

FREE OPTIMA MEMBERSHIP AND BOCCONEA VOLUMES

Through an agreement with the Herbarium Mediterraneum Foundation it is now possible to pay OPTIMA membership fees or to purchase volumes of *Bocconea* by sending herbarium specimens to the Herbarium Mediterraneum in Palermo. This offer is regulated as follows:

1. Only specimens from the following areas are acceptable: peri-Mediterranean countries (except Italy and France), plus Portugal and Bulgaria, the Atlantic Islands (Macaronesia), and the domain of Boissier's "Flora Orientalis" (in particular the Middle East, Transcaucasia and the Crimea). Normally, material from the country of residence (if part of this area) should be given preference.
2. The herbarium specimens must be in good condition and contain complete information with readable, durable labels. The Herbarium Mediterraneum reserves the right to return specimens judged to be of insufficient quality.
3. Each herbarium specimen will be worth 1.67 SFr. Each delivery will consist of a minimum of 18 herbarium sheets. When a group of botanists from the same institution plan to send herbarium specimens, a joint delivery is preferable.
4. Each collaborator will include a copy of the enclosed form specifying his/her name, the number of herbarium specimens sent, the credit earned and whether they wish to use it to pay OPTIMA membership fees or to purchase Bocconea volumes.
5. The package containing the herbarium specimens and the letter will be sent to: Prof. F. Raimondo, Dipartimento di Scienze Botaniche dell'Università, Via Archirafi 38, I-90123 Palermo, Italy.
6. Postage costs will be refunded to the senders by the Herbarium Mediterraneum.
7. At the end of each year, the Herbarium Mediterraneum will transfer the sum of OPTIMA membership fees earned by participants during the year to OPTIMA.

✂ -----

Form to be included with the delivery of herbarium specimens. One form per participant.

Name: _____

Institution: _____

Address: _____

N° of herbarium specimens () x 1.67 SFr/ specimen = _____ SFr. of credit.

I wish to use this credit to pay my OPTIMA membership fees (30.-SFr/year): _____ years of membership

I wish to purchase a copy of *Bocconea* vol. _____ at the OPTIMA member reduced price (see prices at the Publications Offer section of this OPTIMA Newsletter)

COTISATIONS A L'OPTIMA ET DES VOLUMES DE BOCCONEA GRATIS

Par accord avec la Fondation de l'Herbarium Mediterraneum, il est désormais possible de payer ses cotisations à l'OPTIMA et d'acheter des volumes de *Bocconea* en envoyant des spécimens d'herbier à l'Herbarium Mediterraneum de Palerme. Cette possibilité est d'ores et déjà applicable selon les modalités suivantes :

1. Seuls des échantillons provenant de l'aire globale suivante pourront être acceptés: pays circum-méditerranéens sauf la France et l'Italie, plus le Portugal et la Bulgarie; îles atlantiques (Macaronésie); et domaine du "Flora orientalis" de Boissier (notamment le Moyen-Orient, la Transcaucasie et la Crimée). De préférence, ces échantillons proviendront du pays de résidence (s'il fait partie de l'aire globale mentionné ci-dessus).
2. Les spécimens d'herbier doivent être en bon état et comporter des informations complètes avec des étiquettes lisibles et définitives. L'Herbarium Mediterraneum se réserve le droit de retourner les spécimens jugés de qualité insuffisante.
3. Chaque spécimen d'herbier vaudra 1.67 SFr. Chaque livraison consistera en un minimum de 18 planches d'herbier. Quand un groupe de botanistes de la même institution prévoit d'envoyer des spécimens d'herbier, une expédition groupée est préférable.
4. Chaque collaborateur joindra une copie du bordereau de livraison ci-joint comportant son nom, le nombre de spécimens d'herbier envoyés, la somme payée et la destination du crédit (cotisation à l'OPTIMA ou achat de volumes de *Bocconea*).
5. Le paquet contenant les spécimens d'herbier et la lettre seront envoyés à : Pr. F. Raimondo, Dipartimento di Scienze Botaniche dell'Università, Via Archirafi 38, I-90123 Palermo, Italy.
6. Les frais d'expédition seront remboursés aux expéditeurs par l'Herbarium Mediterraneum.
7. A la fin de chaque année, l'Herbarium Mediterraneum virera à l'OPTIMA le montant des cotisations gagnées par les participants pendant l'année.

✂ -----

Bordereau à joindre au paquet de spécimens d'herbier (un bordereau par participant).

Nom: _____

Institution: _____

Adresse: _____

Nombre de spécimens d'herbier () x 1.67 SFr/ spécimen = _____ SFr.de crédit.

Je souhaite utiliser ce crédit pour payer ma cotisation à l'OPTIMA (30.-SFr): _____ années de cotisation

Je souhaite acheter un exemplaire de *Bocconea* vol. _____ au tarif réduit pour les membres de l'OPTIMA (voir les prix a la section "Publications Offer" de l'Informateur OPTIMA).

PUBLICATIONS OFFER

**Ordinary and
Institutional OPTIMA members
are entitled to reductions on the prices
of several publications!**

From Al-Hadara Publishing,

Flora of Egypt. Volume 1 by Loutfy Boulos is available to OPTIMA members with a special discount of 18% (reduced price US\$ 70.00, non-member price US\$ 85.00). Details of the book can be found at <http://www.alhadara.com>. A downloadable form is available at this site. Payment by VISA and Master Card is accepted. Al-Hadara Publishing; 7, Abou El-Seoud Street, Dokki 12311, Cairo, EGYPT. Fax: 20 2 760 5898, E-mail: hadara@ritsec1.com.eg.

From the Institute of Botany, Bulgarian Academy of Sciences,

Flora of the Republic of Bulgaria. Volumes 4 (*Cactaceae* to *Saxifragaceae*), 5 (*Rosaceae*), 6 (*Fabaceae*), 7 (*Oxalidaceae* to *Araliaceae*), 8 (*Apiaceae* to *Cuscutaceae*) and 10 (*Scrophulariaceae* to *Valerianaceae*) are available to OPTIMA members. Prices are SF 48.- for volumes 4-8 and SF 52.- for volume 10. Postage is included in the price. Send your orders to: Institute of Botany, Bulgarian Academy of Sciences, 23, Acad. G. Bonchev Str., 1113 Sofia, Bulgaria; E-mail: palam@iph.bio.acad.bg. Please credit the account: CB "Biochim" PLC, SWIFT Code: CBBIBGSF Branch "Batenberg" Code: 66084219; Bank account n° 3110024518; Institute of Botany, 1113 Sofia, Bulgaria.

From the Med-Checklist Trust of OPTIMA, (Vidollet 17, CH-1202 Geneva, Switzerland),

Med-Checklist. Volumes 1, 3 and 4 are available to OPTIMA members with a special discount of 25% (reduced price: SF 76.50, SF 90.-, and SF 108.-, respectively). Please credit the account "Med-Checklist Trust of OPTIMA", No. CO 265614, with the Swiss Bank Corp., Geneva (payment on the postal cheque account of the bank, No. 12-172, is also possible - provided that the concept of the payment and the account of the "Trust" are clearly specified). If an invoice is needed, send an order to the "Trust".

From B. Cabezudo, Editor of Acta Botanica Malacitana,

Acta Botanica Malacitana, vol. 26 (December 2001) covers articles dealing with taxonomy, vegetation, reproductive biology, anatomy, aeropalynology, and plant geography and chorology. This volume, as well as vols. 15-25 are available to OPTIMA members with a special discount of 33% (reduced price: SF 20.- /each vol.; non-member price: SF 30.-). Moreover, previously published vols. 1-14 are also available to OPTIMA members at the special reduced price of SF 15.- /each. Please send this order and/or ask for further information at the following address: Dpto. Biología Vegetal, P.O. Box 59, E-29080 Málaga, Spain; <http://webdeptos.uma.es/BiolVeg/00Indice.html>; E-mail: abm@uma.es.

From the Museo Regionale di Scienze Naturali (Via Giolitti, 36, I-10123 Torino, Italy; Fax +39 011 4323331), 30% discount for OPTIMA members on the following books:

- G. Bono. 1996: ***Flora y Vegetación del Estado Táchira Venezuela***. Monografie XX. 952 pp, 10 figs, 208 col. plates (cloth); Lit. 200000 + postage.
- D. Puntillo. 1996: ***I Licheni di Calabria***. Monografie XXII. 296 pp, 104 figs, 335 color figs (cloth); Lit. 130000 + postage.
- A. Mercado Sierra, V. Holubová-Jechová and J. Mena Portales. 1997: ***Hifomicetes demaciáceos de Cuba Enteroblásticos***. Monografie XXIII. 392 pp, B/W ill.; Lit. 140000 + postage.

Please send your orders directly to the addresses mentioned for the corresponding items.

From the OPTIMA Secretariat,

- B. Valdés & J. Pastor (eds.) ***Proceedings of the VIII OPTIMA Meeting, Sevilla, 25 September - 1 October, 1995. Lagasalia***, 19. Universidad de Sevilla, Sevilla, 1997. 942 pages, black and white illustrations (50% discount).
- P. Mouterde, ***Nouvelle flore du Liban et de la Syrie*** (33% discount). Vol. 1 (text & atlas), Vol. 2 (text & atlas), Vol. 3 (text & atlas). Single fascicles of the text of Vol. 3 are also still available upon request.
- H.W. Lack (ed.), ***Current projects on the Mediterranean flora - a register***. 2nd edition. (33% discount). Some copies of the 1st edition are still available.
- F.M. Raimondo & W. Greuter (eds.) ***Flora Mediterranea and Bocconea*** (70% and 20% discount). ***Flora Mediterranea*** and ***Bocconea*** are published by the Herbarium Mediterraneum Panormitanum under the auspices of OPTIMA. These publications cover articles dealing with plant geography, floristics and systematic botany in its widest sense of Mediterranean plants of all groups, whether living or fossil. A special emphasis is placed on articles that exceed national limits in coverage or by their general interest. ***Flora Mediterranea*** is a journal published annually with a variety of articles whereas ***Bocconea*** is devoted to monographic subjects:

- Vol. 1: Results of the First "Iter Mediterraneum" in south-eastern Spain, June-July 1988.
- Vol. 2: A check-list of Sicilian fungi.
- Vol. 3: Results of the Second "Iter Mediterraneum" in Israel, March-April 1989.
- Vol. 4: Current research on the biology of threatened plant species of the Mediterranean Basin and Macaronesia: a database.
- Vol. 5: Proceedings of the VII OPTIMA Meeting in Borovetz, 18-30 July 1992, (I and II).
- Vol. 6: Contributions towards a checklist of Mediterranean Lichens (out of print).
- Vol. 7: Proceedings of the Workshops on "Conservation of the Wild Relatives of European Cultivated Plants".
- Vol. 8: Catalogue des plantes vasculaires rares, menacées ou éndémiques du Maroc.
- Vol. 9: The systematics of *Anthemis* L. (Compositae, Anthemideae) in W and C North Africa
- Vol. 10: An annotated checklist of the flora of the Abruzzo
- Vol. 11: Results of the Fourth "Iter Mediterraneum" in Cyprus, April 1991
- Vol. 12: Catalogue of the benthic marine macroalgae of the Italian coast of the Adriatic Sea
- Vol. 13: Proceedings of the IX OPTIMA Meeting. Paris, 11-17 May 1998
- Vol. 14: Checklist of the Lichens and lichenicolous Fungi of the Iberian Peninsula and Balearic Islands.

Please place your orders to the OPTIMA Secretariat by filling out the order form on the next page



PUBLICATIONS ORDER FORM

Please send me the following publications (postage expenses are included in the shown prices):

<i>Nouvelle flore du Liban et de la Syrie</i>				
Volume	OPTIMA member Price	Non-member Price	Quantity	Value
Vol. 1	SF 188.-	SF 280.-		
Vol. 2	SF 188.-	SF 280.-		
Vol. 3	SF 188.-	SF 280.-		

<i>Current projects on the Mediterranean flora - a register</i>				
Volume	OPTIMA member Price	Non-member Price	Quantity	Value
1st edition	SF 10.-	SF 15.-		
2nd edition	SF 10.-	SF 15.-		

<i>Flora Mediterranea (Volumes 1-11)</i>				
Volume	OPTIMA member Price	Non-member Price	Quantity	Value
	SF 30.-	SF 100.-		

<i>Bocconea</i>				
Volume	OPTIMA member Price	Non-member Price	Quantity	Value
Vol. 1	SF 56.-	SF 70.-		
Vol. 2	SF 56.-	SF 70.-		
Vol. 3	SF 56.-	SF 70.-		
Vol. 4	SF 56.-	SF 70.-		
Vol. 5 (I and II)	SF 220.-	SF 270.-		
Vol. 7	SF 84.-	SF 105.-		
Vol. 8	SF 56.-	SF 70.-		
Vol. 9	SF 56.-	SF 70.-		
Vol. 10	SF 56.-	SF 70.-		
Vol. 11	SF 56.-	SF 70.-		
Vol. 12	SF 56.-	SF 70.-		
Vol. 13	SF 56.-	SF 70.-		
Vol. 14	SF 56.-	SF 70.-		

Volume	OPTIMA member Price	Non-member Price	Quantity	Value
<i>Proc. of the VIII OPTIMA Meeting</i>	SF 65.-	SF 115.-		

TOTAL SUM				
------------------	--	--	--	--

Payment:

- I am sending a bank transfer to the OPTIMA Publications Commission, account N° 1651.05.02, Banque Cantonale de Genève, Genève, Switzerland. (Please, include photocopy of bank slip).
- I am enclosing with this order form an International bank cheque drawn on a Swiss bank or a Eurocheque extended to OPTIMA Publications Commission.
- Please send me a pro-forma invoice (items sent upon receipt of payment).

Name:

Address:

Date & Signature:

Please send this order form to: OPTIMA Secretariat - Dr. J. M. Iriondo. Dpto. Biología Vegetal, E.U.I.T. Agrícola, Universidad Politécnica, Ciudad Universitaria. E-28040 Madrid, SPAIN

NOUVELLES DE L'OPTIMA

par JOSÉ M. IRIONDO

Grâce au travail acharné, à la motivation élevée et à l'admirable hospitalité de nos collègues de Palerme, le Xème Colloque de l'OPTIMA fut un remarquable succès qui permit la participation, la communication et les échanges entre de nombreux botanistes méditerranéens. Depuis ce colloque, avec un nouveau comité international et diverses innovations concernant les Commissions et les Comités, l'OPTIMA entame une nouvelle période de six ans riche de perspectives séduisantes. Les succès de l'organisation dépendront pour une large part de la participation active et de l'engagement de ses membres. Votre participation, vos initiatives et vos idées sont primordiales : mobilisez-vous, prenez contact et participez à l'OPTIMA!

COMITÉ INTERNATIONAL

En 2001, les membres du Comité ont approuvé le rapport annuel et le rapport financier pour 2000, soumis par le Secrétaire au nom du Président et du Conseil Exécutif. Le Comité a approuvé la proposition de la Commission des Prix d'attribuer la Médaille d'Or de l'OPTIMA au Pr Dimitrios Phitos. Il a également désigné le Dr Santiago Pajarón et le Dr Federico Fernández-González comme vérificateurs des comptes pour l'année 2000.

Au cours de l'été 2001, les membres de l'OPTIMA ont été invités à élire le nouveau Comité International pour la période 2001-2007. La participation des membres ordinaires de l'OPTIMA a été assez importante : pour 404 bulletins distribués, le Secrétariat a reçu 122 votes valides. La composition du nouveau Comité International figure sur la deuxième de couverture.

A l'occasion du Xème Colloque de l'OPTIMA qui s'est tenu à Palerme, le nouveau Comité International a pris les décisions suivantes:

- Dissolution du Comité de Programme pour le Xème Colloque de l'OPTIMA, avec ses remerciements pour le travail accompli, et établissement d'un nouveau Comité de Programme pour le XIème Colloque.
- Dissolution de la Commission pour la recherche en cours, de la Commission pour la diffusion de l'information et la mise en réseau, et de la Commission Sisyphus.
- Mise en place de la Commission de l'OPTIMA sur les Bryophytes chargée de promouvoir les études et les projets de recherches sur les différents sujets bryologiques.
- Mise en place d'un Comité de conseillers pour Euro+Med PlantBase, chargé d'informer le Conseil de l'OPTIMA et son Comité International du développement du projet Euro+Med PlantBase.
- Création d'un Comité Web de l'OPTIMA, chargé de coordonner et de mettre à jour les informations figurant sur les pages et les sites Web de l'OPTIMA.

Par ailleurs, le Comité International a approuvé que la dénomination de la Commission pour la caryosystématique soit modifiée en Commission pour la caryosystématique et la systématique moléculaire et que, de même, celle de la Commission pour la conservation des ressources végétales soit changée en Commission pour la conservation et l'utilisation durable des ressources végétales.

A l'unanimité, le Comité a approuvé le maintien des Commissions suivantes pour la période 2001-2007 : Commission des publications, Commission pour la recherche floristique, Commission des prix, Commission pour la cartographie des Orchidées dans la région méditerranéenne, Commission des lichens, Commission de l'Herbarium Mediterraneum, et Commission pour la diffusion des connaissances sur les plantes méditerranéennes.

Le Comité International a également accepté à l'unanimité la proposition du Dr Diklic' d'organiser le XIème Colloque de l'OPTIMA à Belgrade, et a décidé de reconduire le Conseil Exécutif avec la même composition pour la période 2001-2007. Santiago Pajarón et Federico Fernández González ont été remerciés pour leur collaboration en tant que vérificateurs des comptes de l'année 2000 et ont été réélus pour l'année 2001.

CONSEIL EXÉCUTIF

Dans la mesure où les comptes de l'OPTIMA se sont avérés déficitaires au terme des exercices des années 1998, 1999 et 2000, le Conseil a approuvé la diminution de la contribution à la Commission des Publications de l'OPTIMA de 11000.- SFr à 10000.- SFr. D'autre part, le Conseil a décidé d'augmenter la cotisation annuelle ordinaire des membres de 25.- SFr à 30.- SFr, celle des membres institutionnels de 90.- SFr à 110.- SFr et la cotisation de membre à vie de 375.- SFr à 460.- SFr. Les cotisations des membres étaient restées inchangées depuis 10 ans et le temps était venu de procéder à un ajustement en fonction de l'inflation.

En juin 2001, le Conseil Exécutif a préparé la liste des candidats à l'élection au Comité International 2001-2007. Deux mois plus tard, le Conseil a approuvé la recommandation de la Commission des Prix de décerner les médailles d'argent pour la période 1998-2000 au Dr C. Oberpieler pour "The systematics of *Anthemis* L. (Compositae, Anthemidae) in W and C North Africa" (1998), au Dr W. Lack pour "The Flora graeca story. Sibthorp, Bauer and Hawkins in the Levant" (1999) et aux Dr J. Simon et J. Vicens pour "Estudis biosistemàtics en *Euphorbia* L. a la Mediterrània occidental" (1999).

Au cours du Xème Colloque de l'OPTIMA que s'est tenu à Palerme, le Conseil a proposé Rosa M. Ros, Benito Valdés et José M. Iriondo comme secrétaires respectifs de la Commission de l'OPTIMA sur les Bryophytes, du Comité de conseillers pour Euro+Med PlantBase et du Comité Web de l'OPTIMA. Le Conseil a également décidé de maintenir inchangées en 2002 les cotisations à l'OPTIMA.

SECRÉTARIAT

Le Secrétariat s'est chargé de tenir les comptes de l'OPTIMA ainsi que ceux de la Commission des Publications et de la Commission des Prix, de gérer le budget des publications et les fichiers des membres. Le Secrétariat de l'OPTIMA a également assuré les relations entre les membres du Conseil et du Comité et les groupes de travail et commissions de notre Organisation. Enfin, les activités en cours concernent l'édition de l'Informateur OPTIMA et la mise à jour du site Web.

DÉCÈS

Prof. William T. Stearn, Richmond, Royaume Uni, décédé en 2001.

Prof. Moustafa Sayed-Ahmed Abdallah, décédé en octobre 2001. Il était l'un des membres fondateurs de l'OPTIMA et travaillait à l'Herbier du Ministère de l'Agriculture, Agricultural Museum, Dokki, Le Caire, Égypte.

Prof. Kiril Micevski, R. F. Y. de Macédoine, décédé en 2002. Le Prof. Micevski fut membre du Comité International pendant plusieurs années et avait été récemment réélu pour la période 2001-2007.

Des notices nécrologiques détaillées sur ces membres éminents de l'OPTIMA seront publiées dans les prochains tomes de *Flora Mediterranea*.

LE POINT SUR LES COMMISSIONS

COMMISSION SUR LA RECHERCHE EN COURS

Dans la mesure où elle n'a eu aucune activité ces dernières années, ma Commission sur la recherche en cours a été dissoute au cours du Xème Colloque de l'OPTIMA à Palerme. Une réorientation des activités est envisagée afin de réunir des informations sur les membres et les projets de l'OPTIMA par l'intermédiaire de bases de données actives qu'il serait possible de consulter et d'enrichir par l'intermédiaire d'Internet. Le Pr. Pier Luigi Nimis sera chargé de créer ce cadre, seul ou en collaboration avec l'Expert Center for Taxonomic Identification (ETI) à Amsterdam. Pour plus d'informations à ce sujet, prendre contact avec : P.L.

Nimis, Dipartimento di Biologia, Università di Trieste, Via Giorgieri 10, I-34127 Trieste, Italy. E-mail: nimis@univ.ts.it

COMMISSION POUR LA DIFFUSION DES CONNAISSANCES SUR LES PLANTES MEDITERRANEENNES

Le projet est bien avancé. Les chapitres d'introduction sont rédigés et la plupart des régions et pays sont déjà couverts. Quelques zones manquent encore mais devraient être bientôt rédigées. Les cartes et figures doivent être fournies dans certains cas. Les problèmes d'index et de références bibliographiques ont été discutés pendant le dernier colloque de Palerme. Une uniformisation de la nomenclature taxinomique utilisée par les différents auteurs de chapitres doit être envisagée à cet effet. Lorsqu'un manuscrit presque complet sera disponible, le secrétaire prendra contact avec les membres de la Commission des Publications pour faciliter la publication du livre. Renseignements supplémentaires : U. Plitmann, Department of Botany, The Hebrew University, Jerusalem 91904, Israel. E-mail: uzi@vms.huji.ac.il

COMMISSION DES PUBLICATIONS

Flora Mediterranea 11 et Bocconea 14 ont été publiés en 2000 et offerts aux participants au Xème Colloque de l'OPTIMA à Palerme. Flora Mediterranea 10 and Bocconea 13 avaient été publiés en 2000. Au Xème Colloque de l'OPTIMA, la Commission des publications a été tenue au courant de l'état d'avancement du livre sur la Vie végétale en Région méditerranéenne préparé par la Commission pour la diffusion des connaissances sur les plantes méditerranéennes. Elle se tient prête à coopérer à la publication de ce livre dès que le manuscrit sera disponible. Le problème du coût élevé de l'expédition de l'Informateur OPTIMA a également été étudié. Des solutions alternatives vont être explorées en coopération avec les membres des différents pays. Informations complémentaires : F. Raimondo, Dip. di Scienze Botaniche dell'Università, Via Archirafi 38, I-90123 Palermo, Italy. E-mail: raimondo@unipa.it

COMMISSION DE L'HERBARIUM MEDITERRANEUM

En plus de la supervision de la publication des numéros 10 et 11 de Flora Mediterranea et 13 et 14 de Bocconea en 2000 et 2001, la Commission de

l'Herbarium Mediterraneum de l'OPTIMA après discussion a proposé que la Fondation de l'Herbarium Mediterraneum attribue sept Plaques d'argent d'Honneur à sept projets de Flores publiés ou en cours de publication (Flora Iberica, Flora Hellenica, Flore d'Arménie, Flore de Serbie, Flore du Maroc, Flore de Bulgarie et Flore des Bryophytes d'Italie). Les plans de masses préliminaires du bâtiment de l'Herbarium Mediterraneum ont été discutés avec les architectes. Informations supplémentaires : W. Greuter, Botanischer Garten & Botanisches Museum Berlin-Dahlem, Königin-Luise Str. 6-8, D-14191 Berlin, Germany. E-mail: w.greuter@bgbm.org

COMMISSION DES CHAMPIGNONS

La *Check-list* des Champignons d'Italie (Basidiomycètes, Hyménomycètes) a été présentée au dernier colloque et il a été annoncé que le livre et le CD correspondants seraient publiés d'ici peu. Cette publication, subventionnée par le Ministère Italien de l'Environnement, faisait partie du programme de la Commission (points 4 à 9 publiés sous le titre 'Projects of the new OPTIMA Commission on fungi', Informateur OPTIMA, 34:6-8, 1999). L'intérêt à étendre cette activité à toute la région méditerranéenne a été souligné. C'est pourquoi la Commission a décidé de soumettre à l'UE une proposition consistant à produire une *check-list* des Champignons de la Région Méditerranéenne établie sur les données publiées et sur les listes de mycologues reconnus. La région couverte serait la même que celle couverte par le projet Med-Checklist. Dans le cadre de ce programme est envisagée une base de données de référence des Champignons de la partie méridionale du Bassin Méditerranéen.

La Commission a décidé de solliciter une aide financière à l'ENBI (European Network of Biodiversity Information) pour mettre en place un réseau d'information sur la mycodiversité dans la région Méditerranéenne, dans le cadre du thème de travail 5 de l'ENBI. Par ailleurs, la Commission a décidé de soumettre une préproposition pour un programme pilote de gestion des données naturalistes et floristiques, basée sur des listes de Champignons de régions choisies de la Région Méditerranéenne (France, Italie, Grèce et Espagne). Ce programme sera mené en collaboration avec la Société Italienne d'informatique FINSIEL, très expérimentée dans le domaine de la gestion des données naturalistes. Informations supplémentaires : S. Onofri, Tuscia University, Via S. Camillo de Lellis, Blocco D, I-01100 Viterbo, Italy. E-mail: onofri@unitus.it

COMMISSION SISYPHUS

La Commission Sisyphus a été dissoute en tant que telle au Xème Colloque de l'OPTIMA et transformée en

un Comité de Conseillers qui tiendra au courant le Comité International de l'évolution d'Euro+Med PlantBase. Informations supplémentaires : B. Valdés, Dpto. Biología Vegetal y Ecología. Universidad de Sevilla, Apdo. 1095, E-41080 Sevilla, Spain. E-mail: bvaldes@cica.es

COMMISSION POUR LA CONSERVATION DES RESSOURCES VEGETALES

Trois orientations principales sont prévues pour le mandat 2001-2007 : 1) l'encouragement à la création de nouvelles banques de graines en région Méditerranéenne et la mise en place d'un réseau pour stimuler la coopération et la coordination entre les banques de graines existantes ; 2) la création d'une banque de données sur quelques genres choisis de parents sauvages ; 3) la conservation des plantes médicinales et aromatiques. D'autres possibilités concernent la publication d'une Liste rouge des plantes menacées au niveau méditerranéen. Afin d'adapter le nom de la commission à cette gamme étendue d'activités, il devient pour la période 2001-2007 "**Commission pour la Conservation et l'utilisation durable des Ressources végétales**". Informations supplémentaires : D. Zohary. Dept. of Evolution, Systematics and Ecology. The Hebrew University, Jerusalem 91904, Israel. Email: zohary@netvision.net.il

COMMISSION POUR LA CARYOSYSTEMATIQUE

Cette commission pleine d'activités a poursuivi la production des Mediterranean Chromosome Number Reports toutes ces années. Le changement de l'un des éditeurs de cette rubrique de Flora Mediterranea a été annoncée : C. Blanché a remplacé F. Felber. L'Institut Botanique de Patras participe au projet Euro+Med PlantBase au titre des informations caryosystématiques. L'alimentation de la base de données chromosomique méditerranéenne à l'aide d'informations provenant d'autres bases locales ou régionales a fait l'objet de discussions. La Commission a l'intention d'ajouter à la base de données des informations sur les séquences de DNA et autres données provenant de la biologie moléculaire afin de traiter de systématique moléculaire dans sa totalité. En conséquence, le nom de la commission a été modifié en "**Commission pour la caryosystématique et la systématique moléculaire**" for the 2001-2007 term. Informations supplémentaires : G. Kamari, Botanical Institute, Dep. Biology, University of Patras, GR-26500 Patras, Greece. E-mail: Georgia.Kamari@upatras.gr

COMMISSION POUR LA RECHERCHE FLORISTIQUE

A l'a dernière réunion de cette commission, le problème des déficits financiers des expéditions précédentes a fait l'objet de discussions et les possibilités pour le prochain Iter ont été examinées. Les problèmes relatifs aux résultats des expéditions précédentes (étiquettes, distribution du matériel, publication...) ont été abordés. Il a été décidé qu'un rapport sommaire sur l'état des dix premiers Itinera serait préparé et publié dans un prochain numéro de l'Informateur OPTIMA. Le XIème Iter Mediterraneum aura lieu en Arménie du 11 juin au 2 juillet 2002. Informations supplémentaires : B. Valdés, Dpto. Biología Vegetal y Ecología. Universidad de Sevilla, Apdo. 1095, E-41080 Sevilla, Spain. E-mail: bvaldes@cica.es

COMMISSION POUR LA CARTOGRAPHIE DES ORCHIDEES MEDITERRANEENNES

La Commission a été renouvelée pour une dernière période avec un nombre de membres réduit (Baumman, Lorenz, Kunkele, Del Prete). Une fois le texte de la publication prêt, le Pr. Del Prete sera chargé de le réviser du point de vue scientifique. On peut espérer que dans les quelques années à venir le travail sera publié et mis à la disposition des membres de l'OPTIMA à un prix réduit. Informations supplémentaires : H. Baumann, Beethovenstr. 45, D-71032 Böblingen, Germany.

COMMISSION POUR LA DIFFUSION DE L'INFORMATION ET LA MISE EN RESEAU

Sans activité au cours des dernières années, cette commission a été dissoute au dernier colloque de l'OPTIMA. Ses objectifs et activités ont été confiés à une nouvelle commission nommée "**Commission Web de l'OPTIMA**". Elle sera chargée de rendre compte sur le Web de toutes les activités de l'OPTIMA. Cette commission établira des nœuds au moins à Madrid, Palerme, Trieste et Patras. D'autre part, un serveur sera créé et géré par Venturella. Informations supplémentaires : J.M. Iriondo, Dpto. Biología Vegetal. EUIT Agrícola, Universidad Politécnica de Madrid, E-28040 Madrid, Spain. E-mail: iriondo@ccupm.upm.es

COMMISSION POUR LES LICHENS

Les *check-lists* de différents pays ou régions méditerranéens sont publiés ou au moins bien avancés. La prochaine étape est d'améliorer les liaisons entre les listes sur Internet puis d'exploiter ces données dans différentes directions telles que l'élaboration de cartes prédictives à l'aide de SIG. P.L. Nimis, Dipartimento di

Biologia, Università di Trieste, Via Giorgieri 10, I-34127 Trieste, Italy. E-mail: nimis@univ.ts.it



OPTIMA NEWS

by JOSÉ M. IRIONDO

Thanks to the hard work, great motivation and splendid hospitality of our Palermitan colleagues, the X OPTIMA Meeting was a great success which made possible the participation, communication and exchange of many Mediterranean botanists. With a new International Board and innovations in the working Commissions and Committees, OPTIMA faces a new six-year term with fascinating prospects. The achievements of the organization will depend to a great extent on the active participation and enrollment of its members. Your collaboration, initiatives and ideas are essential: move on, get in touch and participate in OPTIMA!

INTERNATIONAL BOARD

In 2001, the Board members approved the annual report and the financial report for 2000, submitted by the Secretary on behalf of the President and the Executive Council. The Board approved the recommendation of the Prize Commission to attribute the OPTIMA Gold Medal to Prof. Dimitrios Phitos. It also appointed Dr. Santiago Pajarón and Dr. Federico Fernández-González as auditors for the year 2000.

During the summer of 2001, OPTIMA members were called upon to elect the new International Board for the 2001-2007 period. The participation of OPTIMA ordinary members in the elections was quite relevant: 122 valid ballots were received at the Secretariat out of the 404 ballots distributed. The composition of the new International Board is printed on the inside of the front cover.

At the X OPTIMA Meeting held in Palermo the new International Board made the following decisions:

- To disband the Programme Committee for the X OPTIMA Meeting, with thanks for the services rendered, and to establish a new Programme Committee for the XI OPTIMA Meeting.
- To disband the Commission for Current Research, the Commission for Information Transfer and Networking and the Sisyphus Commission.
- To set up the OPTIMA Commission on Bryophytes with the mandate to promote studies and research initiatives on different bryological topics.
- To set up the Advisory Committee for the Euro+Med PlantBase with the mandate to inform the OPTIMA Executive Council and International Board on the development of the Euro+Med PlantBase initiative.
- To establish the Web Commission of OPTIMA, with the mandate of coordinating and keeping the information of the OPTIMA web pages and web sites updated.

Furthermore, the International Board approved that the name of the OPTIMA Commission on Karyosystematics be changed to OPTIMA Commission on Karyosystematics and Molecular Systematics, and similarly, that the name of the OPTIMA Commission for the Conservation of Plant Resources be changed to OPTIMA Commission for the Conservation and Sustainable Use of Plant Resources.

The Board unanimously approved the continuance of the following Commissions for the 2001-2007 term: Publications Commission, Commission for Floristic Investigation, Prize Commission, Commission for the Mapping of Orchids in the Mediterranean Area, Lichen Commission, Herbarium Mediterraneum Commission and the Commission for the Diffusion of Knowledge of Mediterranean Plants.

The International Board unanimously approved the invitation of Dr. Diklic' to organize the XI OPTIMA Meeting in Belgrade and decided to maintain the same composition of the Executive Council for the 2001-2007 period. Santiago Pajarón and Federico Fernández González were thanked for their co-operation as auditors in the year 2000 and were re-elected for the year 2001.

EXECUTIVE COUNCIL

Since the years 1998, 1999 and 2000 had closed with a negative balance for OPTIMA accounts, the Council approved to lower the contribution to the OPTIMA Publications Commission from 11000.- SFr to 10000.- SFr. Moreover, the Council decided to increase the ordinary membership fee for 2001 from 25.- SFr to 30.- SFr, the institutional membership from 90.- SFr to 110.- SFr and the life membership from 375.- SFr to 460.- SFr. Membership fees had remained unchanged for over ten years and the time had come to make an adjustment for inflation.

In June 2001, the Executive Council prepared the list of candidates for the election of the 2001-2007 International Board. Two months later, the Council approved the recommendation of the Prize Commission to award the OPTIMA Silver Medals for the period 1998-2000 to Dr. C. Oberpieler for "The systematics of *Anthemis* L. (Compositae, Anthemidae) in W and C North Africa" (1998), Dr. W. Lack for "The Flora graeca story. Sibthorp, Bauer and Hawkins in the Levant" (1999) and Dr J. Simon and Dr. J. Vicens for "Estudis biosistemàtics en *Euphorbia* L. a la Mediterrània occidental" (1999).

At the X OPTIMA Meeting held in Palermo the Council proposed Rosa M. Ros, Benito Valdés and José M. Iriondo as secretaries of the OPTIMA Commission on Bryophytes, the Advisory Committee for Euro+Med PlantBase and the OPTIMA Web Commission, respectively. The Council also decided to keep the OPTIMA fees for 2002 unchanged.

SECRETARIAT

The Secretariat was active keeping OPTIMA's accounts and the accounts of the Publications Commission and Prize Commission and managing publication sales and membership files. The OPTIMA Secretariat also functioned as a liaising centre for Council and Board members and the working groups and commissions of our organization. Further activities taking place at this moment include the edition of the OPTIMA Newsletter and the updating of the OPTIMA Website.

DEATHS

Prof. William T. Stearn, Richmond, United Kingdom, died in 2001.

Prof. Moustafa Sayed-Ahmed Abdallah died in October 2001. He was one of the founding members of OPTIMA and worked at the Herbarium of the Ministry of Agriculture, Agricultural Museum, Dokki, Cairo, Egypt.

Prof. Kiril Micevski died on 6 February 2002 in Skopje, F.Y.R. Macedonia. Prof. Micevski was a member of the International Board for many years and had been recently re-elected for the 2001-2007 term.

Full obituaries of these prominent OPTIMA members will be published in future volumes of *Flora*

Mediterranea.

UPDATES ON COMMISSIONS

COMMISSION ON CURRENT RESEARCH

Having been inactive in the past years, the Current Research Commission was disbanded at the X OPTIMA Meeting in Palermo. A re-orientation of the activities is envisioned to produce information on OPTIMA members and projects through active databases in which input and consultation is made available through Internet. Prof. Pier Luigi Nimis will be in charge of producing this framework alone or in collaboration with

the Expert Center for Taxonomic Identification (ETI) in Amsterdam. For more information on this subject, please contact: P.L. Nimis, Dipartimento di Biologia, Università di Trieste, Via Giorgieri 10, I-34127 Trieste, Italy. E-mail: nimis@univ.ts.it

COMMISSION OF DIFFUSION OF KNOWLEDGE ON MEDITERRANEAN PLANTS

The project is quite advanced. Introductory chapters are written and most regions or countries are already covered. Some areas are still missing but will be written soon. Maps and Figures need to be provided in some cases. Indexing and references were discussed at the last meeting in Palermo. A standardization of the taxonomic nomenclature used by the chapter contributors needs to be approached at this point. Once an almost complete draft is prepared, the secretary will contact the members of the Publications Commission to facilitate the publication of the book. Further information: U. Plitmann, Department of Botany, The Hebrew University, Jerusalem 91904, Israel. E-mail: uzi@vms.huji.ac.il

PUBLICATIONS COMMISSION

Flora Mediterranea 11 and Bocconea 14 were published in 2000 and offered to participants at the X OPTIMA Meeting in Palermo. Flora Mediterranea 10 and Bocconea 13 were published in 2000. At the X OPTIMA Meeting the Publications Commission was informed on the status of the book on Mediterranean Plant Life in preparation by the Diffusion of Knowledge Commission. The Publications Commission stands ready to cooperate in the publication of this book as soon as a draft is prepared. The problem of the high cost of postage for the OPTIMA Newsletter was also evaluated. Alternative ways will be explored through cooperation with members from various countries. Further information: F. Raimondo, Dip. di Scienze Botaniche dell'Università, Via Archirafi 38, I-90123 Palermo, Italy. E-mail: raimondo@unipa.it

HERBARIUM MEDITERRANEUM COMMISSION

In addition to supervising the publication of Flora Mediterranea 10 and 11 and Bocconea 13 and 14 in the years 2000 and 2001, the OPTIMA Herbarium Mediterraneum Commission discussed and proposed that the Herbarium Mediterraneum Foundation assign seven Honorific Silver Plaques to seven Flora projects published or in progress (Flora Iberica, Flora Hellenica,

Flora of Armenia, Flora of Serbia, Flora of Morocco, Flora of Bulgaria and Flora of Italian Bryophytes). Preliminary distribution plans of the building of the Herbarium Mediterraneum were discussed with the architects. Further information: W. Greuter, Botanischer Garten & Botanisches Museum Berlin-Dahlem, Königin-Luise Str. 6-8, D-14191 Berlin, Germany. E-mail: w.greuter@bgbm.org

COMMISSION ON FUNGI

The Checklist of Italian Fungi (Basidiomycetes, Hymenomycetes) was presented at the last meeting and it was announced that the corresponding book and CD would be published shortly. This publication, funded by the Italian Ministry of Environment, was part of the Commission program (points 4 to 9 published in 'Projects of the new OPTIMA Commission on fungi', OPTIMA Newsletter, 34:6-8, 1999). Interest in expanding this activity to all the Mediterranean was expressed. Thus, the Commission decided to submit a EU proposal for producing a Checklist of Fungi in the Mediterranean area, based on data from literature and from lists of recognized mycologists. The covered area will be the same as that covered by the Med-Checklist Project. Within this program a reference database on fungi from the southern part of the Mediterranean basin is envisioned.

The Commission has decided to ask the ENBI (European Network of Biodiversity Information) for financial support to establish a network of mycological information in the Mediterranean area, within ENBI workpackage 5. Moreover, the Commission has decided to submit a preproposal for a pilot program for the management of naturalistic and floristic data, based on lists of fungi from selected countries of the Mediterranean Region (France, Italy, Greece and Spain). This program will be carried out in collaboration with the FINSIEL Italian informatic society, which is highly experienced in managing naturalistic data. Further information: S. Onofri, Tuscia University, Via S. Camillo de Lellis, Blocco D, I-01100 Viterbo, Italy. E-mail: onofri@unitus.it

SISYPHUS COMMISSION

The Sisyphus Commission was disbanded as such at the X OPTIMA Meeting and upgraded to form an Advisory Committee that will inform the OPTIMA International Board on the progress of the Euro+Med PlantBase. Further information: B. Valdés, Dpto. Biología Vegetal y Ecología. Universidad de Sevilla, Apdo. 1095, E-41080 Sevilla, Spain. E-mail: bvaldes@cica.es

COMMISSION FOR CONSERVATION OF PLANT RESOURCES

Three main lines of action are envisaged for the 2001-2007 mandate: 1) the promotion of the creation of new seedbanks in the Mediterranean and the establishment of a network to stimulate cooperation and coordination among existing seedbanks; 2) the creation of a data bank on selected genera of wild relatives; 3) conservation of medicinal and aromatic plants. Other possibilities include the publication of a Red List of Threatened Plants at the Mediterranean Level. In order to adapt the name of the commission to this wide range of activities the new name of this commission for the 2001-2007 mandate is "**Commission for Conservation and Sustainable Use of Plant Resources**". Further information: D. Zohary. Dept. of Evolution, Systematics and Ecology. The Hebrew University, Jerusalem 91904, Israel. Email: zohary@netvision.net.il

COMMISSION FOR KARYOSYSTEMATICS

This active commission has been producing the Mediterranean Chromosome Number Reports all these years. The change of one of the editors of this section of Flora Mediterranea was reported: C. Blanché has replaced F. Felber. The Botanical Institute of Patras is participating in the Euro+Med PlantBase Project with a bead on karyosystematic information. The feeding of the Mediterranean Chromosome Database with information from other existing local or regional databases was discussed. The Commission aims to add information on DNA contents and other data from molecular biology to the database in order to treat molecular systematics in full scale. As a result of this, the name of this commission has been changed to "**Commission for Karyosystematics and Molecular Systematics**" for the 2001-2007 term. Further information: G. Kamari, Botanical Institute, Dep. Biology, University of Patras, GR-26500 Patras, Greece. E-mail: Georgia.Kamari@upatras.gr

COMMISSION ON FLORISTIC INVESTIGATION

At the last meeting of this commission, the problem of negative economic balances of previous Itinera was discussed and possibilities for the next Iter were explored. The problems related to the results of previous

Itinera (labels, distribution of material, publication...) were approached. It was decided that a summary report on the status of the first ten Itinera will be prepared and published in a forthcoming issue of OPTIMA Newsletter. The XI Iter Mediterraneum will take place in Armenia from 11 June to 2 July 2002. Further information: B. Valdés, Dpto. Biología Vegetal y Ecología. Universidad de Sevilla, Apdo. 1095, E-41080 Sevilla, Spain. E-mail: bvaldes@cica.es

COMMISSION FOR THE MAPPING OF MEDITERRANEAN ORCHIDS

The Commission was renewed for a last term with reduced membership (Baumman, Lorenz, Kunkele, Del Prete). Once the text of the publication is ready, Prof. Del Prete will be in charge of having it reviewed from a scientific point of view. Hopefully in the next few years the work will be published and available for OPTIMA members at a reduced price. Further information: H. Baumann, Beethovenstr. 45, D-71032 Böblingen, Germany.

COMMISSION FOR INFORMATION TRANSFER AND NETWORKING

Having had no activity in the past years this Commission was disbanded at the last OPTIMA Meeting. Its purpose and activities have been reconducted into a new Commission named "**OPTIMA Web Commission**". It will be in charge of keeping account of all OPTIMA activities on the Web. This Commission will establish nodes in Madrid, Palermo, Trieste and Patras. Moreover, a listserver will be created and managed by G. Venturella. Further information: J.M. Iriondo, Dpto. Biología Vegetal. EUIT Agrícola, Universidad Politécnica de Madrid, E-28040 Madrid, Spain. E-mail: iriondo@ccupm.upm.es

COMMISSION FOR LICHENS

The checklists from the different countries or areas of the Mediterranean are published or in most cases well advanced. The next step is to progress in the connections between the lists on the Internet and to further work with this data for different purposes like generating predictive maps with GIS. P.L. Nimis, Dipartimento di Biologia, Università di Trieste, Via

Giorgieri 10, I-34127 Trieste, Italy. E-mail:
nimis@univ.ts.it



PERSONALIA

OPTIMA MEDALS

OPTIMA Gold Medal

Professor Dimitrios Phitos was awarded the OPTIMA Gold Medal at the X OPTIMA Meeting held in Palermo in September 2001. This medal is awarded every three years to a botanist who, by his or her activity, is considered to have made an outstanding contribution to the phytotaxonomy of the Mediterranean Area. The text of the address delivered upon presentation of the award is reproduced below.

“Professor Dimitrios Phitos was born in 1928 in Piraeus, the harbour town of Athens. Having devoted a lifetime of endeavour and labour to the study of the plant world of his home country, Greece – the classical cradle of botany as a science, he has become the first Greek scientist after Theodoros Orphanides, and the second in post-classical times, to achieve fame and international renown in the fields of plant geography and taxonomic botany.

Phitos obtained his PhD in 1960 from Athens University with a thesis on the phytogeography of Central Euboea, under the supervision of Charalambos Diapoulis, then went to Germany and Austria to refine his botanical training and achieve full mastery of his subject. He spent the major part of six postdoctoral years in Munich then Vienna. Hermann Merxmüller became his mentor in biological thinking, model in scientific care, and teacher in modern research techniques. Munich was then (1961-1964) a leading think-tank in the domain of plant sciences, where a whole new generation of German botanists was being bred. For Phitos these were fascinating years that he will never forget. Up to the present day he loves and handles impeccably the German language. During his winter in Vienna (1965/1966), Phitos perfected his knowledge of Greek plants. Karl Heinz Rechinger was his tutor there, an ideal complement to Merxmüller’s more theoretically minded personality. Rechinger, our

century’s most assiduous plant collector and expert floristic explorer, taught Phitos the ultimate secrets of plant collecting and refined his field botanist’s flair.

Back to Greece, Phitos immediately undertook to put to profit the knowledge he had acquired. He was entrusted with the task of designing and organising the Institute of Botany at the newly founded University of Patras, the development of which became the leitmotiv of his professional life. His major concern was the fact that Greek botany had come to lag far behind forefront botanical research of that time, and he therefore devoted his whole active academic career to bridging that gap. Teaching as a reader of botany, then after 1972 as full professor, he came to essentially father modern Greek plant taxonomy – especially cytology, a discipline which he newly introduced into his home country. He wrote the basic Greek students’ textbooks on geobotany and systematic botany. He – and after him, his pupils – supervised well over a dozen PhD theses dealing with the taxonomy of a variety of plant groups (*Anthemis*, *Centaurea*, *Crepis*, *Limonium*, *Paeonia*, *Viola*) and the flora and phytogeography of several areas (Mts Kyllene and Gerania, the islands of Samos, Nisiros, and Crete, as well as Peloponnesus). The Institute in Patras, which with eight professors and lecturers is now the Country’s major research centre for Plant taxonomy, is presently staffed entirely with Phitos’s academic offspring. The Patras Herbarium, which in 1966 started at zero, has become the country’s major plant collection, with over 150,000 well curated and adequately stored specimens.

The development in Greece, not only of taxonomic botany, but of biological research and environmental awareness as a whole owes much to Dimitrios Phitos. He was a founder and first president of the Greek Society of Biological Sciences and first vice-president of the Greek Botanical Society of which he was recently made an honorary member. He founded

Botanika Chronika, still the single Greek journal entirely devoted to the botanical sciences, and was its editor for 16 years. He actively and enthusiastically promoted the publication of a new, modern Flora of Greece, acting as the chairman of the steering committee of *Flora Hellenica* of which the first volume was published in 1997. Two years earlier he had secured publication of the *Red Data Book of rare and threatened plants of Greece*, of which he was the editor-in-chief and the author of many of its entries. His devotion to the pressing needs of nature conservation is witnessed, among others, by his many years of service in the managing board of the Greek Society for the Protection of Nature, which he presided for the term 1980-1982.

In an international context, Phitos served as regional adviser for Greece to the two major European botanical joint ventures of our time: *Flora europaea* and the *Atlas florae europaeae*. Even more importantly, he became a key-note player in Mediterranean plant taxonomy as one of the founders of OPTIMA, member of that organisation's first International Board (1974-1977), then for three consecutive terms (1977-1995) of the Executive Council, including as its President (1983-1989). He organised the initial OPTIMA Meeting in Crete in 1975, where the foundations of international co-operation in Mediterranean botany were laid, and also the sixth OPTIMA Meeting in Delphi in 1989, for which he co-edited the proceedings volume of almost one thousand pages.

Phitos is the author of well over a hundred scientific papers and several books, the acknowledged specialist of, e.g., Greek *Campanula*, *Arenaria*, *Aubrieta*, *Bolanthus*, the floras of Cephalonia and of the Northern Sporades, and one of the renowned plant systematists of our time.

Those who know Phitos well will first see the Greek in him. The generosity, the pride, sometimes – why not – the stubbornness that are characteristic of his nation pervade his personality. He may sometimes be harsh to those who harass him; but to his good friends, I can tell, he is kindness itself. Let me then conclude these words of appreciation on a personal note, by recalling how I came to get acquainted with Dimitrios, how our friendship started that makes it such a pleasant task to present him with OPTIMA's highest award. Our first meeting had all but happened in spring 1964, when we missed each other by just two days: mutually unaware of our travel arrangements, Dimitrios with the Rechingers and I with my father both visited the islands of Kythera and Antikythera almost simultaneously. They were there on 4-6 May, when they barely survived a stormy caique ride to Antikythera on the last day; I arrived as soon as they had left, on the eighth. As it were, we eventually met in early November 1966 on my return from my fifth Cretan journey, in Phitos's Athens home at

Ampelokipi. Rechinger had by then committed him to contribute to our joint "Purgatorium" or *Chloris Kythereia* – to be published the following year. Phitos was somewhat ill at ease though, as he knew that in the meantime a young botanist from Athens, Artemios Yannitsaros, had started his PhD work on the flora of Kythera under Diapoulis's supervision. What a clash of interests between local botanists and their foreign hosts! Add that during our chats we soon discovered that we were about to describe the same new species independently. Plenty of ammunition, you might think, for a good fight among host and "neocolonialist", were it not for Oh, but you ignore Dimitrios' generosity of mind and unconditional commitment to the laws of Greek hospitality. As it is, the reverse happened: our first common evening sealed a lifetime's fecund collaboration; and the new *Campanula pinatzii*, an endemic of Karpathos in the southern Aegean, was published jointly, with Phitos choosing the epithet and I the place of publication and nomenclatural type.

Let me end by this anecdote which, I believe, has educational value as well as historical interest. It links Greek and European botany in the person of Dimitrios Phitos, it shows him as the catalyst he has been and continues to be. May he be able to continue for many years his productive scientific activity".

W. Greuter

OPTIMA Silver Medals

The OPTIMA Silver Medal is awarded every three years to the authors of the best papers or books on the phytotaxonomy of the Mediterranean Area that were published in the preceding three-year period. At the X OPTIMA Meeting held in Palermo in September 2001, the following botanists received this medal: **Dr. Christoph Oberprieler** for "The systematics of *Anthemis* L. (Compositae, Anthemidae) in W and C North Africa" (*Bocconea* 9, 1998), **Dr. Joan Simon & Dr. Josep Vicens** for "Estudis biosistemàtics en *Euphorbia* L. a la Mediterrània occidental" (Institut d'Estudis Catalans, Secció de Ciències Biològiques, Barcelona, 1999), and **Prof. Walter Lack** for "The Flora graeca story. Sibthorp, Bauer, and Hawkins in the Levant" (Oxford University Press, Oxford, New York & Tokio, 1999).

The texts of the addresses delivered upon presentation of the first two silver medals is reproduced below. The text corresponding to the medal for Prof. W. Lack was not available at the closing of this edition.

"Anyone who is foolhardy enough to get involved in the taxonomic intricacies of the *Anthemideae* group of the *Asteraceae*, and then produces such a comprehensive and detailed treatment as The Systematics of *Anthemis* L. (Compositae, *Anthemideae*) in W and C North Africa' (*Bocconea* 9: 1-328 1998) deserves a medal, and it is therefore with great pleasure that I accepted the invitation to present

Dr Christoph Oberprieler for the award of an OPTIMA Silver Medal for this work.

This revision includes not only detailed analyses of morphological features but data on the structure, anatomy and micromorphology (using scanning electron microscopy) of the cypselas that have played such an important part in this and in previous treatments of this group. My only regret is the use of the term 'achenes' instead of the more correct 'cypselas' for these structures! The revision also includes a thoroughly detailed study of the chromosomes of the members of the group, with karyotype analyses and morphometric data for each karyotype studies. Pollen morphology is also analysed.

"Mr. President, Rectore Magnifico della Università di Palermo, Ladies and Gentlemen. It is for me a pleasure to present here the work which has been awarded the OPTIMA Silver medal for 2000, "Estudis biosistemàtics en *Euphorbia* L. a la Mediterrània occidental". This excellent book results from the fusion of two PhD Thesis submitted in the University of Barcelona in 1992 and 1993. Its authors, both Lectures of the Faculty of Pharmacy, University of Barcelona, are Joan Simon Pallisé and José Vincens Fandos.

J. Simon Pallisé was born in Manresa, an industrial city close to Barcelona, and graduated in this University in 1985. In 1992 he got his PhD degree by the presentation and public defense of a Thesis which had been directed by J. Molero and C. Blanché, who are also OPTIMA members. He later moved from *Euphorbia* to the field of Conservation, has been working on reproductive biology and molecular biology (isozyme analysis), and is now responsible for the preparation of a Chromosome Atlas of Paraguay. He has also been responsible, together with the second author and J. Molero and C. Blanché for the preparation of *Euphorbia* for Flora Iberica vol. 8.

José Vincens Fandos was born in Palma de Mallorca (Balearic Islands) and graduated from Barcelona University in 1988. In 1993 he got his PhD degree after the submission of a Thesis whose directors were, once again, J. Molero and C. Blanché. He has continued working on *Euphorbia*. He has been responsible, together with J. Simon Pallisé, J. Molero and C. Blanché, for the preparation of *Euphorbia* for Flora Iberica, vol. 8, and he will be responsible for this genus in the Flora Helenica project.

In 1995 they both decided to apply for the prestigious prize "Pio Font i Quer" which the Institut d'Estudis Catalans of Barcelona gives every four years to a prominent PhD study. In 1996, the prize was given ex-equo to both of them. One of the advantages of the "Pio Font i Quer" prize is that the awarded work is published at the expense of the Institute. A great effort was then made by both authors, and Prof. J. Vigo, also an OPTIMA member, who edited the work to prepare a single and uniform book by fusing together what

In the *Anthemis boveana* group, species delimitation is studied using Principal Component Analysis in morphological characters while in the *A. pedunculata* – *A. punctata* complex, the techniques used are numerical analysis of morphological features and RAPD analysis.

The formal revision, with all the details of nomenclature, synonymy, descriptions, specimens cited and discussion, is excellently presented and well illustrated.

I have therefore much pleasure in presenting Dr Christoph Oberprieler for an OPTIMA Silver Medal".

V. Heywood

initially were two rather different PhD Thesis although similar in their general scope and orientation. This resulted in the awarded work.

This book includes a first general part, followed by the taxonomic revision of *Euphorbia* group *Flavicomia* (9 species) and group *Squamigera* (7 species).

An introduction on the history of *Euphorbia* taxonomy is followed by a list of populations used for biological studies and a list of consulted herbaria. Then, the methodology for the study of morphological and karyological characters is clearly explained. The main bulk of the book, this is, the taxonomical study of *Euphorbia* gr. *Flavicomia* and gr. *Squamigera* follows. Each group is handled in a similar way. There are detailed studies of morphological characters, most of them studied by stereo, optical and scanning electron microscopy. Nice descriptions and drawings of the habit are followed by the revision of all morphological and karyological characters. The study of foliar morphology and indument is exceptionally detailed. Pollen analysis is followed by the study of capsules and seeds. Simpson & Roe tests, generally used to show pollen variability, are extended to fruits and seeds. Keys to the identification of the recognized species by foliar, fruit or seed characters are included. The karyological study of the recognized taxa, apart from chromosome number and ploidy levels, includes karyotype descriptions, idiograms, and evaluation of karyotype asymmetry following Stebbins', Graulhüber & Speta and Romero indices. Numerical taxonomy (main components analysis and classification) is applied to analyse the numerous data obtained.

The taxonomic treatment of the groups (*Flavicomia* or *Squamigera*) includes keys for the separation of species and infraspecific taxa. The correct name is given for each recognized taxa, followed by the basonym and homotypic and heterotypic synonyms, and, especially for the *Squamigera* group, the types. Detailed descriptions are given, together with dotted distribution maps and complete lists of the studied material. For each taxon a photocopy of a representative specimen (for gr. *Flavicomia*) or a line drawing (for gr. *Squamigera*) is also included.

Altogether this work constitutes an excellent revision of part of the genus *Euphorbia*, and well deserves the prize it has been awarded”.

B. Valdés



CONSERVATION PROGRAM FOR *NARCISSUS CAVANILLESII* A. BARRA & G. LÓPEZ (AMARYLLIDACEAE) IN PORTUGAL: A TRANSLOCATION ACTION

by ANTÒNIA ROSSELLÓ-GRAELL, DAVID DRAPER, ANA ISABEL D. CORREIA & JOSÉ MARÍA IRIONDO

Narcissus cavanillesii A. Barra & G. López is an autumn flowering endemic geophyte mainly distributed in SW Spain but rare in Portugal, Algeria and Morocco. This species is a priority *taxon* included in Annexes II and IV of the European Community Habitat and Species Directive (Council Directive - 92/43/EEC). Two plant localities of this *taxon* have been reported in Portugal and both of them will be affected by the construction of the Alqueva dam at the Guadiana basin (Alentejo region). This dam is going to cover 250 km² of land and it will be the largest one of its kind in Europe. One of the *N. cavanillesii* localities will be completely flooded and the other will be affected by changes in habitat and in human activities. According to IUCN criteria (2001), this species can be classified as Critically Endangered (CR) in Portugal.

In this context, a conservation program has been planned with the main goal focused on avoiding the extinction of *N. cavanillesii* in Portugal and guaranteeing the survival of its populations. Furthermore, this program pursues an improvement from the original situation of the Portuguese populations in order to lower the threat status in Portugal from Critically Endangered (CR) to Endangered (EN) or Vulnerable (VU). This program is promoted by EDIA, S. A. and co-financed by EDIA, S.A. and European Regional Development Funds (ERDF).

This conservation program integrates several measures concerning different components of biological conservation. As a first step, a four-year plan has been started with the following main goals:

- **Acquisition of base-line information about *N. cavanillesii*.**

This information will provide the basic understanding of the species requirements needed to adequately manage the Portuguese *N. cavanillesii* populations and maximize their survival.

Thus, ecological requirements, population size, and

spatial, demographic and genetic structure are being studied for the two populations. Studies regarding breeding system, reproductive success, dispersal and competition are also under way.

Data on ecological requirements of *N. cavanillesii* have been gathered based on Portuguese populations as well as nine Spanish localities visited in Autumn 2000. Most of the visited populations were very localized (small occupancy area), had a low coverage, a number of individuals below 10,000 and showed no outstanding specific edaphical or climate requirements.

During the last flowering season, Autumn 2001, several additional studies were carried out involving demography, phenology, breeding system, floral biology and insect flower visitors. Moreover, a comparative study with the congeneric species *Narcissus serotinus* L. was initiated to achieve a better understanding of *N. cavanillesii*. *N. serotinus* is widespread throughout the Mediterranean basin and cohabits at the two Portuguese locations with *N. cavanillesii*.

- **Translocation**

This operation is considered a mitigation action to avoid the loss of the population that would result from the flooding of one of the Portuguese localities. Thus, the action consists of the translocation of the population to a safe place with a high habitat suitability for the species. This kind of plant conservation action has never before been performed in Portugal.

The translocation was planned in two phases. First, a temporary translocation was performed in September 2001 and consisted of the removal of the population from the original site to a new location at a higher altitude near the original site. This step was needed to eliminate the risk of losing the population by an early flooding of the location. Thus, the translocation had to be carried out before the dam started filling with water, planned for December 2001, and before this autumn-

flowering geophyte initiated the active phase of its biological cycle, because at this stage the plant is more vulnerable to perturbations than at a latent bulb stage. This rescue was performed in collaboration with the Dep. Geociências of the University of Évora (Portugal).

The translocated population has about 1200 reproductive individuals (census elaborated in Autumn 2000). It is structured in 11 small patches from 0,5 m² to 8 m² on soil or schist rock and it was located very close to the Guadiana river at 127 m. a. s. l. The exact original location and orientation of the patches and individuals was geo-referenced by a GPS with differential correction accuracy. Each patch was moved to a higher altitude (142-146 m. a. s. l.), well above the mean water level planned for the dam (139 m. a. s. l.). The translocation maintained the original distance as well as the relative position between the patches in order to reproduce the original situation as much as possible. In this sense, habitat adequation of the receptor site was performed as needed before receiving the population. The effects of this first translocation on the population individuals is now under evaluation.

The definitive translocation is planned for late spring 2002. Three main considerations are being taken into account for the selection of the new location: i) suitability of the habitat, ii) historical range of the species and iii) protection status of the area. However, since we aim for the long-term conservation of the

species, the possible effects of global change upon potential reception sites are also under study.

- **Monitoring** the dynamics of the populations

A monitoring program will evaluate the dynamics of both *N. cavanillesii* Portuguese populations. The study of life history processes and reproductive success over the years will allow us to evaluate the adaptation of the translocated population to the new location as well as the response of the other population to the increase in the dam water level and to changes in its ecological conditions.

- **Corrective actions**

According to monitoring results, corrective actions will be implemented as needed in order to maximize the survival of *N. cavanillesii* populations. In this sense, several propagation and *ex situ* conservation techniques are being developed. The plant material obtained and preserved through these protocols might be used in re-inforcement or re-introduction actions if an alarming decline of the population were detected by the monitoring program.

HERBARIUM NEWS*

edited by PALOMA BLANCO

PTERIDOPHYTES IN THE IBERIAN HERBARIA

by M^a CARMEN PRADA

The study of pteridophytes in the Iberian Peninsula was initiated by J. Cavanilles. Between 1799 and 1804 he published several works on Spanish and foreign ferns. In the 19th century few but interesting papers, such as those by M. Lagasca, D. García and S. Rojas Clemente, M. Colmeiro and J. Henriques, treated this

group of plants. In terms of the number of publications devoted to pteridophytes, the first three decades of the 20th century showed a progressive increase, with contributions by F. Barras, R.B. Merino, S.J. Barnola, J. Cadevall and, especially, J. Ruiz de Azúa, who can be considered the first Spanish pteridologist, including

* Please send all items suitable for publication under this heading directly to the editor of this column: Paloma Blanco, Real Jardín Botánico, Plaza de Murillo, 2, E-28014 Madrid, Spain.

in his works not only floristic aspects but also anatomy and numerical analysis of characters.

The natural impasse due to the Civil War led to an almost complete stop of the pteridological research in Spain, lasting until the 60's. There was, however, a thriving period in Portugal with contributions by M.C. Rezende Pinto, R.T. Palinha, C. Romariz and R.B. Fernandes. Since 1960 a great amount of work on pteridophytes has been done and new perspectives have arisen after modern taxonomical concepts were assumed in the study of this group of plants. Classical floristic reports continued being the main activity of Iberian botanists; among them S. Rivas Goday, S. Rivas-Martínez, P. Montserrat, M. Mayor, M. Lafínz, M. Costa, J. Fernández Casas, G. López and many others, made important contributions to the chorology of Spanish pteridophytes. Taxonomic studies of several groups were also initiated. Moreover, foreign pteridologists, especially from the British Isles and Central Europe, focused their interest on our pteridoflora and also contributed to the discovery or description of new taxa. This was the case of B. Mollesworth, T. Reichenstein, D.E. Meyer, A. Sleep, H. Rasbach, among others.

In the late 70's, stimulated by the enthusiastic leadership of S. Rivas-Martínez (Universidad Complutense de Madrid) and A.E. Salvo (Universidad de Málaga), the Iberian Pteridological Group (GPI) emerged as an organization devoted to the study of pteridophytes. Among their activities, and coordinated by T.E. Díaz, A. Penas and E. Puente (University of León), seven Exsiccata Pteridophyta Iberica were distributed between 1985 and 1995. Depending on the year, 12 to 17 Herbaria participated, and 962 sheets of Spanish pteridophytes, corresponding to 105 different taxa were distributed, greatly increasing the richness of pteridophyte collections. GPI is not active at present, but the interest in pteridophytes is still alive among a reduced group of Spanish botanists.

References for the pteridological publications by the authors mentioned above can be found in Salvo (1982), Salvo et al. (1981) and Prada (1982). Since 1989 Spanish pteridological papers have been listed yearly in the Pteridophyta section of *Bibliografía Botánica Ibérica* of *Botanica Complutensis*.

Due to their condition of vascular plants, pteridophytes are treated in the Herbaria in the same way as spermatophytes; they are not placed in special cryptogamic collections. In fact, except for the last two decades, most of the works dealing with pteridophytes were developed by phanerogamists.

A first list of the pteridophyte collections at different Iberian herbaria is now presented. In most cases information has been provided by their keepers, whose cooperation we would like to acknowledge. The list is arranged following the *Index Herbariorum* abbreviations.

ALME (Herbario de la Estación Experimental de Zonas Áridas, CSIC, C/General Segura 1, E-04001, ALMERÍA, Spain). It holds about 1400 sheets of Spanish pteridophytes belonging to 23 families. Aspleniaceae is the best represented with almost 500 sheets, followed by Adiantaceae, Aspidiaceae, Athyriaceae, Equisetaceae, Hemionitidaceae and Sinopteridaceae. Most of the material was collected by A. Castillo in the Almería Province. There is an old collection made between 1920 and 1970 with about 6.500 sheets, 67 of them being pteridophytes. This collection is very rich in species (about two sheets per taxon), but with little information on their labels. Important collectors are Brother Rufino Sagredo and Brothers Jerónimo and Mauricio. Regarding pteridophytes, Aspleniaceae and Athyriaceae are the two families with the most specimens. Keeper: Roberto Lázaro Suau. E-mail: lazaro@eeza.csic.es. Telephone: 34 950281045, Fax: 34 950277100.

BCN (Herbari, Universitat de Barcelona, Baldri Reixac 4-6, Torre D, E-08028 BARCELONA, Spain). This Herbarium holds the collections of the previous BCF and BCC Herbaria, now united in BCN. It contains about 1600 sheets of pteridophytes, mainly from the northeastern Iberian Peninsula. Aspleniaceae and Dryopteridaceae are the two families with the most specimens. Important collectors are A. Carrillo, J. Carreras, T.M. Losa, J. Molero, J.M. Ninot and J. Vigo. The entire collection was revised by L. Sáez for the Atlas pteridològic de Catalunya i Andorra (*Acta Bot. Barcinonensia* 44:39-167, 1997). Keeper: C. Benedí. E-mail: benedi@farmacia.far.ub.es. Telephone: 34 934037019, 34 934024490, Fax: 34 934034592.

GDA-GDAC (Herbario de la Universidad de Granada, C/ Rector López Argüeta 8, E-18071, GRANADA, Spain). It keeps about 2700 sheets of pteridophytes, mainly from Andalusia. Important collectors are E. Salvo and J. Molero. Keeper: J. Eduardo Linares Cuesta. E-mail: elinares@ugr.es. Telephone: 34 958246329, Fax: 34 958243254. Herbarium information available at <http://www.ugr.es/~herbario>.

JACA (Instituto Pirenaico de Ecología, CSIC, Avda. Regimiento Galicia s.n., E-22700 JACA, Spain) It keeps about 4000 sheets mainly from the central-western Pyrenees, Cantabrian Mountains and Iberic System Mountains (especially Moncayo), as well as the rest of the Iberian Peninsula, Menorca and Europe. *Asplenium*, *Equisetum*, *Dryopteris* and Athyriaceae are well represented groups, with more than 200 sheets each. Important collectors are P. Montserrat, L. Villar, G. Montserrat, D. Gómez, J.V. Ferrández and J.A. Sesé. Spores are generally available in most of the sheets. The collection is almost completely databased and it is possible to obtain taxonomical and

geographical lists as well as distribution maps. Keeper: D. Gómez. E-mail: dgomez@ipe.csic.es. Telephone: 34 974361441, Fax: 34 974363222.

LEB (Dpto. Biología Vegetal, Facultad de Ciencias Biológicas y Ambientales, Campus de Vegazana, E-24071 LEÓN, Spain) The Herbarium holds about 2800 sheets, mainly from the north and northwestern Iberian Peninsula. Equisetaceae, Polypodiaceae, Sinopteridaceae (*Cheilanthes*), Thelypteridaceae, Aspleniaceae (*Asplenium*), Athyriaceae, Aspidiaceae and Blechnaceae (*Blechnum*) are especially well represented. Important collectors are A. Penas, E. Puente, J. Andrés, A. Terrón, M.J. López Pacheco, T.E. Díaz, C. Pérez Morales, M.E. García González, L. Herrero, F. Llamas, C. Acedo, M. de Godos, P. Fernández Areces and F.J. Pérez Carro. There is a palynotheca with about 1.300 slides. Keeper: E. de Paz Canuria. E-mail: dbvepc@unileon.es. Telephone: 34 987291494, Fax: 34 987291563.

MA (Real Jardín Botánico-CSIC, Pza. de Murillo 2, E-28014 MADRID, Spain). This Institution holds in the General Herbarium about 19500 sheets of pteridophytes, belonging to 195 genera from all over the world. 55% of the samples are from Spain, with representatives of all Iberian genera. Genera such as *Adiantum*, *Asplenium*, *Athyrium*, *Cheilanthes*, *Cystopteris*, *Dryopteris*, *Equisetum*, *Polypodium*, *Polystichum* and *Selaginella* are represented by more than 500 specimens. Important collectors are Brother Sennen, A. Caballero, E. Guinea, C. Vicioso, F. Bellot, E.F. Galiano, G. López, E. Valdés Bermejo, S. Castroviejo, J. Fernández Casas and F. Muñoz Garmendia. The collection has been recently databased. In the historical collections (Sessé y Mociño, Isern, Mutis, Ruiz y Pavón) there are more than 1000 sheets of pteridophytes of great interest. Keeper: M. Velayos. E-mail: velayos@ma-rjb.csic.es. Telephone: 34 914203017, Fax: 34 914200157.

MACB (Dpto. Biología Vegetal I, Facultad de Biología, Universidad Complutense, Ciudad Universitaria, E-28040 MADRID, Spain). It keeps about 3500 sheets of Spanish pteridophytes, mainly from central Iberian Peninsula. Aspidiaceae, Aspleniaceae, Athyriaceae, Equisetaceae, Polypodiaceae and Sinopteridaceae are the best represented families. Important collectors are M.E. Ron, E. Fuertes, M.A. Carrasco, M. Costa, A. Molina, S. Pajarón, A. Herrero, E. Pangua and C. Prada. The collection is being databased at present. Keeper: M.A. Carrasco. E-mail: carrasco@bio.ucm.es. Telephone: 34 913944781, Fax: 34 913945034.

MAF (Dpto. Biología Vegetal II, Facultad de Farmacia, Universidad Complutense, Ciudad Univer-

sitaria, E-28040 MADRID, Spain). It holds about 4200 pteridophyte sheets, from all over the country. *Adiantum*, *Dryopteris*, *Polystichum*, *Asplenium*, *Cystopteris*, *Equisetum*, *Isoetes*, *Thelypteris* and Lycopodiaceae are groups especially well represented. Important collectors are B. Lázaro Ibiza, J. Cuatrecasas, S. Rivas Goday, S. Rivas-Martínez, M. Ladero, E. Fuertes, C. Navarro, F. Fernández, J. Loidi, and P. Cubas. Keeper: J. Pizarro. E-mail: mafherb@farm.ucm.es. Telephone: 34 913941769, Fax: 34 913941774.

MUB (Dpto. de Biología Vegetal, Botánica, Campus de Espinardo, Universidad de Murcia, E-30071, MURCIA, Spain) It holds about 450 sheets from the region of Murcia. The main collectors are P. Sánchez-Gómez and F. Alcaraz. There is a palynotheca managed by Dr. J.S. Carrión. Correspondent: J. Guerra. E-mail: jguerra@um.es. Telephone: 34 968367011.

SALA-SALAF (Dpto de Botánica, Avda. Licenciado Méndez Nieto s.n., Universidad de Salamanca, E-37007 SALAMANCA, Spain) It keeps 4221 sheets mainly from the western Iberian Peninsula, especially Zamora, Salamanca and Cáceres Provinces. Genera such as *Isoetes*, *Ophioglossum*, *Polypodium*, *Cheilanthes*, *Asplenium*, and *Dryopteris* are well represented. The Herbarium has been databased. Keeper: F.J. Hernández. E-mail: herjavi@usal.es. Telephone: 34 923294469, Fax: 34 923294484.

VAL-VAB-VF (Herbari, Jardí Botanic, Universitat de Valencia, Calle Quart 82, E-46008, VALENCIA, Spain) The three herbaria from Valencia have been recently assembled and are located at the Botanical Garden. It keeps more than 1100 sheets, mainly from the areas of Marina Alta and Marina Baixa (Alicante), the Espadán Mountains (Castellón) and La Ribera region (Valencia). Equisetaceae and Aspleniaceae are the best represented groups. Important collectors are: A. Aguilera, J. Borja, M. Caldich, J.T. Corbín, M. Costa, C. Fabregat, E. Estrelles, R. Figuerola, J. Güemes, J.J. Herrero-Borgoñón, A.M. Ibars, J. Iranzo, S. López Udias, J. Mansanet, I. Martínez-Solís, G. Mateo, A. Olivares, J.B. Peris and J.Riera. Keeper: J.Güemes. E-mail: guemes@uv.es. Telephone: 34 963156810, 34 963864928, Fax: 34 963156826.

REFERENCES

- PRADA, C. (1982). Datos biográficos y bibliografía de Justo Ruiz de Azúa. *Collectanea Bot.* 13(1): 85-86.
- SALVO, A.E., A. ASENSI & S. RIVAS-MARTÍNEZ (1981). Bibliografía pteridológica de España y Portugal (Continente e Islas). *Trab. y monograf. Dep. Bot. Málaga*: 2: 59-104.
- SALVO, A.E. (1982). *Flora pteridofítica de*

Andalucía. Tesis Doctoral (inéd.). Universidad de Málaga.



WEB NEWS*

BOTANY DATABASES ON THE INTERNET

by JOSÉ LUIS BENITO

The **Kew Record Taxonomic Literature (TL)** database contains references of all publications relating to the taxonomy of flowering plants, gymnosperms and ferns. It also includes references on phytogeography, nomenclature, chromosome surveys, chemotaxonomy, floras and botanical institutions, along with articles of taxonomic interest in the fields of anatomy and morphology, palynology, embryology and reproductive biology, and relevant bibliographies and biographies. Each article on the database is divided into different fields (for instance author, title, added keywords) and searches may be made over the whole article or be limited to particular fields.

<http://www.rbgekew.org.uk/bibliographies/KR/KRHomeExt.html>

The **International Plant Names Index (IPNI)** is a database of the names and associated basic bibliographical details of all seed plants. Its goal is to eliminate the need for repeated reference to primary sources for basic bibliographic information on plant names. The data are freely available and are gradually being standardized and checked. IPNI will be a dynamic resource, depending on direct contributions by all members of the botanical community.

IPNI is the product of the collaboration between the Royal Botanic Gardens at Kew, the Harvard

University Herbaria and the Australian National Herbarium.

<http://www.ipni.org>

HYpermedia for Plant Protection (HYPPA) - Weeds. This encyclopedic database on plant protection catalogues the main weeds (580) of western Europe, describes the species at two stages: mature plants and seedlings, and provides information on their taxonomy, their distribution and their ecology. It is the internet version of the weed section of the HYPP©CDROM.

HYPPA is developed by the Weed Science and Agronomy Unit (INRA, France)

<http://www.inra.fr/Internet/Centres/Dijon/malherbo/hyppa/>

The **Index Synonymique de la Flore de France** of Michel Kerguélén is an alphabetic list of taxa of the wild and cultivated Flora of France, including synonymy and hybrids, with around 62,000 citations. The compilation has been carried out following the International Code of Botanical Nomenclature. It also contains the bibliographic references corresponding to the diagnosis of taxa, chromosome numbers, and the type species of each genus.

<http://www.inra.fr/flore-france/index.htm>

PROJECTS

* Please send all items suitable for publication under this heading to the editor of this column: José Luis Benito Alonso Instituto Pirenaico de Ecología, CSIC Apdo. 64. E-22700 Jaca, Huesca, Spain. E-mail: jlbenito@ipe.csic.es

THE SPANISH 'THREATENED FLORA ATLAS' PROJECT

by JUAN CARLOS MORENO

The new Spanish Red List of vascular plants was published at the end of 2000, as a result of a nearly two-year long effort of a great number of local botanists belonging to universities, botanic gardens, research institutes and public administrations. The Ministry of Environment, which provided technical support and partial funding, promoted the continuance of the work of this team with a project to elaborate an Atlas and a Red Book of the Spanish threatened flora from 2000 to 2003.

This project comprises the following objectives:

- i) To compile the existing information of the Spanish vascular flora at risk (chorology, ecology, demography, biology, conservation status, etc.) in a preliminary database. As the red list links a vast number of taxa (1414 species and subspecies), only those plants which are extinct or included in the IUCN 'CR', 'EN' and 'DD' categories were selected, leaving the vulnerable taxa (720) for a second stage.
- ii) To update and increase the field information of all the endangered species and a number of 'Data Deficient' taxa. This includes the mapping of the current distribution of about 500 species using the 1 km U.T.M. grid, making a census of all their recognized populations and identifying actual and potential risks for their survival.
- iii) To analyse the population viability of a core of 40 selected species. Demographical parameters of these taxa will be monitored for three years at a first stage. Widening the use of the methodology of

this branch of conservation biology among the Spanish botanists has been considered a collateral goal.

- iv) To make a preliminary list of alien taxa in Spain, pointing out those species affecting the threatened flora and the results of their establishment.
- v) To identify the most important areas of the Spanish threatened flora, looking for gaps in the network of national and/or regional protected areas and in the Natura 2000 network.
- vi) To diagnose the trends of the endangered flora using the above-mentioned results, planning future actions and suggesting guidelines to monitor these species.

An elected steering committee composed of Angel Bañares, Gabriel Blanca, Santiago Ortiz, Juan Carlos Moreno and Jaime Güemes is in charge of the course of the project and the coordination of the regional subgroups (Canarian, Andalusian, Atlantic, Central and Mediterranean regions, respectively). To standardize the field work and data collecting, a methodological handbook has been edited under the supervision of José M. Iriondo, who will also be responsible for the treatment of demographic data.

Up to now, the preliminary database has been completed as well as the field work for 50% of the species. Future plans include the publication of a new Red Book, scientific publications, a database available on the internet and other electronic documents.

MEETINGS

THIRD INTERNATIONAL BALKAN BOTANICAL CONGRESS "Plants of the Balkan Peninsula in the Creation of New Values"

SARAJEVO, BOSNIA AND HERZEGOVINA, 18-24 MAY 2003

The Academy of Science and Arts of Bosnia and Herzegovina, University of Sarajevo, the Faculty of Science, University of Sarajevo, and the Coordination of the Center of Ecology and Natural Resources, Faculty of Science, University of Sarajevo are organizing this congress that will include plenary lectures, introductory (key) lectures, oral presentations, poster presentations, workshops, discussion panels and professional excursions.

The themes of the congress are: Biodiversity - Structure, Dynamics and Management (Balkan Flora and Vegetation), Biosystematics, Taxonomy & Evolution, Horology & Phytogeography, Vegetation Science & Landscape Planning, Phytochemistry & Natural Products, Economic Botany & Ethnobotany, Structure and its Dynamics, Metabolism, Growth & Bioenergetics, Molecular Biology, Genetics, Genetical Engineering and Biotechnology, Ecology, Environmental Botany,

Conservation & Restauration.

The Mid-Congress excursion will be to the canyon of the Neretva river, a center of endemism, and the Cvrstica, Cabulja, Prenj. mountains. There will also be Pre-Congress and/or Post-Congress excursions from Sarajevo to: a) Vranica, Vlasica and Konjuh mountains (serpentine complex); b) Sutjeska National Park - Dubrovnik; c) Una river waterfalls - Plitvice lakes - Velebit mountain - Split.

For further information, please contact: Professor Sulejman Redzic Center for Ecology and Natural Resources, Faculty of Science, University of Sarajevo. 33 Zmaja od Bosne St., 71 000 Sarajevo, Bosnia and Herzegovina. Tel./ Fax: + 387. 33 64 91 96, E-mail: redzic0102@yahoo.com or 3bbc@email.com;

Web pages: <http://tibbc-2003.com>

ANNOUNCEMENTS*

**6 April-20 October
2002**

Floriade 2002. The Netherlands.

If you are touring Europe in 2002, you might want to see Floriade, a world horticultural exhibition in the Netherlands. The Floriade is held once every ten years; the theme for this year's event is "Feel the Art of Nature." It will be held in the district of Haarlemmermeer, close to Amsterdam's Airport Schiphol, amid 65 hectares (160 acres) of parkland. It is anticipated that more than 3 million people will attend. For more information, see <http://www.floriade.com/>

• • • • •

8-10 May 2002

Robert Brown 200. Royal Botanical Gardens. Sydney, Australia.

In May 1802, nearly 200 years ago, Robert Brown first set foot in Sydney as surgeon-naturalist on Matthew Flinders' expedition. He returned several times over the next three years, making a pre-eminent contribution to knowledge of our local flora. A three-day conference celebrating his time in this region and his lasting scientific

contributions will be held under the auspices of the Royal Botanic Gardens Sydney, Greening Australia (NSW) Inc., the Linnean Society of London, and the Australian Systematic Botany Society. The conference will include invited talks and contributed posters on two broad themes: 1) Brown's lasting influence on botanical systematics and 2) Changes in the vegetation of the Sydney region since his visit: current conservation and land management issues. For more information, see the web site at <http://plantnet.rbgsyd.gov.au/brown200/>

• • • • •

15-19 May 2002

André Michaux International Symposium. North Carolina, USA.

A major international symposium featuring the life, works, and times of André Michaux, noted French explorer, collector and botanist, is being planned for May 15-19, 2002. The symposium will feature various talks and academic presentations, workshops, field trips, historical re-enactments, and other activities that, altogether, should appeal to a variety of au-

diences. The goals of the symposium are to call attention to Michaux's important botanical contributions in North America; to place Michaux in his historical context and honor his life, work and legacy; to raise awareness of plants in the local environment; and to spark interdisciplinary studies involving France, the French language, science, gardening, botanical illustration, early American history and exploration, and geography. It is expected that the symposium proceedings will be published. The setting for this symposium is Gaston County, North Carolina, and the symposium will occur in the bicentennial year of Michaux's death. A partnership consisting of Belmont Abbey College, Daniel Stowe Botanical Garden and Gaston Day School was formed to organize and promote the symposium. Major funding has been secured and other cooperators are also involved in the planning of this major event. The Southern Appalachian Botanical Society is a co-sponsor of this event. For further information on AMIS, please visit the web site at: <http://www.michaux.org>

• • • • •

* Coordinated by S. Pajarón. Please, send your announcements to S. Pajarón, Dpto. Biología Vegetal I Fac. Biología, Univ. Complutense, Ciudad Universitaria, E-28040 Madrid, Spain. E-mail: SPAJBOT@eucmax.sim.ucm.es

17-19 May 2002

Rhododendrons in Horticulture and Science. Edinburgh, Scotland.

This international conference is being supported and sponsored by The Royal Botanic Garden Edinburgh and The Royal Horticultural Society. The conference will provide a range of lectures by many internationally renowned speakers covering many aspects of rhododendrons and related plants. It will aim to provide a mix of horticulture and science that will appeal to a wide audience and will cover cultivation, collection and status in the wild, taxonomy including recent molecular work, problems with pests and diseases and the use of rhododendrons in modern gardens. There will be a poster display of recent work and an art exhibition of fine rhododendron paintings, many of which have been painted from the cultivated collections in Edinburgh. For the benefit of international delegates the conference immediately precedes the Chelsea Flower Show and coincides with The Floriades, a 3 month horticultural spectacular exhibition in the Netherlands held once every 10 years. Conference participation will be limited to 200. If there is sufficient interest, there will be workshops on rhododendron identification hosted by Dr. David Chamberlain and Dr. George Argent on 16th and 20th May and each restricted to 25 persons. A pre-conference tour of southern gardens and a post-conference tour of northern gardens will be arranged, but numbers will probably be limited to 30 persons per tour. To register interest please contact: Dr. G. Argent, Rhodo '02, The Royal Botanic Garden, Edinburgh EH3 5LR, Scotland, United Kingdom; e-mail: g.argent@rbge.org.uk; fax: +44 (0)131 552 0382.

• • • • •

6-8 June 2002

Sedges 2002 - International Conference on Uses, Diversity, and

Systematics of Cyperaceae. Delaware State University, USA.

The sedges are a large, ecologically and economically important family found in many habitats and climates throughout the world. This conference is hosted by the Claude E. Phillips Herbarium of DSU and sponsored by the Natural Resources Conservation Service of the United States Department of Agriculture. The first day is devoted to programs by researchers on an array of subjects including systematics, weed ecology, horticulture, conservation, wetland restoration, and ethnobotany. On the second day, field trips to local areas will enable conference participants to see a variety of sedges, mostly members of the large and taxonomically complex genus *Carex*. Identification workshops, again primarily for *Carex*, will be held on the third day.

To be placed on the mailing list for future notices and registration, please contact Robert Naczi maczi@dsc.edu

• • • • •

10-14 June 2002

VIIth Plant Life of Southwest Asia Symposium. Yuzuncu Yil University, Van, Turkey.

Lectures or posters on the following themes are invited: evolution and molecular systematics; ecosystems and vegetation; adaptations, speciation, biology and systematics in phanerogams and cryptogams; computer technology for the future of SW Asiatic Botany; Flora writing in SW Asia; ethnobotany and wild relatives of cultivated plants and phytochemistry. Deadline for registration is Friday, February 1, 2002. For more information please contact: Prof. Dr. Mehmet Koyuncu, VIIth Plant Life of Southwest Asia Symposium, Yuzuncu Yil University, Vice-Rector, Kampus, Van 65080, Turkey; Tel.: +90 432 225 1739; Fax: +90 432 225 1009; e-mails: mehmetkoyuncu@yyu.edu.tr

mekoyuncu@hotmail.com

• • • • •

22-27 June 2002

The 43rd Annual Meeting of the SOCIETY FOR ECONOMIC BOTANY. The New York Botanical Garden, USA.

Symposium: Origins, Evolution, and Conservation of Crop Plants: A Molecular Approach.

For more information, please visit: http://www.econbot.org/events/seb2002/seb_2002.html

• • • • •

July 2002

6th Hieracium Workshop.

Taxonomy, Molecular Systematics, Karyology, Embriology, Reproductive Biology, Ecology.

For more information, contact: walter.gutermann@univie.ac.at

• • • • •

5-7 July 2002

Flowers: Diversity, Development and Evolution. Institute of Systematic Botany, The University of Zurich, Zurich, Switzerland.

The conference will focus on the structure of flowers, their evolutionary origin, function, development and genetic control. Key researchers have been invited to speak, and we are very pleased to have positive responses from Spencer Barrett, Peter Crane, Pamela Diggle, James Doyle, Peter Endress, Claudia Erbar, William Friedman, Else Marie Friis, Pat Herendeen, Larry Hufford, Joachim Kadereit, Peter Leins, Susanne Renner, Louis Ronse De-Craene, Paula Rudall, Doug Soltis, Pam Soltis, Dennis Stevenson and Shirley Tucker. There will also be sessions for contributed papers and posters during the conference. Persons wishing to receive the second

circular, which will include the Registration Form, should complete the Expression of Interest form available at our website <http://www.systbot.unizh.ch/flowers>. Completed forms should be sent to Ms. C. Burlet either by e-mail <burlet@systbot.unizh.ch>, electronically via the website, by regular post to: Institute of Systematic Botany, University of Zurich, Zollikonerstrasse 107, CH-8008, Zurich, Switzerland or by fax (00 41 1 634 8403).

• • • • •

8-10 July 2002

Science for Plant Conservation – an International Conference for Botanic Gardens. Trinity college, Dublin, Ireland.

Botanic gardens throughout the world are actively involved in plant conservation at the local, regional, and international levels. Recently, Botanic Gardens Conservation International (BGCI) published an international agenda for botanic gardens which identifies the importance of conservation research at botanic gardens.

The goal of this conference is to bring together conservation scientists from the world's botanic gardens and academia to share field, laboratory, horticultural, and analytical methods and results that will make measurable progress in plant conservation.

Please join us for this timely and important conference, as we make the research agenda for plant conservation science at botanic gardens. In addition to a three day conference, pre- and post-conference field trips will be available.

If you are interested in attending this meeting, or for more information, please reply to: Mary Foody (mfoody@tcd.ie) or Steve Waldren (swaldren@tcd.ie); Conservation Conference, Botany Department, Trinity College, Dublin 2, Ireland. Phone: +353-1-608 1274; Fax: +353-1-6081147. <http://www.rbg.ca/cbcn/science>

[//www.rbg.ca/cbcn/science](http://www.rbg.ca/cbcn/science)

• • • • •

14-19 July 2002

SCB 2002 Annual Meeting. Canterbury, United Kingdom

The 16th Annual Meeting of the society of Conservation Biology. The meeting will be co-hosted by the Durrell Institute Of Conservation and Ecology (DICE) and the British Ecological Society (BES). The web site for the 2002 meeting is: <http://www.ukc.ac.uk/anthropology/dice/scb2002/>

Please visit this site for updates on registration, travel and accommodation, and the scientific and social program.

• • • • •

4-7 August 2002

Botany 2002. Madison, Wisconsin USA.

The annual meeting of ASPT as well as of the Botanical Society of America, American Fern Society, Canadian Botanical Association, and the Phycological Society of America. The theme of the meeting will be "Botany in the Curriculum: Integrating Research and Teaching." For information about the meeting, see the web site <http://www.botany2002.org/>

A new FORUM focusing on botanical education and outreach will be held on Friday and Saturday (August 2–3), and it will be linked to the annual scientific meeting on Sunday (August 4) via workshops and field trips.

• • • • •

9-16 September 2002

Sixth International Congress of Systematic and Evolutionary Biology. Patras, Greece.

The Congress will cover the general fields of Systematics and Evolution including, but not limited to, the following themes.

I. Classification and phylogenetic reconstruction. Likelihood, parsimony, optimisation, long-branch problems; Deep trees, multiple kingdoms; Universal phylogeny, tree of life; etc.

II. Evolution of genes and genomes. Comparative and Darwinian genomics; Genotype-phenotype mapping; Evolution of inheritance; Genomics, systematics, and biodiversity; Karyotype evolution; etc.

III. Evolution of form and function. The eukaryotic cell: genesis and evolution; Evolution of development; Homology; Evolution of cognition; Genetics of morphogenesis: patterns and constraints; Evolution of virulence, parasitism, toxicity; etc.

IV. Evolution in space and time. Coevolution, evolutionary ecology; Islands and endemism; Evolution and dispersal of Man; Biogeography; Tempo and rates of evolution; Molecular clock; etc.

V. Evolution through geological time. Interpreting the fossil record; Past environments; Evolution of Mediterranean biota; Dating the past; Extinction crises and past radiations; Stasis and disruption in the fossil record; Deep time evolution; etc.

VI. Global change and the biodiversity crisis. Why conserve: conservation vs. economics; Setting priorities; Extinction and survival; Scenarios of man-made changes and past catastrophes; Global stocktaking; In-situ and ex-situ conservation; Conservation and education; etc.

VII. Biodiversity and informatics. Global biodiversity informatics: the GBIF; Data and metadata in biodiversity; Handling large data sets for phylogeny; Biodiversity training; Natural history collections: value and needs; etc.

VIII. Attempts at synthesis: models and theories. Adaptive dynamics: co-evolution and speciation; Future concepts for biodiversity research; Purposes of classification; Modelling patterns and processes; The value of predictive tools; etc.

IX. Names, terms, concept. Diversity of names and life; Naming organisms in the information age; Phylogenetic nomenclature; Standard sets of descriptors; History of biodiversity research; etc.

X. Patterns and processes below the species level. Genomics and human phylogeny; Microevolution; Allele frequencies and population sampling; Gene flow; Speciation: sympatric, allopatric, parapatric; Genetic drift, mosaic populations; Adaptive strategies; Domestication; etc.

Further information: icsebinfo@biology.upatras.gr

• • • • •

11-15 September 2002

TREE SEEDS 2002. Annual Meeting of IUFRO "Research Group for Seed Physiology and Technology. MAICH, Chania, Greece.

<http://www.cc.uoa.gr/biology/TreeSeeds2002.htm>

• • • • •

13-18 October 2002

VIII Latin American Botanical Congress. Cartagena de Indias, Colombia.

The Congress is being organized by the Latin American Botanical association (Asociación Latinoamericana de Botánica-ALB), the Colombian Botanical Association and the National University of Colombia, so far with financial support from the Latin American Botanical Network (RLB). The first circular has already been distributed via Internet. This VIII Congress continues a tradition which started in México City in 1972. We will be celebrating 30 years since the very successful first. Latin American Botanical Congress was held. The Organizing Committee is inviting the international botanical community to actively participate in this important gathering. Previous Latin American Congresses have attracted between 700 and 1500 participants. Many colleagues will remember that the 4th Latin American Congress was held in the city of Medellín, Colombia, back in 1986. For additional information please contact the Organizing Committee at the following e-mail address: congrbot@ciencias.unal.edu.co.

• • • • •

31 March-5 April 2003

MONOCOTS III. The Third International Conference on the

Comparative Biology of the Monocotyledons and The Fourth International Symposium on Grass Systematics and Evolution. Rancho Santa Ana Botanic Garden, California, USA.

Comprising some 60,000 species, the monocots are a diverse and economically important group of flowering plants and the focus of significant and varied worldwide study. We invite you to participate in Monocots III, which combines the Third International Conference on the Comparative Biology of the Monocotyledons and the Fourth International Symposium on Grass Systematics and Evolution.

Topics will include morphology, anatomy, development, reproductive biology, molecular biology, cytology, genomics, genetics, biochemistry, paleobotany, phylogenetics, classification, biogeography, ecology, and data integration.

Sessions will be devoted to particular groups within monocots such as grasses and orchids. Monocots III will provide a rare opportunity for researchers in diverse fields to interact, share ideas, and form collaborations.

We invite proposals from those who wish to organize sessions. A call for contributed papers and posters will follow. The conference proceedings will be published.

For more information, please visit: <http://www.monocots3.org>

NOTICES OF PUBLICATIONS*

edited by WERNER GREUTER

General Botany, Textbooks

1. **Iôannês B. TSEKOS – Botanikê.** Domê, leitourgikê drasê kai biologia tôn futôn. – Ekdotikos Oikos, Thessalonikê, 2000 (ISBN 960-343-576-7). [5] + 1018 pages, drawings, graphs, tables, black-and-white photographs; hard cover.

Theophrastus's *Peri phyton historia* is so to say the world's earliest botanical textbook. The fact that Greece has produced, once again, one of the forefront manuals in the field, written in a modern version of the old Greek philosopher's language, is therefore well worth mentioning.

Iannis Tsekos is an internationally renowned specialist in the study of the algae including their infrastructural, functional and developmental aspects. At the end of his career as Professor of Botany at Aristotle University in Thessaloniki, he has written up a synthesis of his academic teaching in the field of general botany. The subtitle translates "form, function and biology of plants", which is why aspects of plant geography and systematics (on which other Greek textbooks, by Dimitrios Phitos, already exist) are excluded. The book, through its 34 chapters, follows a stringent logical progression from the simple to the complex: molecule, cell organelle, cell, tissue, organ, organism. Some of its later chapters (on shoot, leaf, flower, fruit and seed) concern the higher plants alone, while one (on life cycles) compares the main plant phyla – and in passing, on just a couple of pages, the fungi.

One of the characteristics of this book is the variety and quality of illustrations – a most important feature of a textbook addressing students. There are 487 figures in total, many of them original but the majority reproduced from the leading literature of our time. Their selection testifies to the great experience of Tsekos as a

teacher, and the quality of their reproduction shows that Greek typography is no longer Europe's stepchild in the domain. A less convincing aspect is bibliography – not the coverage of literature, which is perfectly fine, but the lack of completeness and accuracy in its citation. The search for the original sources of the second-hand illustrations, even though mentioned, requires advanced sleuthing skills.

Research performance in any one country depends, in the medium term, on the quality of academic teaching, which conditions the skills of the next generation of scientist. In other words: this book is the best possible legacy Tsekos could have made to his home country's botanical science. W.G.

Cryptogamae

2. **Giuseppe VENTURELLA – I funghi delle Madonie. Fungi of the Madonie.** – Ispe Archimede, Palermo, 2000 (ISBN 88-88024-00-8). 148 pages, colour photographs; laminated cover.

Some years ago I spent a couple of holiday weeks in the Mt Madonie region, having rented a small flat in a house picturesquely built on the slopes overlooking the borough of Castelbuono. My landlady, a middle-aged widow, once told me of her misfortunes, with a brother and a cousin killed in Palermo traffic – less tame then than it has since become – and her husband a victim of *Amanita* poisoning. Looking at this comely booklet makes me wonder whether, had it then been available, it might have saved him.

Amanita phalloides is indeed among the 60 species represented by good quality colour photographs. It is said to be widespread in the Madonie woods. Sadly, the text explains, it is

* Please send all items for review directly to the editor of this column: Prof. W. Greuter, Botanischer Garten & Botanisches Museum Berlin-Dahlem, Königin-Luise-Str. 6-8, D-14191 Berlin.

responsible for an increasing number of cases of fungal poisoning – a trend that is curiously attributed, not to prevailing ignorance but to the raising popularity of hobby mushroom collecting. The booklet's main interest for mycologists does not however reside in the portraits of common and widespread species such as the *Amanita* but in the photographs of the rare and local ones, such as the famous *Pleurotus nebrodensis*, and of those which, as *Rutstroemia echinophila*, are rarely represented owing to their small size and unobtrusive habit.

The text is bilingual, Italian in the left-hand column and English to the right. It is curiously unstructured for a book of this kind, with some descriptive information interspersed with data on habitat, edibility, common names, and you have it. No formal diagnostic descriptions are present, and as a tool for identifying a fungus the book can hardly serve. On second thoughts, even if it had then existed, my landlady of old would likely still be widowed. W.G.

3. **Giuseppe VENTURELLA, Alessandro SAITTA & Salvatore ROCCA – A check-list of the mycological flora of Madonia Park (North Sicily).** – Mycotaxon, Ithaca, 2000 (ISBN 0-930845-10-2). 246 pages, maps; paper.

When Venturella & Mazzola in 1989 presented a poster on the known Sicilian mycoflora at the 6th OPTIMA Meeting in Delphi the number of fungal species that had been recorded from the Madonie area, based on literature data, was barely 65 – a figure that included microfungi as well. The present new survey, based on five years of intensive field investigation at all seasons, raises the total (for macrofungi alone) to the impressive number of 614 taxa. Of these, about 10 % are ascomycetes and the remainder, basidiomycetes.

The checklist is an informative, well structured, nicely presented document, giving for each taxon the months of its appearance, habitat, detailed locality enumeration, and a map of its occurrence in the 69 grid squares of 3.5 × 2.5 km each into which the area has been subdivided. A seasonal synthesis expectedly shows a marked peak in autumn (September to December); but there is an equally clear, rather surprising early spring minimum in February and March, when under Mediterranean climatic conditions one

might have expected a more severe limitation due to summer drought. Species diversity increases dramatically in the higher parts of the park, where up to 375 taxa have been recorded from a single square. W.G.

4. **Giuseppe VENTURELLA, Alessandro SAITTA, Salvatore ROCCA & Silvano ONOFRI – The mycological flora of the Ficuzza Wood – Rocca Busambra territory (North Sicily, Italy).** – Mycotaxon, Ithaca, 2001 (ISBN 0-930845-11-0). 66 pages, graphs, table, colour map; paper.

Palermo's "home mountain" Rocca Busambra, situated at a distance of only 45 km from the city, has been the subject of an equally intensive mycological investigation as the Madonie Park that was dealt with under the foregoing item. Almost as high (over 1600 m) but considerably smaller than the Madonie (less than one fifth of the surface area), Rocca Busambra and the adjoining Ficuzza woods have proved to be surprisingly rich from a mycological point of view. The present inventory lists 741 taxa of macrofungi (again, about 10 % are ascomycetes).

The presentation is strictly tabular, resulting in substantial economy of space but concomitant loss of clarity. This is particularly true for the habitat data, for which the abbreviations used are hidden away in the current text. However the information is all there: square-wise distribution (the same 3.5 × 2.5 km square size as before applies, but the number of squares is merely 16), indication of habitat, substratum, and period of appearance, by month. The latter clearly shows the summer depression in species number that we missed in the Madonie: virtually no fungi are to be seen from June to August. In addition there is an indication of abundance, but as the categories used are not defined it is not very helpful.

The results of Venturella's mycological team exploring the fungal flora of Sicily are truly impressive. Congratulations! W.G.

5. **Siranush G. NANAGULJAN & Lia L. OSIPJAN – Konspekt makroskopičeskikh gribov Armenii: Gasteromicety** (Priloženie k strategii i planu dejstbij po bioraznoobraziju Armenii). – Ministerstvo Ohrany Prirody Respubliki Armenija, Erevan, 2000. 52

pages, graph, table, drawings and photographs; paper.

This is a first checklist of Armenian macroscopic *Gasteromycetes*, produced on the basis of field work, herbarium records and literature data. It lists 83 species plus 29 infraspecific taxa, belonging to 28 genera in 14 families of 8 different orders. Four species (*Phallus impudicus*, *Astraeus hygrometricus*, *Geastrum rufescens*, *Lycoperdon perlatum*) are illustrated by drawings, and two (*Scleroderma aurantium*, *Calvatia excipuliformis*) by black-and-white photographs. The text is written in Russian, except for the title page, editorial and introduction, which are trilingual (Russian, English and Armenian). Armenian designations are reported or newly coined for all listed taxa.

The list has been produced in the frame of a first national report on Armenian biodiversity presented by the Ministry of Nature Protection. Hopefully, similar inventories of other plant groups will become available before long. W.G.

6. **Xavier LLIMONA & Néstor L. HLADUN – Checklist of the lichens and lichenicolous fungi of the Iberian Peninsula and Balearic Islands.** [*Bocconea* (ISSN 1120-4060), 14 & *OPTIMA Commission for Lichens Publication*, 4.] – Herbarium Mediterraneum Panormitanum, Palermo, 2001 (ISBN 88-7915-014-6). 581 pages; paper.

This sizeable volume is the fourth in a series produced under the auspices of the most active of OPTIMA's scientific bodies: the Commission for Lichens, operating under the dynamic leadership of Pier Luigi Nimis of Trieste. Just for the record: the first volume of the series, a compendium of the lichens of Italy, was published in 1993 (see *OPTIMA Newsletter* 30: (2). 1996), the second, with checklists relating to 5 different areas, in 1996 (l.c. 31: (1). 1997), and the third (*I licheni di Calabria*, by D. Puntillo), also in 1996.

Now there is this newest product, and it is indeed impressive. It is based exclusively on a search of the literature (in the wide sense, including unpublished or semi-published theses and "theselets" [*tesinas* in Spanish]) and declares itself a guide to bibliographic sources for the planned Iberian lichen Flora. The body of literature that exists on Spanish lichens, with the cor-

responding bibliography spanning 53 pages in small print, is truly amazing, and so is the number of different names accounted for: 7381. Of these, less than 20 are doubtful records, c. 270 could not be matched with a definite taxon, and all others are assigned to one of the 2794 recognised species or infraspecific taxa. These figures, incidentally, are those given in the abstract heading the book, although they curiously appear to be absent from the main body of the text.

Being intended as a key to the knowledge of the past, the work refrains from making original comments of any kind, nor does it weigh the information it gives in any other way than by synonymy. No geographical breakdown is provided either. Users are supposed to look up the source literature for themselves. The authors stand ready to assist by providing access to those items that are not generally available.

As the subtitle states, and contrary to earlier checklists of the same series, non-lichenised fungi parasitic on lichens are included. A surprisingly high number of listed taxa (368, i.e., more than one out of eight) are stated to be lichenicolous, many of which are not themselves lichenised. Their study appears to be a particularly attractive, challenging field of action for modern lichenology. W.G.

7. **Domenico DRAGO – La biodiversità dei mari siciliani. Biodiversity of the Sicilian Sea. La biodiversité des mers de la Sicile.** – Orto botanico dell'Università, Palermo, 2001. 72 pages, 51 colour photographs; paper.

Drago is a phycologist working at the Botany Department of Palermo University, but he is also a talented and highly successful submarine photographer. A small but very attractive public exhibition was arranged at the Palermo Botanic Garden during the recent OPTIMA Meeting, displaying a representative sample of his work that illustrates the submersed world of Sicily's coastal waters. The present pamphlet, gorgeously illustrated, is a guide to that exhibit.

Coloured illustrations of marine algae of the Mediterranean are still scarce, and photographs of the present high quality standard are exceptional. Ten such photographs are included here, showing the genera *Cystoseira* (2), *Zonaria*, *Sargassum*, *Acetabularia*, *Flabellia*, *Palmophyllum*, *Halimeda*, *Peyssonnelia* and *Amphiroa* – along with several others illustrating the animal kingdom, from sponges and corals to fishes and the single most important marine mammal, Man (a portrait of the author with his scuba diving equipment). The booklet is a splendid souvenir for the Symposium participants to treasure. W.G.

8. **Monika KOPERSKI, Michael SAUER, Walther BRAUN & S. Rob GRADSTEIN – Referenzliste der Moose Deutschlands.** [*Schriftenreihe für Vegetationskunde*, 34.] – Bundesamt für Naturschutz, Bonn-Bad Godesberg, 2000 (ISBN 3-7843-3504-7). 519 + XVI pages, tables, graphs; paper.

This book has, essentially, a twofold aim. At first sight it is merely an updated version of an earlier bryophyte checklist for the Federal Republic of Germany, published four years before, from which it differs by an improved nomenclature and by the addition of 27 newly recorded species and 16 formerly unrecognised taxa. [One should note that the German word "Moose" is not equivalent to mosses in English (the German "Laubmoose") but to bryophytes as a whole.]

The book's second concern is more generally significant. As the supporting agency, the Federal Office for Nature Conservation in Bonn, proudly states in the preface, this is a world première, implementing the "potential taxon" notion for a major group of organisms. It foreshadows, hopefully, the breakthrough we need in biological informatics to make it fully operational.

The fundamental problem the book tries to tackle is the lack of congruence between mere nomenclature, a technique of attaching names to biological taxa by means of a common element known as type, and bioinformatics, using names as tags for information linked to a taxon with a given circumscription. Biological nomenclature has long abandoned circumscription-based names in favour of type-based ones. There were excellent reasons for so doing, but unfortunately it greatly reduces the usefulness of names for purposes of information transfer.

The term "potential taxon" was introduced in 1995 by Walter Berendsohn to designate a particular taxonomic concept (in terms of circumscription) linked to a given name. The present book uses "taxonym" instead, a misnomer that should be quickly abandoned (taxonym signifies name of a taxon; what is meant is not the name but a taxonomic concept linked to it). A second new notion here introduced is, however, useful: "conceptual synonymy". For the purpose of information management there are various qualities of synonyms, depending on the relation of the accepted taxon with the synonymous taxon concept: both taxa may be coextensive, or one may be included as part of the other, or there may be partial overlap only, or mutual exclusion.

By consequence one finds two kinds of synonymy in this list: the traditional, nomenclatural style, making use of the symbols = and ≡ for heterotypic and homotypic status, respectively; and conceptual synonymy, using a different set of symbols (<, >, ≠, and others unavailable on my computer) for the various synonymy concepts. All this sounds rather complex (and perhaps it is), or at least unusual; but as we live in an era known as the age of informatics, we might better get used to it. W.G.

Dicotyledones

9. **Armando T. HUNZIKER – Genera *Solanacearum*.** The genera of *Solanaceae* illustrated, arranged according to a new system. – Gantner, Ruggell, 2001 (ISBN 3-904144-77-4). xvi + 500 pages, 136 plates of drawings, tables; boards with dust-cover. Price: DM 240.

With 92 genera and about 2300 species the *Solanaceae* family is among the larger ones in flowering plants, and owing to the economic importance of some of its members – to name but *Solanum*, *Lycopersicon*, and *Nicotiana* – it is one of the most generally known. Add its intimate relation with the roots of our European culture, its myths (*Mandragora*) and wizardry (*Hyoscyamus*) not forgetting cosmetics (*Atropa*), and you will not fail being impressed.

Yet the first notion you will get when leafing through Hunziker's masterly revision is that the nightshade family is largely a New World affair. Less than one tenth of the genera occur in the native state in Europe and the Mediterranean region, a single one (unispecific *Triguera*) being endemic to that area. One only of six recognised subfamilies includes Euro-Mediterranean representatives, the *Solanoideae*, and so do just five of its nine tribes: *Mandragoreae*, *Lycieae*, *Solaneae*, *Atropeae*, and *Hyoscyameae*.

This is no reason, mind you, to dismiss this genus-level revision as irrelevant. Even though much of the information it offers, and most of its elegant illustrations, concern plants you have never seen and may never come across, the book still stands as a model to us all of what needs to be done in our domain, and how to do it. W.G.

10. Ralf HAND – Revision der in Europa vorkommenden Arten von *Thalictrum* subsectio *Thalictrum* (*Ranunculaceae*). [*Botanik & Naturschutz in Hessen* (ISSN 0931-1904), Beiheft 9.] – Botanische Vereinigung für Naturschutz in Hessen, Frankfurt a.M., 2001. 358 pages, drawings, photographs, maps, tables; paper.

The species complex that Hand chose as subject for his PhD thesis is one of those notorious taxonomic nightmares with which European botany is so well endowed. Its difficulty roots partly in the plants themselves but also and perhaps principally in the botanists who have dealt with them. It was an ambitious undertaking to try and bring order and method into a relative chaos borne out by the existence of about 1300 different Latin names for what eventually turned out to be a small group of 7 species, or 21 taxa at species and subspecies rank (five of them, plus two nothosubspecies, newly named here). Make your count: 62 synonyms per accepted taxon, all checked to their source and interpreted, if possible by verification of type material.

Hand has produced a revision of classical style, mainly based on the study of morphology (including micro-characters of the hairs and cuticle) and on extensive chromosome studies. The amount of herbarium material he verified is impressive (c. 5500 sheets). It was complemented by his own new gatherings in many parts of Europe and as far east as Siberia. This field work

yielded valuable original data on pollination and also showed that hybridisation has played a less prominent role in *Thalictrum* than was often believed. Pollen studies were found to be unrewarding, and no analyses of phytochemistry or DNA sequences have been attempted. Old-fashioned people like myself will be enticed to find a work with solid taxonomic conclusions based on a synthetic understanding of the group – yet without a single cladogram!

The book is not easy bedside reading. Quite apart from the fact that it is written in German, it abounds in dry and unpalatable data. In our technologically advanced era one might have wished to be spared pages and pages of specimen citations on paper, preferring them in a searchable electronic format – but in a few years' time, when all will be struggling to read information stored on antiquated and unfamiliar media, readers will bless Hand for his purposely unfashionable ways.

Illustrations are not profuse, but they include detailed dot distribution maps for all treated taxa over their total area, which in many cases includes large parts of Asia.

European and Mediterranean botanists will wholeheartedly welcome this revision, as it will help them to know and understand a group of plants that many have tended to neglect, not for bad will but in despair. W.G.

11. Christian EICHBERGER – Die baumartige Wolfsmilch *Euphorbia dendroides* L. Biologie, Ökologie Pflanzensoziologie und soziokulturelle Stellung einer mediterranen Art. [*Dissertationes botanicae*, 344.] – J. Cramer, Berlin & Stuttgart, 2001 (ISBN 3-443-64256-X). 351 pages, photographs, facsimiles, graphs, drawings and maps, 2 tables and 1 map as folded enclosures; paper.

It is rather unusual to find a whole monograph of several hundred pages devoted to a single species, and what is more, one that moreover has never posed problems taxonomic and has no synonymy to speak of (a few names have been published in the ranks of variety and forma, to which Eichberger curiously refers as "Kleinarten" [microspecies] while confirming that they are taxonomically unimportant). But this is not, of course, a taxonomic monograph but a biological one. In order to achieve it, the author has

performed extensive studies in the field (291 phytosociological relevés throughout the core area of the species except Tunisia), herbaria and literature. The amount of references cited (41 pages) is staggering, the size of the locality enumeration (35 pages) impressive. The author has travelled in Greece, Italy, France and Spanish Catalonia, and has visited the islands of Majorca and Minorca, Corsica, Sardinia, Sicily, Cephalonia, Santorini, and Crete.

I will bypass the phytosociological discussions and tables which occupy the bulk of the work and present the usual problems inherent in the synsystematic methodology in use. From a phytogeographer's point of view the distribution map is interesting: the tree spurge is found growing all along the mainland and island coasts of the Central Mediterranean area, from Catalonia to Greece as well as in Tunisia and Cyrenaica; but outside of this core range it is very rare, with but a few scattered localities in Algeria, Egypt, Israel, and Anatolia. Southern Italy, Sicily and Tunisia are the only regions where it is found in inland localities.

In the general chapters there is much information on morphology, phenology, autecology, etc., including a survey of vernacular names and a documented account of the plant's uses – fish poisoning being the single major use that survived from antiquity to the present day. W.G.

Monocotyledones

12. Peter PEISL & Gerhart WAGNER (ed.) – *Orchis*. – Stiftung Dr. h.c. Erich Nelson, Zürich, 2001 (ISBN 3-9522293-0-x). 231 pages, frontispiece, graphs and drawings, colour paintings; cloth volume plus index and plates on 46 loose cardboard sheets in box.

Erich Nelson, Swiss painter and botanist of German origin, has never ever achieved the level of fame to which his work entitles him. This may partly have been his own fault, not only because his major writings were all written in German – German at its worst, that is: unpalatably complex even for the native speaker. His own personality was similarly complex: kind but stubborn, endearing in his monomaniac passion for orchids, an exigent correspondent keen on good advice that he might or might not accept – thus I

keep him in memory from the times, in the sixties of last century, when our contacts were intense.

In 1980, aged 83, Nelson was killed in a car accident when crossing the road in front of his home in Chernex near Montreux. He left a mourning widow and, besides his three published volumes on several European orchid genera, a huge archive of pictorial material destined to illustrate the still wanting genera, mainly *Orchis* and *Epipactis*. Gerda Nelson, his faithful companion and assistant of a lifetime, endowed a trust to take care of these materials and secure their eventual publication, but nothing had happened by 1990 when she died, aged 98. It took 11 more years to see the present volume published.

The book (confusingly titled "Nelson *Orchis*" on the outside of the case and on the dust jacket but just "*Orchis*" on the binding and title page) is fully bilingual, German and English. It consists of two very different parts: a selection of Nelson's paintings of *Orchis* and satellite genera, with corollary texts by D. M. Moser (the German and English versions in two facing columns), as Nelson had left no manuscript or draft; and a seven-fold commemoration of Nelson's life and works, in German followed by an English translation. This Nelson memorial comprises a preface by Gerhart Wagner, chairman of the board of trustees; a general introduction by Kew Gardens' orchid specialist Phillip Cribb; two essentially biographical sketches, by Erika and Sandro Pignatti and from a manuscript left by Gerda Nelson; an essay on Nelson's theoretical work, especially his views on speciation and morphogenesis, by Peter Peisl; an appreciation of Nelson's merits as botanical painter, in a global historical context, by Heinrich Zoller; and as a kind of alien intrusion from modern times, a review of state-of-the-art DNA-sequence-based classification of the subtribe *Orchidinae*, by A. Kocyan and A. Widmer.

Frans Stafleu, in a contemporary review of the *Serapias* volume, has compared Nelson's artistic skills with those of Redouté and Ehret. Zoller extends the comparison to Franz Bauer, with whom Nelson is said to share not only the genius but the basic painting technique and even a physiognomic likeness. However this may be, it is plain that Nelson has his place among the top set of botanical artists, not only of the 20th century but of all times. The 45 plates of the

present work, an important part of his artistic legacy, are a gift for which we must be grateful to all who have made it happen. They are not in need of comment beyond the data of origin, and if anything, they would have deserved a more qualified and original corollary than Moser's (who still uses – without really knowing it – the twice outdated Berlin *Code* of 1988). In particular, the initial list of "species" which, "published subsequently, are not contained in the work", is a laugh: most names it contains are old, and few of those published "subsequently" [to Nelson's death, one infers] are listed. "*Orchis collina* Willd.", a name on that list, simply does not exist: it is probably an error for *Orchis conica*.

Through the "memorial" part of the book, the man, artist and scientist Nelson become palpably alive. In some of his ideas and theories Nelson was ahead of his time, when he thinks of "gestalt" of the flower as conditioned by morphogenetic constraints and channelled by the interactions of its developing parts. In a time when the functional aspects of selection pressure alone were emphasised under a prevailing neo-Darwinistic credo, such views were thought of as uninteresting and irrelevant, when in fact they were pioneering much of today's general concern. On the other hand, Nelson's cool dismissal of experimental evidence, his failure to perceive the importance of pollination ecology, mycorrhizal symbiosis and population structure for orchid evolution make him unsuited for the role of a pioneer of modern holistic approaches. For this and other reasons the "memorial" part of the book will remain the epilogue as which it was planned, a contribution to historical epistemology and biography rather than a trend-setter for the future of our science.

The biographical chapters of the book are good examples of their kind, shedding new light on a fascinating personality under diverse angles. They are the result of intimate personal knowledge, and the picture they convey of Nelson's personality is true and fair. Only on a point of detail I want to contradict. The Pignattis claim that "Nelson showed a sovereign indifference with regard to nomenclatorial nit picking procedures that he regarded as of little sense" – by which they perhaps project their own attitudes on to their "victim". From my old correspondence I know that quite the contrary is true. Nelson tried desperately and with great efforts, if often with

exasperation, to solve the riddles of synonymy and typification, to apply the *Code* as best he understood it. If he sometimes failed, it was rather by an excess of scruples than by neglect or light-handedness.

As a bottom line, it remains for me to wish the work the success it deserves. The world being what it is, I guess that it will rather sell thanks to its colour plates than for its learned texts. In a way, this is as should be: the plates are Nelson's own, posthumous achievement. W.G.

13. Anne Eldredge MAURY – Iconografia delle orchidee d'Italia. Iconography of Italian orchids. – Ministero dell'Ambiente, Servizio Conservazione Natura & Istituto nazionale per la fauna selvatica "Alessandro Ghigi", [Roma & Bologna], 2001. [4] text pages and 50 plates of colour paintings on 51 loose sheets; cardboard box.

Anne Maury is doubtless the best known among botanical artists living in Italy today. Her skilled and artful drawings enliven many publications by Italian botanists, not only of Tuscany where she has settled down. However, her outstanding gifts as a painter are not yet sufficiently appreciated. The one major set of her paintings of which I am aware are her portraits of Sardinian plants first published as calendar illustrations then re-issued in a loose-leaf edition in 1992 (see OPTIMA Newsletter 30: (17). 1996). These are splendid and well printed colour plates, but being framed in a format of 23 × 18 cm they cannot convey fully the beauty of the originals.

Now this product is of a different category. Maury's portraits of Italian orchids will be this year's outstanding addition to my library – not just because of their size of 70 × 50 cm. In a time when colour photography reaches new peaks of perfection it is amazing to find how much more a good painting can still provide, in particular when reproduced in superb quality with modern printing techniques (eight-colour stochastic screening, print on coarse-grain Canaletto white cardboard).

But let us turn to contents. This is a complete overview of *Orchidaceae* found growing in Italy in the wild, except that, as the author states in her short, bilingual introductory text, she has not endeavoured to keep up "with all the new species, often of dubious taxonomic value, which

are constantly being described". Still the better novelties have not been left out, and several of the taxa that Maury has portrayed were described in the last decade, while she was already busily painting. For the last 16 years she has worked every spring season on this pet project of hers, hunting down the rare species under the expert guidance of local botanists throughout Italy.

Each of the 50 plates shows between one and six different taxa, depending on plant size, and of each taxon (with few exceptions when only flowers are shown), one or more complete plants have been painted, sometimes from more than one locality, often with individual flowers in addition. These portraits show the plants in natural size, which however is not an absolute rule: *Orchis militaris* is clearly oversized. There are 109 species of 30 different genera represented, plus 16 additional subspecies, 3 varieties, and a selection of just 3 of the most frequently encountered hybrids.

The botanical editors of the work, who take the credit or blame for the taxonomic and nomenclatural treatment, are Walter Rossi and Mario Spagnesi. Fair enough, they used a moderately wide species concept in e.g. *Ophrys*, *Dactylorhiza* and *Himantoglossum*, but a narrow one in other genera (*Epipactis*, *Epipogium*, *Nigritella*). *Aceras* they include in *Orchis*, in line with recent molecular findings. Their single major blunder, by which they risk to irritate the vast orchidologists' community, is their failure to adopt the correct name *Ophrys holoserica* for the species they designate by the junior synonym *O. fuciflora*. True, the case has its nomenclatural complexities, but it has been thoroughly discussed and unambiguously resolved. A variant or race of *Ophrys fusca* from Sardinia is misnamed *O. fusca* subsp. *iricolor*: *O. iricolor* is a different, distinctive East Mediterranean species that does not occur in Italy.

A somewhat smaller edition ("only" 50 cm high) is announced, with explanatory text and in book form. It will provide the opportunity, not only to correct the errors noted above but to produce an index to the plates, an item now sadly missing (I made my own index, first thing, of which I can gladly provide electronic copies on request). Another desideratum for the future is the provision of scale indications. W.G.

14. Renato FERLINGHETTI (ed.) – Orchidee spontanee della provincia di Bergamo. – Provincia di Bergamo and Gruppo Flora Alpina Bergamasca, Bergamo, 2001 (ISBN 88-86536-22-4). 191 pages, maps and photographs in colour, drawings, tables, graphs; hard cover with dust jacket.

This is a gorgeous example of modern orchid literature. But it is more. It is the result of collaborative efforts of a large group of people (about 80 are named), which is the best way to ensure that its underlying message – the love and respect of nature – is widely and efficiently spread. It is also a choice example of how a specialised subject, orchids, can be embedded in an enticing and informative general context.

At the core of the book are the 55 species presentations, each on two opposite pages: to the right a full-page colour photograph; a smaller one to the left, side by side with a drawing, a map of the provincial distribution, and a standardised descriptive text. The grid maps are framed by graphs showing the flowering period, altitude, habitat and exposure – all such data having been assembled by members of the Gruppo Flora Alpina in the context of their participation in the Central European vascular plant mapping project. The drawings are by Silvana Gamba and the pictures by a collective of 17 photographers (individual authorship is not specified).

Corollary chapters deal with subjects such as physical geography, biotic environment, floristic mapping, as well as the biology, ethnobotany, distribution and conservation of orchids. These texts are profusely illustrated by landscape, habitat and plant photographs that match the orchid pictures proper in beauty and technical excellence. Just look for yourself, and you will find one of the finest edelweiss portraits existing, and many other botanical treasures of the high mountains of the southern Alps, none of which you would normally expect in an orchid book.

Renato Ferlinghetti did a superb job in editing this book. Also, he has authored or co-authored 8 of its 14 chapters. He and all who helped him may be proud of the result. W.G.

15. Wolf KRETZSCHMAR, Gisela KRETZSCHMAR & Wolfgang ECCARIUS – Orchideen auf Rhodos. Ein Feldführer durch die Orchideenflora der "Insel des Lichts". – Pri-

vately published, Bad Hersfeld, 2001 (ISBN 3-00-007322-1). 240 pages, maps and photographs in colour, tables; hard cover.

- 16. Wolf KRETZSCHMAR, Gisela KRETZSCHMAR & Wolfgang ECCARIUS – Orchideen auf Kreta, Kasos und Karpathos.** Ein Feldführer durch die Orchideenflora der zentralen Inseln der Südägäis. – Privately published, Bad Hersfeld, 2002 (ISBN 3-00-008878-4). 416 pages, maps and photographs in colour, tables; hard cover.

Those who, opening these twin volumes, expect to find two more of the well produced, gloriously illustrated orchid picture books whose number, to the plant lover's delight, is steadily increasing will not be disappointed. The fascinating world of south Aegean orchids unfolds before the reader's eye in its unequalled variety and amazing beauty. There can hardly be a more suitable companion for the keen amateur visiting those islands in springtime than these books, which fulfil other desiderata as well, such as advice on excursions commendable for orchid hunters (with species lists) and identification keys with colour portraits of single flowers typical for each taxon. Short introductions on the geology, landscapes and vegetation of each island, with pictures of a selection of characteristic representatives of the fauna and non-orchidaceous flora, are an additional bonus. [One might note that *Campanula saxatilis*, allegedly shown in the book on Rhodes, does not occur on that island; the photograph is likely to be of a decumbent, mat-forming individual of the polymorphic *C. hagielia*.]

So much for the flower book aspect. But there is much more to Kretzschmar & al.'s orchid guides than pleasantness and aesthetics. To me as a botanist, they come as a real good surprise. To understand my delight, you have to know that as a young man I took a lively interest in the orchids of Crete, primarily *Ophrys*, as full of mysteries then as they are now; and that after a thorough study of them in the wild I thought I had almost grasped them. But then, more recently, with the steady flood of new descriptions of – for me – unrecognisable new species, I gave up in despair. *Ophrys* classification appeared to have nothing left in common with "normal" botanical systematics, no link with populations as a biological reality, of reproductive biology,

not even a glimpse of evolutionary reasoning. Consideration of the plants' "mating system" was reduced to watching the sexual behaviour of greedy male insect visitors.

Thanks to these books hope has returned. They are plainly intelligent, the best in their kind for ages – probably since Nelson's entirely different works referred to previously. The authors have their own, precise criteria of classification, they take the trouble to explain them, and then they proceed and implement them as coherently as possible. You may or may not concur, but at least the outcome reflects a coherent vision – which is an immense progress. The result is still on the splitters' side, but tolerably so. The named units are real populations, and they are morphologically defined at least within the particular area considered. The reader is led to recognise each taxon and understand the criteria used to establish it, both thorough the descriptive text and a generous selection of pictures that demonstrate the observed variation.

The authors avoid minimising the difficulties. Morphotypes that in one area form discrete, recognisable populations, thus meeting the criteria for distinction at species level, intergrade elsewhere. *Ophrys omegaiifera* and *O. basilissa*, distinct in Crete but not on Rhodes, are an example – the conclusion being that they are treated as subspecies of a single species in the second book (where, contrary to the first one, several rank transfers are validly proposed). Another problem case is the status of *O. episcopalis* with respect to *O. holoserica* – but as the latter is considered to be absent from the area, that question has been skipped and no solution is attempted.

In their endeavour to understand the observed, often chaotic patterns of variation, the authors mention an important point that I have long felt is obvious yet is seldom if ever spelled out: the fact that in non-autogamous orchids successful pollination is a rare event but when it happens has dramatic consequences, as tens of thousands of seeds with identical parentage are then produced. This explains the local clusters of individuals sharing peculiar morphological traits that one so often observes.

These, then, are not mere picture books but real scientific works. The authors have been led to recognise several new taxa (validated in parallel elsewhere) that are well documented and

appear to be solidly founded, and to reassess the classification of many others. There is an impressive, carefully edited bibliography at the end, and at the beginning the most recent reappraisal of generic classification based on molecular data is explained: the merger of *Aceras* with *Orchis* and split of the latter genus into three: *Orchis* s. str., *Neotinea* and *Anacamptis*. However, the authors wisely refrain from implementing that new concept in the treatment proper.

The illustrations are a prominent and vitally important feature of the work. The accurate way in which they are documented deserves equal praise as their beauty, technical perfection and informative quality: in each case, the locality, date and (in the few cases in which pictures by others are used) name of the photographer are carefully cited. Most of the illustrations represent plants from within the area, but in a few cases, when none were available, Turkish or Central European plants are shown – e.g. for *Epipogium aphyllum*, reported with circumspect doubt as a new addition to the Cretan flora. W.G.

Floras

17. [T. G. TUTIN & al. (ed.)] – **Flora Europaea on CD-ROM.** – Cambridge University Press, Cambridge, 2001 (ISBN 0-521-77811-5). Five-part folded pamphlet + CD-ROM; plastic box.

No need to introduce that all-time classic among Old World Floras, *Flora europaea*. The fact, however, that it is now available in electronic format is well worth being mentioned. Even though there has been no attempt to update the information in the 5 published volumes (vol. 1 in its second, considerably updated edition), the new potentialities associated with electronic format are a tantalising prospect for the user.

Electronic versions not always keep their promise. They usually have built-in limitations and all kinds of shortcomings to irritate and eventually discourage the user. The act of placing a new disk in the CD-ROM drive and trying to get it function is, for many, a moment of apprehension and concern. The success or otherwise of the operation will depend on the individual hard- and software constellation used, so that my own experience may not be valid in the case of others. With this restriction in mind, I am glad to report that the set-up operation ran smoothly and rapidly on my PC, installation instructions were simple and easy to follow, and the system was immediately operational without re-booting or other time-consuming extras. Hard- and software requirements as specified by the producer are moderate, provided one is using an IBM PC or compatible. There is no need to copy the whole programmes on one's hard disk because the system responds quickly even if run from the CD – which saves about 60 MB hard disk memory space.

So far so good. But what are the contents, and how well can they be accessed? Well, one will need a little training to perform well, especially since on-screen guidance is very concise. One will need to find out when to single-click and when double-click, and where, to obtain the desired result. But once you got through the preliminaries the world is yours to enjoy.

You can use the CD in the same way as the published books, only more quickly and with less demands on desk space and muscular effort. One goes to the index to genera (very quick!), may then call up the "all species" list (which includes synonyms and subspecies as well), and from there one gets to the appropriate entry with a simple mouse click; or if one starts from a volume and page reference, one may look up the entry directly.

Identification is facilitated by an interactive version of the keys, which is however limited to the upper three levels (family, genus, and species): for the lowest-level keys, below the species (or species group) level, one has to move to the normal text version. Also, same as for the printed keys, the interactive ones work by single access.

An additional feature, absent from the printed version, is a glossary of technical terms, a bounty for the non-professional and/or

non-native English speaking user. Again, access is quick and practical, so much so that one often lands in the glossary unintentionally, by clicking fortuitously on the displayed text. In the glossary I found the single real programme bug so far: The selected entry is displayed on the last line of the window, and any attempt to scroll the text by activating the apposite arrows will close the window. Scrolling can be effected by keyboard commands, but one has to get used.

The most marvellously unique feature of the electronic version is searchability. The CD version includes a powerful and sophisticated Boolean searches menu, so refined that one should study it carefully beforehand. The help function, is explained in the folded instruction pamphlet, which one should carefully read before getting started. With some training one can do marvellous searches in no time, such as finding all species named *creticus* (-a, -um) by Linnaeus but not occurring in Crete, or all of Arcangeli's subspecies, or all taxa recorded from Crete and Bulgaria but not from Greece (there are 11 of them, but most are errors). Invent your own game!

Predictably, this will be one of the most useful and most assiduously used among the CDs of my small but rapidly growing collection.W.G.

18. Henning HAEUPLER & Thomas MUER – Bildatlas der Farn- Und Blütenpflanzen Deutschlands. – Ulmer, Stuttgart, 2000 (ISBN 3-8001-3364-4). 757 pages, tables, drawings, colour photographs; laminated boards with dust-cover. Price: DM 148.

This large and heavy tome fulfils the twin role of a critical national Flora and a picture book. In both fields it achieves excellency, and in so doing it is unique among works known to me. Even though not part of Mediterranean botanical literature, it warrants an extensive presentation here in view of these qualities.

The text is highly condensed information on minimal space. Items believed to be unessential for the purpose of the book have been cut out without mercy. There are no keys at any level (identification is "polythetic", by pattern matching using the images), no family entries (the families are mentioned only in the page headers), no generic entries (the number of species in each genus is given under its first species), and no synonymies (Table 1 in the introduction lists

familiar names that have changed due to generic transfer). An elaborate system of letters and symbols permits, in barely two printed lines, to give detailed information on status, biological properties, regional distribution, conservation, uses, and ecological preferences of each species. This information cannot be understood without constant reference to the introductory explanations. The morphological descriptions (headed by **M**), however, are self-sufficient once you get used to the abbreviations, and the same applies to the Notes (headed by **B** for "Bemerkungen"), some of which are replaced by references to a set of end-notes. With minor exceptions (see below) the taxonomic modular unit is the species or, where applicable, subspecies; there are 3914 such units in total.

Illustrations are the essence of the book. According to title-page information (which I did not care to verify) there are 3900 colour photographs and 134 drawings in total – slightly more than one per taxon on average. The photographs have a standard size of 8.5 × 6.3 cm, fitting the three-column layout, with few exceptions of mostly half or twice that size. They are of state-of-the-art quality throughout (not long ago we would have used more euphoric qualifications, but one is getting spoiled), their main merit being usefulness for recognition rather than sheer beauty. When searching for aesthetic highlights, steer clear of orchids (for which the market is saturated) and turn to the "ugly ones" instead: grasses, sedges, rushes and the like: you will be surprised how beautiful and at the same time characteristic they look. Or let yourself be inspired by the techniques used for photographing submerged plants, e.g. *Najas* and *Zannichellia*: Some of the shots were taken from above the water surface, somehow minimising reflection; others are in lateral view, presumably through a glass pane; others still show plants out of the water, when sufficiently stiff not to collapse: still dripping wet, they look perfect – and are recognisable. In many genera, drawings are used in addition, as a means of showing critical diagnostic details that cannot be seen on a picture.

The scientific value of the book lies in its systematic treatments, whose standard in most cases is amazingly high. Competent specialists could be won to deal with critical groups. Inevitably, there is no coherent pattern in the way how the botanists' nightmare taxa are treated. One

finds a full range of solutions, from "giving up in despair" to the highest attainable peaks of sophistication, as examples will show. Starting at the bottom, the 49 numbered entities of the apomictic *Ranunculus auricomus* group (author: G. H. Loos) are only listed by name, without individual comments let alone descriptions, and only 14 of them are illustrated: no way to identify any such species reliably with the aid of this book. In *Taraxacum* (with a collective authorship of six) the recognised, numbered units are not the species, of which there must be hundreds, but the 11 sections – a practical solution that has the merit of being feasible on the precarious basis of our present knowledge but the drawback of distorting species statistics (for what it is worth when apomicts and the like enter the count). K. Roštański has contributed *Oenothera*, so his splitter's taxonomy (46 accepted taxa) has, albeit half-heartedly, been admitted by the editors in preference to competing, more synthetic approaches. This is the single genus for which photographs are scarce and drawings, showing both details and general habit, prevail. For *Hieracium* (by G. Gottschlich) the reader is presented with the novel, practical device of 12 physiognomically defined artificial groups, to serve as a first approach, from where on the 170 German hawkweeds are treated as if they were normal species (note that the figures referring to some of the photographs got mixed up). This is a remarkably thorough treatment, as is W. Lippert's of *Alchemilla*. The outstanding example of the lot is, however, due to *Rubus* specialist H. E. Weber. With 334 numbered taxa, brambles are by far the largest among German plant genera, reputed to be hopelessly complex and beyond the grasp of the common of mortals. Whether this will now change thanks to Weber's account remains to be seen, but at least there is hope – and if not every single taxon is represented by its own picture, still the 246 that have been included represent the most comprehensive photographic documentation of the genus available in print.

The concept of this Flora is innovative in many ways. From here on, there is only a small step to be made for the ideal identification aid of the future, which I guess will not be a printed book but a digitised compendium for on-screen use. No need, then, for hermetic symbols and lettering, no constraints on layout, no need for linear arrangement of the data. Limitations of

memory space will have to be overcome, but this is only a matter of time. As the following review will demonstrate, we are already on the move, albeit still hobbling. W.G.

19. Erich GÖTZ – Pflanzen bestimmen mit dem Computer. Flora von Deutschland. – Ulmer, Stuttgart, 2001 (ISBN 3-8001-2723-6). 16 pages (manual; paper) + CD-ROM; cardboard box. Price: DM 49.80.

This CD-ROM programme package is for the identification of vascular plants of the Flora of Germany. It functions by means of a multi-access key with schematic figures illustrating the character states.

The idea is good, but the implementation is lousy. Programme installation, to start with, is time-consuming and suffers from poor guidance. In my case, the attempt to run the programme from the CD aborted and it was necessary to download the whole files onto the hard disk to get the programme to function, which meant the loss of 120 MB disk space.

When testing the programme one immediately spots countless small errors, meaning that there has been no proper check prior to release. Just a few examples: *Aconitum vulparia* is given as a synonym of *A. lycoctonum* subsp. *lycoctonum*, not of subsp. *vulparia*; *Alcea biennis*, in the index, is given as a synonym of *A. pallida* – but there is no *A. pallida* in either index or database. The character states "awn basal" and "awn dorsal" are illustrated by one and the same twin icon, showing two types of dorsal insertion.

Apart from these minutiae there are major shortcomings: a rudimentary search function, limited to the indexes and to the beginnings of lines; an unacceptably low taxonomic resolution, where species aggregates such as *Rubus fruticosus* or *Alchemilla vulgaris* (there are only two *Alchemilla* species in total) represent the ultimate attainable level; and worst, a much too low number of recorded key characters. Typically, the characters mentioned are just the required minimum for telling species apart – which negates the benefit of multiple-access keys and precludes the option of error allowance (a setting which the system, anyway, does not permit); and there are cases such as *Festuca*, with 31 recognised taxa, where having answered all questions

one is left with up to 20 species impossible to tell apart.

Conclusion? I have just deinstalled the programme. Good news last: deinstallation functioned as described (it is operated by Windows).

W.G.

20. Santiago CASTROVIEJO (gen. ed.), S. TALLAVERA, C. AEDO, S. CASTROVIEJO, A. HERRERO, C. ROMERO ZARCO, F. J. SALGUEIRO & M. VELAYOS (vol. ed.) – Flora iberica. Plantas vasculares de la Península Ibérica e Islas Baleares. Vol. VII(II), *Leguminosae* (partim). – Real Jardín Botánico, Consejo Superior de Investigaciones Científicas, Madrid, 2000 (ISBN 84-00-06221-3 [complete work], -07882-9 [this tome]). Pages [I]-XXII + 579-1119, map and drawings; cloth with dust-cover.

Less than four years after the publication of volume 8 of this *Flora* the gap in the numerical sequence of volumes has now been closed, and "law and order" on the bookshelf has been re-stored. This is not, of course, the main or only reason for welcoming the new book. The legume family being the second most important Spanish vascular plant family, after the *Compositae*, their completion stands as a major landmark in the production of the flagship among Europe's national Floras (which was awarded a special prize, in the form of a silver plaque, by the Herbarium Mediterraneum Foundation in Palermo).

Owing to the family's size it has been split into two independently bound but consecutively paged half volumes (see OPTIMA Newsletter 35: (8). 2000 for a review of the first half). The second portion covers five tribes, all of them diverse and widespread in the Mediterranean countries where they probably have their centre of origin: *Ononideae*, *Trifolieae*, *Loteae*, *Coronilleae*, and *Hedysareae*. There are 243 species in 20 genera, 8 of them large to medium sized in the area covered by the *Flora*: *Trifolium* (60 species), *Ononis* (43), *Medicago*, (30), *Hippocrepis* (21), *Lotus* (16), *Anthyllis* and *Melilotus* (12 each), and *Onobrychis* (10).

The split of the family has inevitably resulted in some duplication, and the editors, in an obvious effort to make each half volume self-contained, have been generous in allowing such redundancy. Both books start with a full

generic key covering the whole family (they are not quite identical, even though there has been no change in the recognised genera: in the more recent version some leads have been improved). The indexes to the second half are cumulative and serve for the whole volume, same as the first three Annexes (abbreviations of author names, journal and book titles), but the two next ones are particular to their respective tome.

As in previous volumes, nomenclature and taxonomy of all taxa has been critically assessed and, where necessary, revised. This time, the changes are less dramatic than usual, due perhaps to the fact that there are relatively few critical groups and species limits are as a rule clear cut. There are exceptions, such as the notoriously chaotic *Anthyllis vulneraria* aggregate, here subdivided into 11 subspecies and provided with an additional multi-access key that looks promising. Generic limits mostly coincide with those that *Med-Checklist* adopted upon advice from Per Lassen. The major exceptions are segregation of *Hippocrepis emerus* (better known as *Coronilla emerus*) in a separate genus *Emerus*, recognition of *Tetragonolobus* as distinct from *Lotus*, and maintenance of the traditional generic placement of *Medicago monspeliensis* in *Trigonella*.

An endearing trait of this book is the tribute it pays to Eugenio Sierra Ràfols, botanical artist deceased in 1999 at the age of eighty. Sierra is at the origin of the exceptional quality of the illustration in which *Flora iberica* takes justified pride. He alone made the drawings (over 700) of the first four volumes, and some of his last ones are included in the present volume, illustrating the genera treated by Barcelona botanist Carles Benedí: *Anthyllis*, *Tripodion*, and *Hymenocarpus*. Obviously Sierra's example has influenced the illustrators of the later volumes, as a challenge to maintain the high standard set initially. It is perhaps unusual, but certainly well deserved, to find a flora volume dedicated to a botanical artist. Sierra's biography (unsigned; presumably due to the general editor, Santiago Castroviejo) which appears ahead of the preface matter brings credit not only to the artist but to the editors as well.

W.G.

21. Santiago CASTROVIEJO (gen. ed.), J. PAIVA, F. SALES, I. C. HEDGE, C. AEDO, J. J. ALDASORO, S. CASTROVIEJO, A. HERRERO & M. VELAYOS (vol. ed.) – *Flora iberica*. Plantas vasculares de la Península Ibérica e Islas Baleares. Vol. XIV, *Myoporaceae-Campanulaceae*. – Real Jardín Botánico, Consejo Superior de Investigaciones Científicas, Madrid, 2001 (ISBN 84-00-06221-3 [complete work], -07953-1 [this volume]). pages XLVII + 251, map and drawings, colour photographs; cloth with dust-cover.

When this volume, delayed in the mail, arrived, I was just about to close the column. I reopened it of course, if only by a tiny crack.

So there you are: no sooner had I announced that the former gap in volume sequence had been successfully closed by completion of the legume treatment, a new, much wider gap opens up. Never mind. The plan of the *Flora* appears in a twin index on the flyleaf at the end of the volume, and a complete family key, including monocots, is provided each time in the preface matter. Any published part, irrespective of its sequential place, is thus most welcome.

Volume 14 is relatively small. It treats 9 families, three of them exotic, the largest being *Campanulaceae*. There are 26 species in *Campanula* alone, which is not however the most difficult genus taxonomically – *Jasione* is worse, with its reticulate and almost continuous pattern of variation that resulted in the recognition of infraspecific taxa in *J. montana* and *J. crispata* plus several rather ill defined satellite species.

An innovation of this volume is the presence of colour illustrations: 36 beautiful photographs on glossy white paper, assembled in 15 plates at the end of the book. All belong to *Orobanchaceae*, the volume's second largest family (30 species, of which 29 belong in *Orobanche*), which many botanists loathe as being hopelessly difficult. The main problem resides in the nature of the distinctive characters, which are hard to describe in writing – especially when herbarium specimens are concerned. Colour pictures, especially such high-quality ones, are an ideal means to convey the diagnostic traits. Who knows? With such aid, I might now manage to identify my broomrape specimens correctly. W.G.

22. Inés ÁLVAREZ FERNÁNDEZ (compiler) & Santiago CASTROVIEJO (gen. coord.) – *Claves de Flora iberica*. Plantas vasculares de la Península Ibérica e Islas Baleares. Vol. I. *Pteridophyta, Gymnospermae, Angiospermae (Lauraceae-Euphorbiaceae)* – Real Jardín Botánico, Consejo Superior de Investigaciones Científicas, Madrid, 2001 (ISBN 84-00-07932-9 [complete work], 84-00-07933-7 [this volume]). xxiv + 776 pages, drawings; boards.

Nine of the 21 planned volumes of *Flora iberica* have by now been published, so the work is not even halfway complete, yet it is a truism that its use as in the field for identification purposes is out of the question. The idea to extract the keys from the available parts (volumes 1-8) and publish them separately in a less bulky format has therefore obvious merit. Designed as a vade-mecum, this book omits descriptions, synonymies and the like but not core information such as each plant's habitat, altitudinal range, flowering time and distribution, both in Spain and world-wide. The *Flora's* beautiful plates of drawings (almost 1200 by now) have been included in reduced format: even in their new, modest quarter-page size they look well enough and are certainly informative.

No attempt at updating the information with respect to the original treatments has been made, but two interesting lists have been added at the very end. One enumerates 56 Iberian species and subspecies that were newly described subsequent to the publication of the respective *Flora* volume (exactly half belong to only four genera: *Limonium*, *Biscutella*, *Armeria*, and *Helianthemum*). The second is of 25 additional records for the Iberian flora (no less than 18 being naturalised aliens) and 3 erroneous inclusions marked for deletion. The only serious criticism I have is that in the text there are no cross-references to this additional information, nor is it indexed, so that it is normally lost to the user unless she or he annotates her (his) personal copy.

You will need generously dimensioned pockets to use this book as a pocket flora – but field botanists usually have. Their main wish will be for the companion corresponding to volumes 9-21 of the *Flora* to be available soon, so that they may balance their gait. W.G.

- 23. Ginés A. LÓPEZ GONZÁLEZ – Los árboles y arbustos de la Península Ibérica e Islas Baleares.** (Especies silvestres y las principales cultivadas). – Mundi-Prensa, Madrid, Barcelona & México, 2001 (ISBN 84-7114-994-x [vol. 1], -995-8 [vol. 2], -953-2 [both]). Pages 1-861, 867-1727, drawings, colour photographs; two hard cover volumes. Price: Euro 96.

When reading the preface of the present twin manual of the trees and shrubs of Spain and Portugal one wonders: is this merely, perhaps, the unacknowledged second edition of a popular guide book published by the same author in 1982 in the *Guías de Incafo* series? Comparing the two one will indeed find many common basic traits. The species treatments of the earlier book are often repeated textually, and most of its (excellent) colour photographs have been re-used. In other respects, however, this is an entirely new work, differing in layout, arrangement (it follows the Dahlgren system of angiosperms) and obviously in size. Even though the increase of numbered and fully treated species, from 279 to 397, is moderate, the total length of the text and the number of photographs (almost all by the author) are about fourfold. This mainly results from inclusion of a large number of additional, lettered species, often belonging to other genera, appended in a kind of notes to the numbered species but included in the identification keys, provided with short descriptions, and illustrated.

Definition of coverage has been the author's main problem. Where do shrubs end and shrublets begin? Which are the "principal" cultivated species? Concerning size, López has included all woody species that sometimes grow to at least one metre high. He treats all ornamental trees widely cultivated in the streets, and those which, while rare, are likely to catch the eye. Woody climbers are covered, as are tall suffrutices. Not enough: López, conscious of the impossibility of including, as he would have liked, the countless dwarf shrublets of the Ibero-Balearic flora, often sets aside his self-set rules for the benefit of his pet plants. These exceptions, plus occasionally cultivated species, make up the bulk of the lettered additions. They add significantly, for sure, to the merit and interest of the work. A particular bonus, worth mentioning as it might easily go unnoticed, is a full-scale treatment (keys, diagnostic descriptions and photographs) of the gen-

era *Helianthemum* and *Fumana*: surprising to find it here, as neither genus includes a single shrub – yet even the annual helianthemums are included (not, however, *Tuberaria*, which only appears in the generic key and has been forgotten in the index). Such extras amply outweigh a major weakness: the genus *Rubus*, arguably "the most complex and difficult of all vascular plant groups", is treated in a stepmotherly way, with all but five species keying out under "other species of *Rubus* sect. *Rubus*". "Do as most botanists," the user is told, "leave them to the specialist".

Speaking of keys, they are remarkably elaborate. The main initial key runs over more than 100 pages and leads directly to the genus (with minor exception such as the bambusoid grasses). Representative drawings fill alternate pages. Several of special keys, stressing particular features, follow; they are not fully resolved but lead to groups of genera. The knowledgeable user is also given the option to start genus identification under individual families. For the beginner there is a glossary of technical terms at the end, and at the beginning one finds schematic drawings illustrating the various character states and features of organs.

Illustration is both generous and of remarkably good quality. López is a gifted nature photographer and disposes of an amazingly rich collection of colour pictures. The drawings – presumably by López as well, as no botanical artist is mentioned – are simple but faithful and informative, so they fulfil their purpose.

This is a beautiful work, and a useful one – a bit heavy to carry perhaps, and obviously not designed for use in the field; and it has a likeable author, to judge from the overall motto he chose: Cervantes' mention of Don Quijote and Sancho Panza resting at the foot of an elm and a beech tree, respectively – "because trees always have feet but never hands". W.G.

- 24. Loutfy BOULOS – Flora of Egypt. Volume two, Geraniaceae-Boraginaceae.** – Al Haddara, Cairo, 2000 (ISBN 977-5429-22-6). xvi + 352 pages, 71 plates of drawings + 24 plates of colour photographs, map; boards with dust jacket.

When the first volume of this Flora was published (see OPTIMA Newsletter 34: (3). 1999),

the plan was to complete the treatment of dicotyledons with volume 2. The fact that this scheme was changed and the planned second volume split into about equal halves, had at least one beneficial consequence: that the first half could be published in time for the turn of the millennium. It includes the treatments of 471 species, almost exactly the same number as is still left in the dicots, and again the same as the prospective monocot species number.

Speed and regularity of publication, which we hope will persist, is not of course the single major merit of this Flora, which is an excellent, scholarly written work that also fulfils the practical needs of non-professional users. Reliability of progress is of note because one misses it in the other multi-part Egyptian Flora: Hadidi's follow-up to Täckholm & Drar's critical *Flora of Egypt*, forever a torso, was awaited with high-strung expectations but appears to be stuck.

The short but informative preface mentions the main genera treated, with their number of species, and gives other useful information that we need not repeat here. Suffice it to say that volume 2 includes the genus which, surprisingly, is the largest of Egypt's flora, *Euphorbia* (41 species); that endemism is very low for Mediterranean standards (just 1.5 %, at species level), almost half the endemic taxa being confined to the Sinai Peninsula; and that the species inventory, compared to the published checklist, decreases by a dozen units, the 11 gains being outnumbered by 23 losses – most of them in *Zygophyllaceae*, where only one out of Hadidi's many new *Fagonia* species has survived.

Same as for volume 1, the generous illustration is a major asset. This is particularly true for the fine drawings, due we are told to three botanical artists: Magdy El-Gohary (mostly reproductions from Boulos's earlier work on medicinal plants of North Africa), Margaret Tebbs, and Camilla Speight. The quality of the colour photographs (mostly, one infers, by the author himself) is less convincing on average than last time. Neatness, exposure and colour blend are very unequal, due at least in part to neglect at the printers. The suggestion I made in my last review, to add references to the illustrations under the individual taxa, has not been followed: one still must resort to the index to find out whether and where a figure or photograph is included. One other point I must blame: the lack of artists'

credit under the individual figures. Last time, at least, a majority of the drawings were signed or initialled; now only those by El Gohary are, plus Plate 32 where "MD" can be spotted at the bottom.

My wish, then – more modest than last time but more pressing –, is for a cumulated index to illustrations, with mention of their authors, to be included in the next volume. W.G.

25. A. L. TAHTADZIAN (ed.) – Flora Armenii.

Tom 10. *Monocotyledones* (isključajaja *Poaceae*). – Gantner, Ruggell, 2001 (ISBN 3-904144-16-2). [1] + 613 pages, map, 194 full-page figures, cloth. Price: DM 180.

Six years have passed since volume 9 of this Flora was published, bringing the dicotyledonous families to completion (see OPTIMA Newsletter 32: (8). 1997). Life in Armenia has meanwhile become more tolerable but is still difficult, and scientific work is slowed down by many hindrances those working in European normality won't even dream of. A special welcome, therefore, to the present volume, which brings the Flora of Armenia to the doorstep of completion: just one family, the grasses, is left to be written, and I am told that work is actively progressing.

Not all hindrances for publication of the present volume were Armenian. The low-cost printing in the Czech Republic, by a printer who chose to remain anonymous, caused an added delay of several months. A tight competition was running behind the scene as to where four new names in *Gladiolus* would first be validated. An erratum slip tells us that the (equally delayed) *Bocconea* paper with the Proceedings of the Paris Meeting of OPTIMA eventually won.

The present volume includes the treatments of 378 numbered species – less than last time (456) but still far above average (the total species number in 10 volumes being 2924). Among the included families, *Liliaceae* in Engler's traditional delimitation would come first, with 144 species, had it not been split into 10 families placed in 5 different orders, following the modern fashion launched by Dahlgren. As it is, *Cyperaceae* (98 species) are on top, followed by *Alliaceae* (44), *Orchidaceae* (43), *Liliaceae* (37), *Hyacinthaceae* (33), and *Iridaceae* (27). The larger genera are *Carex* (65 species; by

Handžjan), *Allium* (43; by Oganessian & Agababjan), *Gagea* (22; by Tamanjan), *Iris* (16; by Gabriëljan), *Juncus* (12; by Handžjan), *Orchis* (11; by Aver'janov & Nersesjan), and *Ornithogalum* (10; by Agapova & Gabriëljan). Most of the smaller genera were dealt with, either by Nora Gabriëljan herself, or Handžjan, or Tamanjan.

Discounting *Gladiolus* (see above) there are three new names validated in the book: one new subspecific combination in *Carex pyrenaica*, one new subspecies (*Fritillaria pinardii* subsp. *hajanica*), and one new species: *Polygonatum ovatum*. There is a problem with the latter name, which has a chequered history. It was a herbarium name coined by Miščenko, first adopted in print by Knorring (in Komarov, Fl. SSSR 4: 465. 1935) who provided an English but no Latin description. Later authors to accept the species so named include Grossgejm in his 1949 Key to the Caucasian Flora, but they failed to validate the name until Tamanjan did so now. It is and was, however, pre-empted by a homonymous combination, *P. ovatum* (Farw.) Bush (in Amer. Midl. Naturalist 10: 397. 1927), based on *P. biflorum* var. *ovatum* Farw. (in Bull. Torrey Bot. Club 42: 255. 1928), a North American taxon. The Caucasian species therefore needs a new name, as which I propose ***Polygonatum mischtschenkoanum*, nom. nov.** (\equiv *P. ovatum* Miscz. ex Tamanian in Tahtadžjan, Fl. Armenii 10: 369. 2001).

As in earlier volumes, illustration is profuse and of excellent quality, with drawings due to nine different artists including three of the text authors. One will be pleased to recognise the splendid portrait of *Gundelia tournefortii* adorning thy flyleaves, same as last time – a bit of a surprise perhaps, as *Gundelia* is not really a monocot. There is a little story to be told on this mishap which worried Nora Gabriëljan a lot. The new prospective flyleaf illustration, combining *Lilium armenum* and *Tamus communis*, was apparently misplaced at the printers who fell back on the previous solution. Let us hope the original of the new artwork will be recovered: if Nora did not lose her beautiful sense of humour in the process, she might perhaps use the lily and black bryony for the grass volume. W.G.

26. R. I. GAGNIDZE (ed.) – Flora Gruzii. Flora Georgiae. Izdanie vtoroe / editio secunda.

XII, Solanaceae-Adoxaceae. XIII, Caprifoliaceae-Campanulaceae. – Akademiya Nauk Gruzii, Tbilisi, 1999 & 2001 (ISBN 5-520-00315-7 & -01029-3). 400 & 286 pages, 27 & 37 maps (1 & 1 in colour), 33 & 30 full-page figures; two hard cover volumes.

The *Flora of Georgia* was among the many major scientific projects whose existence was threatened by the political and economic collapse of the Soviet Union. Eleven volumes of the second edition (the first, said to have been published in 8 volumes between 1941 and 1952, I have not seen) appeared at regular intervals between 1971 and 1987. After that, publication came to a halt.

The fact that two new volumes have been produced recently is not the small miracle it appears to be, but the concrete result of Peter Raven's support and interest and of the generosity of Anne and Constantine Sidamon-Eristoff. Sidamon-Eristoff, of Georgian descent, is a New York attorney specialised in environmental issues and chairman of the American Friends of Georgia. These people have been furthering a worth-while goal, for which they must be acknowledged.

Georgia has an astoundingly rich vascular flora which, according to the first edition of the present work, comprises 4100 species, with a rate of endemism of about 20%. The sequence of the *Flora* follows the familiar Engler system. The two new volumes treat 13 tubiflorous families and 77 genera with c. 450 species in total, leaving "only" the *Compositae* and monocotyledons to deal with. The largest genus is *Campanula* (66 species), defined to include several of Kolakovsiy's recent generic splits but excluding *Symphyandra*. Next come *Veronica* (42) and *Verbascum* (29), the latter excluding *Celsia*. Other important genera are *Orobancha* (28), *Scrophularia* (24) and *Scabiosa* (15, including *Lomelosia*).

Except for a preface in Russian and English (a welcome innovation!) the *Flora* is written in Grusinian in its entirety – a language with which few are familiar and that uses a completely foreign alphabet. The script is beautiful, highly decorative, but this does not help understanding. The ignorant readers (of which I am one) will however be able to read and understand the synonymies and type citations, interpret the distribution maps, and appreciate the drawings. A care-

ful comparison of the footnotes in the text with the names of persons given in the trilingual impressum will allow to identify the authors of each genus or family treatment (they also appear in a Cyrillic index at the end). No less than 19 different authors have contributed, 14 to volume 12 and 9 to volume 13.

A special index at the end of volume 12 lists nomenclatural novelties, the names of new taxa being validated in an Appendix. All concern the *Scrophulariaceae* (10 new series in *Linaria* and *Pedicularis*, including invalid *L. ser. Vulgares* which includes the type of the generic name; one new variety in *Euphrasia petiolaris*; and one subspecies recombined under *Paederotella pontica*). There are no listed novelties in volume 13.

W.G.

27. Shaukat Ali CHAUDHARY (ed.) – Flora of the Kingdom of Saudi Arabia illustrated. Volume II (Part 3). – Ministry of Agriculture and Water, Riyadh, 2000. [9] + III + 433 pages, 109 plates of drawings, folded colour map, tables; laminated cover.

The new and, I should add, first modern *Flora of Saudi Arabia*, produced under Chaudhary's expert editorship, started in 1999 with volume 1, comprising the pteridophytes, gymnosperms, and most non-sympetalous dicot families arranged in the familiar Engler sequence, up to the *Mimosaceae* but excluding the *Papilionaceae*. The chronologically second instalment is the third part of vol. 2, covering the last portion of sympetalous families: the *Acanthaceae*, *Pedaliaceae*, *Campanulaceae*, *Plantaginaceae*, *Rubiaceae*, *Caprifoliaceae*, *Valerianaceae*, *Dipsacaceae* and, principally, *Compositae*. Parts 1-2 of the volume, which will complete the dicot treatment, are announced as forthcoming.

The *Flora* is written in English throughout, except of course for local plant names, which appear in Arabic script but also in Latin transcription. It provides full keys for identification, diagnostic descriptions, and baseline synonymy, but wisely does not care for excessive nomenclatural detail. The traditional, familiar delimitation of families (e.g. *Plantaginaceae*) and genera (e.g. *Scabiosa*) has been retained, without as much as a reference to recent remodelling.

In an Appendix the names of two new species (in *Euryops* and *Echinops*) and one infras-

pecific taxon (in *Phagnalon stenolepis*) are proposed. The Latin is a bit awkward, and the type is referred to as "halotype", but this is not the main trouble. For each of the binomials two herbaria are stated to host the type, a fatal error under the *Code*, which has been remedied in the main text for *Euryops jaberianus* ('*jaberiana*') but not for the *Echinops* species. The *Phagnalon* taxon is referred to as a subspecies in the Appendix but as a variety in the text – again contravening the nomenclatural rules. Two of the new names will therefore have to be validated separately elsewhere.

At the end of each family treatment there is a list of voucher specimens, which is almost totally confined to material kept locally in Riyadh, mostly at the National Herbarium of Saudi Arabia (RIY) or else at the University herbaria (KSU, KSUP); occasionally specimens in the Karachi herbarium are cited, and quite exceptionally those in European herbaria (K, E). Specimen enumeration is alphabetically by genus and species, whereas in the main text a systematic order has been preferred.

A feature of this flora of which the editor may be proud is illustration. The drawings, assembled into plates, are placed at the end of the main text for each family, ahead of the specimen list. With few exceptions all species have been portrayed, often with diagnostic details in addition to habit representation. The drawings have been executed with competence and professional skill, mostly by the *Flora's* official botanical illustrator, Mohammad Rafiqud Din; other artists who have contributed remain unacknowledged, but on a check I found the signatures Akham [?] (*Verbesina*), Naseem and Nomi (*Anthemis* p.p.), and the initials UAC (*Plantago* p.p., *Eclipta*, *Flaveria*, *Urospermum*, *Reichardia*). A few drawings are unsigned and remain anonymous.

Nine botanists, all based at the four botanical institutions of Riyadh, are credited with authorship of the various treatment. [A tenth, J. Thomas, is mentioned as co-author of *Caprifoliaceae* in the text, but his name was curiously dropped from the index and is not mentioned among the contributors: he must be Jacob Thomas, formerly at Riyadh University, now at the Tropical Botanic Garden in Trivandrum, Kerala, India.] All authors are to be congratulated for their scholarly work, but most of all Shaukat Chaudhary himself who, apart from taking charge of general editing,

has authored the greater part of the text. The Ministry who has supported and keeps supporting the project may take justified pride in the outcome. W.G.

28. Karl Heinz RECHINGER † (ed.) – Flora iranica. Flora des iranischen Hochlandes und der umrahmenden Gebirge. Persien Afghanistan, Teile von West-Pakistan, Nord-Iraq, Azerbaidjan, Turkmenistan. **Lfg. 175** (edited by Wilhelmina RECHINGER), *Papilionaceae* IV, *Astragalus* II, by Dieter PODLECH, Shahin ZARRE & Ali Asghan MAASSOUMI. – Akademische Verlagsgesellschaft Salzburg, Hallein, 2001 (ISBN 3-9501445-0-1, the whole work). 197 pages, 135 extra plates of photographs, paper. Price: Euro 276.

Just a few steps off completion of Karl Heinz Rechinger's monumental Flora of the Iranian highlands, two important changes have taken place. One is natural enough, and promising at the same time: Wilhelmina Rechinger has taken over as a volume editor from her deceased husband (who remains the overall editor, and would no doubt be pleased could he see how faithfully the Flora's former style keeps being followed). This change is not as momentous as it might appear, since Willy has been intimately associated with the editorial process throughout the work's progress, typing the whole manuscript (Karl-Heinz preferred writing by hand) and progressively assuming responsibility in proof-reading and editing, particularly of the specimen citation portions.

The second change is both surprising and in a way reassuring: the switch in publisher. In my last review (OPTIMA Newsletter 35: (9-10). 2000) I had already noted a certain neglect on the former publisher's side, coupled with a breathtaking pricing policy. Whereas the new publisher is not really what you would call cheap, he is at least slightly more reasonable.

The second part of the *Astragalus* treatment is distinctly smaller than the first. It covers the pungent-leaved sections with basifix (or subbasifix) hairs, with the exception of those that have sometimes be placed in a distinct genus, *Astracantha* (*Tragacantha* auct.). It is hard to be sure of how much is left, as no survey of the genus has been provided so far, but at least the "tragacanthoid" sections and the perennials with

medifix hairs are wanting. Whether they will fit within a single (third) volume as was originally planned remains to be seen.

This instalment covers 9 sections totalling 152 species. Two sections are unispecific (one of them newly described). The seven others were all the subject of previous monographic work by Podlech's pupils: Irmgard Deml, in 1972, dealt with *A. sect. Acanthophace* and sect. *Aegacantha*; Solveig Tietz, in 1988, with sect. *Campylanthus*, sect. *Microphysa*, and sect. *Poterion*; Tietz and Zarre treated "sect. *Megalocystis*" (now a synonym of the enlarged sect. *Anthylloidei*) in 1994; and in 1996 Zarre & Podlech revised sect. *Hymenostegis*. The latter is the one that underwent the largest amount of change since its revision was published: from about 20 Iranian species then recognised it has now risen to 45, of which 7 are newly described and named in the *Flora*. Much of the increase is due to the work of Maassoumi who co-authors the sectional treatment. Two further new species I spotted in *A. sect. Acanthophace* (an index to nomenclatural novelties validated in the *Flora* remains a desideratum).

This time Podlech has provided the reader with a key to the sections treated. Having lamented the absence of such a key last time, I am particularly pleased to note this improvement. Another change – obviously linked to a technological switch from classical (now archaic) typesetting to generation of camera-ready printout from the computer – is a substantially larger type face: a kindly thought for the short-sighted elderly. I am less favourably impressed by the quality of the illustrations: the herbarium specimen photographs are as profuse as ever, but they tend to be over-exposed, especially the flower spikes, and the "grain" is distinctly coarser than previously, so that some details are lost. W.G.

29. M. ASSADI, M. KHATAMSAZ, V. MOZAFARIAN & A. A. MAASSOUMI (ed.) – Flora of Iran. No. 28: *Asclepiadaceae*, by M. ZAEIFI (ISBN 964-473-061-5); No. 29: *Aristolochiaceae*, by M. MAJID (ISBN 964-473-062-3); No. 30: *Capparaceae*, by F. SAGHAFI KHADEM (ISBN 964-473-063-1); No. 31: *Iridaceae*, by M. MAZHARI (ISBN 964-473-064-X); No. 32: *Crassulaceae*, by Kh. AKHIANI (ISBN 964-473-023-2); No. 33: *Papilionaceae (Viciae)*, by M. PAKRAVAN, N. JALILIAN & M. NEAMATI (ISBN 964-473-070-4); No. 34: *Linaceae*, by F. SHARIFNIA & M. ASSADI (ISBN 964-473-090-9); No. 35: *Moraceae*, by D. AZIZIAN (ISBN 964-473-091-7); No. 36: *Urticaceae*, by M. JANIGHORBAN (ISBN 964-473-092-5). – Research Institute of Forests and Rangelands, [Tehran], 2000 [20-33], 2001 [34-36]. 57 + [2], 13 + [2], 61 + [2], 87 + [2], 69 + [2], 176 + [3], 48 + [2], 30 + [2], 32 + [2] pages, drawings, maps; paper.

Since last time (OPTIMA Newsletter 35: (10). 2000) no less than 9 new fascicles of *Flora of Iran* have been published, covering eight families plus a tribe of legumes. This means, in figures: 219 numbered species belonging to 38 genera, or 236 distribution maps (since infra-specific taxa are mapped separately). The rate of progress is terrific indeed.

The major genera of this time's batch are *Vicia* (40 numbered species), *Lathyrus* (22 species), *Sedum* (22 species), *Iris* (20 species), *Cleome* (16 species), and *Linum* (15 species). None is really problematic and overly complex, yet each has its critical aspects when you look closely. Whereas no new taxa have been described within the *Flora* itself, two species have been recently proposed by the author of one of the accounts: *Vincetoxicum assadii* Zaeifi and *V. mozaffarianii* Zaeifi. Two new combinations have, furthermore, been validated within the *Flora* treatment: *Linum nervosum* var. *bungei* (Boiss.) Sharifnia and *Ficus rupestris* (Hausskn. ex Boiss.) Azizian. The latter, unfortunately, has not one but two earlier, validly published homonyms (*F. rupestris* Blume 1825 and *F. rupestris* Buch.-Ham. 1827), so if it is indeed to be maintained at the rank of species it will have to be renamed.

I will not go again into the merits of this *Flora*, as I have praised it repeatedly before. Let me however mention a point that I find is particularly encouraging: the number of different botanists who contribute to it as authors. This time there have been no less than twelve, and even more remarkably, for eight of them it was their first treatment to be published. I cannot of course be sure, but I imagine them to be young: the promising, raising new botanical generation. And mind you, it is not as if their leaders, the editors working in the background and passing on their experience to them, were that old either: they are all in their early fifties or not even there as yet. Definitely, with such human resources in the background, the future of *Flora of Iran* looks bright! W.G.

Flower Books

30. Ori FRAGMAN, Ran LEVY-YAMAMORI & Pambos CHRISTODOULOU – Flowers of the eastern Mediterranean including southern Turkey, Lebanon, western Syria, Cyprus, northern and central Israel, the Palestinian Territories and northern Jordan. – Gantner, Ruggell, 2001 (ISBN 3-904144-27-8). [6] + 458 pages, drawings, colour map, colour photographs; boards with dust-cover. Price: DM 148.

An attractive looking book: high-quality paper and print, solid binding, beautiful pictures on the front (*Aristolochia sempervirens*, *Anemone coronaria*) and back (*Pisum elatius*, *Podonosma orientalis*) of the dust jacket. Flower books from the general area covered – roughly a square, from Adana south to the Gaza strip and from Antalya east to Damascus – are scarce. This is "the first comprehensive guide to the wild flowers of the eastern Mediterranean region", so the cover text promises, and goes on: "Includes 530 species, 648 exquisite photos taken in nature, detailed accounts". Sounds too good to be true, perhaps? Let us see.

I did not count either the species or picture number, but both seem credible, and the photographs, whether "exquisite" or not, are certainly good and, as far as I can judge, correctly identified. Most or all were taken in nature, if often against an unnatural, sombre background. The

claim to comprehensiveness is tuned down by the authors themselves in the introduction: 530 species are a tiny fraction of those growing in the area. And then, "detailed accounts" are not given for all 530 species mentioned but for a selection only – 192 to be exact, which is the number of "groups" treated.

So how does the book function – if it does? At the start, there is a series of what one might call rough pictograms representing the main species of each group; they are arranged under two main categories, radial and non-radial flowers, and within these by petal number (3, 4, 5, 6, 7 or more). If you happen to have one of the book's 192 main species you are likely to recognise it by means of these pictograms, so you will find its sketchy description and the rough indication of its distribution, habitat and flowering period, plus one or two colour pictures. If you have a different plant and it is sufficiently alike to one of the main species, you may also end up in the correct group, where your species may or may not be mentioned in a rudimentary key, and if it is, may or may not be illustrated. You can never be sure, however, whether or not your identity guess is correct.

The order of the groups is not explained but I managed to ferret out the basic criterion: it is flower colour, in alphabetic order: blue (groups 1-18), brown (19-27), green (28-41), purple (42-91), red (92-99), white (100-147) and yellow (148-192). Many groups include plants with different flower colour, so assignment is often arbitrary; and why the *Epipactis* group is placed in the brown category when its lead species, *E. helleborine*, is figured and described with greenish purple flowers I cannot fathom.

This is a book written for amateur botanists by the botanically untrained: a conservationist, a nature history writer, a forester. It will foreseeably find its friends. The final cover statement, however, I must question: that it will also be useful for the professional botanist. For an expert in the field it is infuriating to read that *Iris* has non-radial flowers, that the "flower" of *Compositae* has 7 to many "petals" and the papilionaceous flower has one "sail" and two "standards". The critical reader may also miss authorship credit for the individual photographs – a breach of ethics if not of intellectual property law. W.G.

31. Galip AKAYDIN – Dođal, kltr ve ss bitkilerimiz. Fotođraflar ve bilimsel isimleriyle (bitki tantıma kitapçıđı). – Hacettepe niversitesi Eđitim Fakltesi, Beytepe/Ankara, undated [rcd. May 2001]. Unpaged, 22 sheets of text + 256 colour photographs on 32 plates; paper.

An unpretentious, cheaply produced booklet with photographs of Turkish plants, intended as a help for identification. There are 24 plates of native taxa followed by 8 plates with cultivated plants, including ornamentals. The last three photographs show two student groups as well as the author in the field. The text consist of little more than a list of Latin names of the illustrated plant species, followed by their designations in Turkish, German and English.

Some of the pictures are over-exposed and/or out of focus, but most can be readily recognised. The plants are correctly named as a rule as far as I can tell, but "*Rubus idaeus*" is an error for *R. cf. sanctus*. W.G.

Botanical Calendars

32. Artems GIANNITSAROS – Futa ts Lesbou. merologio 2002. – Sullogos Mesopotitn Lesbou " Anagenns", [Lesbos], [2001]. 17 sheets with colour photographs, black-and-white frontispiece; cardboard back, ring binding.

The Greek botanist Artemis Yannitsaros, professor at the Biology Department of the National and Kapodistrian University of Athens, has provided the texts and photographs of what is arguably the first Lesbian flower calendar ever. While written entirely in modern Greek language (except for a couplet by Sappho that is in classical Greek) and thus not easily read by the general botanical public, it has merit as a source of illustrations of several rare and little known plants. Foremost among them is the single-island endemic *Fritillaria theophrasti*, just recently described (Kamari & Phitos in Biol. Gallo Hellen. 26, Suppl.: 70. 2001). *Haplophyl- lum megalanthum*, a rare species first found in W. Anatolia and recently discovered in Lesbos, and *Rhododendron luteum*, here at the western limit of its area, are also worth mentioning.

Two sheets at the end of the calendar recapitulate the monthly photographs and add explanatory texts for each. They are written for the layman but include information that may be of interest to professional botanists as well. Taken as a whole, the calendar is a worthy homage to an island which is to be remembered not only as Sappho the poetess's home but also as the birthplace of Theophrastos, the founding father of botany. W.G.

Floristic Inventories and Checklists

- 33. Christoph DOBEŠ & Ernst VITEK – Documented chromosome number checklist of Austrian vascular plants.** – Naturhistorisches Museum, Wien, 2000 (ISBN 3-900275-77-7). 642 pages, maps, tables, CD-ROM with voucher specimens images; hard cover.

It has been done before (the classic among regional chromosome count registers, for Slovakia by Márovský & al., was published in 1987), but never as thoroughly and carefully. Dobeš & Vitek's chromosome number checklist for Austria sets new standards for a national work of its kind. What they have achieved does indeed deserve the attribute "documented" that they use in the title, because they give full documentation of every entry. It has been their constant concern to present verifiable data in their compendium, and which is more, whenever possible they made verifications, or had them done by specialists.

The counts themselves cannot usually be controlled because the preparations on which they were made are rarely kept. It is however a standard requirement nowadays that voucher specimens of counted material be prepared to prove its identity. Dobeš & Vitek looked for any existing such specimens in Austrian herbaria and when feasible had their identity checked. They also established the exact location of the stated places of origin, in terms of standard grid square units of approximately 6×5.5 km, which enabled them to generate maps. Such maps, which also show different ploidy levels when they exist, were produced when there were more than 6 counts for any given taxon. No less than 234 taxa were so mapped, on 129 different maps.

Coverage is exemplary. Not only literature data are considered but those in unpublished theses as well. Furthermore, the authors themselves and some of their correspondents used the book as outlet for some of their own so far unpublished chromosome data. As a result, just over 10 % of the 6232 chromosome records accepted in the volume were unpublished previously! Digitised colour images of vouchers for 132 of the new counts are provided on a CD-ROM that accompanies the book.

This volume is not only an exemplary source of data but an impressive documentation of the huge amount of karyological research that has been carried out in Austria. Naturally it can also be used as a kind of negative picture, to highlight what still needs to be done. It shows that, whereas for some species over 200 records exist, for 56 % of the taxa of the country's flora no count of Austrian material has yet been made. W.G.

- 34. João DOMINGUES DE ALMEIDA – Flora exótica subespontânea de Portugal continental (plantas vasculares). 2a edição.** Catálogo das plantas vasculares exóticas que ocorrem subespontâneas em Portugal continental e compilação de informações sobre estas plantas. – Universidad de Coimbra, Coimbra, 1999. 153 pages; paper, plastic front cover sheet.

The work lists 500 alien plant species of the Portuguese flora, with indication of their status (using the terms coined and categories defined by Kornaš) and detailed documentation of their spatial and temporal occurrence. It is based on literature and herbarium data, the author's own experience in the field, and the opinions and advice received from others, all carefully cited and documented. It is a mine of information, not easily accessible otherwise, on a subject on which there is often much uncertainty. An instructive statistical appendix includes graphic representation of the relative importance of various alien categories.

As the author knows and acknowledges it is difficult, even with good professional experience and ample (though often contradictory) data at hand, to assess the status of aliens objectively and reliably. Drawing the borderline between native and alien, casual and established, archae-

ophyte and neophyte, is a delicate matter. I am certain that it would have been easy for Almeida to justify kicking a few species off his list or adding several more, and on that account I am suspicious of the round figure of 500 Portuguese aliens. The archaeophyte category in particular is problematic, because most of the species which according to the definition would probably qualify as archaeophytes are universally, and for very good reasons, accepted as members of the native flora. Inspection of the 12 alleged archaeophytes on the list shows that only 4 of them were mentioned in the earliest source available, published in 1661: *Centaurea cyanus*, *Tanacetum parthenium*, *Agrostemma githago*, and *Spartium junceum*. Accepting these, which according to the definition is fine, one could certainly add many others. For the 8 other listed species the archaeophyte status is hypothetical if not speculative, with favourable odds for *Arundo donax* (first mentioned in 1804) and very low probability for *Artemisia verlotiorum* (first recorded in 1967) and *Chamaesyce canescens* (1885).

It is not the archaeophyte category, however, that makes this publication relevant; it is the invasive aliens which are presently in the limelight. According to Almeida's assessment almost 40 % of the listed species are actually or potentially invasive – a term he applies to weeds of cultures and invaders of natural habitats alike. Portugal has the reputation of being particularly "rich" in aggressive alien plants, and that reputation is fully confirmed here. From *Eucalyptus* to *Carpobrotus*, many naturalised exotics work together in putting the country's rich native flora at risk.

This is an unpretentious, cheaply produced brochure, but it is good to have it, and it was well worth the author's painstaking efforts. W.G.

35. Toni NIKOLIĆ (ed.) – Flora croatica. Index florae croaticae. Pars 3. [*Natura Croatica*, 9, Suppl. 1]. – Hrvatski prirodoslovni muzej, Zagreb, 2000. 324 pages; laminated cover.

The present, third volume brings the checklist of the vascular flora of Croatia to its conclusion. The arrangement does not differ from that of the earlier portions, outlined in my review of Part 2 (see OPTIMA Newsletter 32: (12). 1997). Again, the extensive and carefully edited literature citations listed in the Appendix under the

relevant taxa, arranged alphabetically, are an invaluable extra which increases substantially the value of the Checklist.

This time, 49 families with 440 genera are treated, corresponding to the major part of the sympetalous dicots and all monocots. The most important families are *Labiatae*, *Scrophulariaceae*, *Compositae*, and *Gramineae*.

The checklist part of the work is now available for online consultation in database format (http://hirc.botanic.hr/croflora/tax_default.asp). There is also a literature database at the same Web site, but it is less complete than the published lists, and not searchable by taxa as yet. Obviously the site is still under development: keep trying! W.G.

36. Sven SNOGERUP, Britt SNOGERUP, Dimitrios PHITOS & Georgia KAMARI – The flora of Chios Island, Greece. [*Botanika Hronika* (ISSN 0253-6064), 14.] – Ergastêrion Botanikês tou Panepistêmïou Patrôn, Patra, 2001. 199 pages, 2 graphs, 2 maps; paper.

So far, Chios ranged among the floristically less well known Aegean islands. The last survey of its flora, which was published in 1954 by Meikle, was rather preliminary. Since then there had been updates for particular plant groups (orchids, woody plants), but for the remainder little had been published.

The present Helleno-Swedish author team carried out extensive field work, collecting a vast amount of material, which they complemented with a thorough literature survey and the study of the collections of various other people. As a result, the number of taxa present (1260 species and subspecies, 485 previously unrecorded) is now better in line with what one would expect from the island's size (it is the third largest in the East Aegean Area, after Lesbos and Rhodes); in fact, Rhodes which is larger by two-thirds appears to be floristically poorer (Carlström in 1987 recorded 1127 native species), even though the figures at hand are not exactly comparable.

The work consists largely of a checklist of taxa, with specimen citation and references to previous literature records, if present. The general part is refreshingly concise and matter-of-fact, devoid of statistical exercises of dubious relevance and abstaining from phytosoci-

ological jargon when the prevailing vegetation types are characterised. Genus-level taxonomy is soundly traditional in most cases, or even plainly old-fashioned as in *Dipsacaceae*, with minor exceptions of which the most flagrant is adoption of the generic split *Phedimus* (masculine please, not feminine!) for *Sedum stellatum*. The recent explosive splitting in *Ophrys* has resulted, in three cases, in the mention of one and the same taxon under two different names (*O. holosericea* - *O. homeri*, *O. omegaifera* - *O. sitiaca*, *O. spruneri* - *O. mammosa*), but in compensation *O. speculum* (or the perhaps synonymous *O. ciliata*) has been left out by accident. Examples of erroneous nomenclature are rare: they include the use of *Asteriscus spinosus* (in preference to *Pallenis spinosa*), *Chrysanthemum coronarium* and *C. segetum* (instead of *Glebionis coronaria* and *G. segetum*), as well as the obvious slip *Anthyllis vulneraria* subsp. "*rubrifolia*". All in all, however, this is a scholarly work that can serve as a model to many. W.G.

- 37. Ruprecht DÜLL – Preliminary list of vascular plants of Samos, Icaria and Fourni (East Aegean Islands, Greece). Vorläufige Übersicht der Gefäßpflanzen von Samos, Icaria und Fourni (Ostägäis, Griechenland).** – Irene Düll-Hermanns, Bad Münstereifel, 2000 (ISBN 3-925425-18-7). [3] + 136 pages, 1 table; paper.

The area covered by this checklist coincides with the Nomos (province) of Samos in the East Aegean Sea. This province falls naturally into three parts, corresponding to the larger islands, Samos, Icaria and Fourni. The contribution of Düll's list differs in importance between the three.

Düll himself, his wife, daughter and son-in-law botanised extensively on Samos, and so did others since the recent update (1993, by the Snogerups) of Christodoulakis's PhD thesis, of 1986, which included a floristic inventory of the island. As a result, the number of wild taxa (species and subspecies) recorded for the island has grown by 368 in less than a decade. Of the additional records, 190 are credited to various sources and almost as many, 178, are by the Düll family.

Icaria has been less well investigated in general terms, but there is a very recent inventory of its flora, by Christodoulakis in 1996. To the 829 taxa listed there, Düll and his wife now add 29, which they found in 1996. Finally, the baseline of Fourni floristics is still Reehinger's *Flora aegaea* of 1944, and only three orchid species have since been added to the former total of 264 taxa; none of the Dülls has visited that island.

This list, cheaply produced and privately published, is stated to be preliminary. One must not, therefore, be too severe in assessing it but will rather stress its merits. The odd computer-generated error message awkwardly appearing in print does little harm. What counts is the fact that Düll's new inventory is broadly based and carefully done. Many widely scattered publications, including poorly known grey literature, have been taken into consideration. The coverage is not one hundred percent complete – perfection is impossible to achieve – but reasonably so. There is one item, though, that I found missing: Panitsa's PhD thesis of 1997 (see OPTIMA Newsletter 34: (15-16). 1999), in which plant lists are given for three offshore islets at the north-eastern tip of Samos.

The information is presented in an extremely condensed form, almost in shorthand. Therefore, the list is not comfortable to use. The text is basically bilingual (English and German): The German has disappeared in some places, but few will worry. One hopes that vouchers have been kept at least for all new records, but this is not confirmed explicitly, nor are the whereabouts of potential specimens clearly stated. Hopefully, in most cases they can be found in the collectors' private herbaria, but the concern remains that Düll's list might include errors that will be difficult to prove, and hard to eradicate in the future.

W.G.

Excursions

- 38. Ina DINTER – Ligurien.** Botanische Wanderungen in einer wenige bekannten Region Italiens vom 13.-22. Juni 1999. – Privately assembled/duplicated, Lauffen, 1999. [1] + 44 sheets, drawings; paper, plastic front cover sheet.

39. Ina DINTER – Insel Euböa. Nachtrag zum botanischen Studienaufenthalt vom 8.-21. Mai 2000. – Privately assembled/duplicated, Lauffen, 2000. [2] + 18 sheets, 1 facsimile, 2 colour photographs, 5 maps; paper, plastic front cover sheet.

40. Ina DINTER – Rhodos, Griechenland. Botanischer Studienaufenthalt 19. April -2. Mai 2001. – Privately assembled/duplicated, Ostfildern, 2001. [1] + 90 sheets, drawings, maps (one in colour), facsimiles; paper, plastic front cover sheet.

As every time (last in OPTIMA Newsletter 35: (15). 2000), I am delighted to record a set of new products from the Dinter factory – nice little samples of "grey literature" intended for a restricted circle of readers (the actual participants of Ms Dinter's botanical study tours) but, being of relevance as sources of floristic information, also made accessible to other interested persons. I shall not repeat here the whole background information on layout and contents, which I have explained earlier, but I should perhaps insist on the fact that Ms Dinter's tours, while hopefully financially self-supporting, are not the lucrative job one might suspect. If they were, they would be much more repetitive and so-to-say industrially planned. Ms Dinter obviously sees her tours as her hobby, so she won't let herself become bored by visiting the same area more than twice (first alone on a preparatory excursion, then again with her group). She wants to constantly add to her botanical knowledge, already vast, sending her critical specimens (she has collected about 6500 numbers by now) to specialists to check or identify.

The Rhodes brochure is new matter, produced in advance to serve as a guide booklet to the tour participants, and with plant lists based on three prior excursions. In addition, it includes a small list of plants from Simi, as that island might be visited by some participants on the excursion's free day. The cumulative species inventory at the end for once lacks voucher specimen numbers. For these, we are told to await the post-excursion "elaboration", still to come.

The two other pamphlets belong to the "elaboration" kind, i.e., they were produced subsequent to the respective excursion and include its botanical results. (The "preliminary" version for Evvia was presented last time, that

for Liguria I have not seen.) The Evvia report nicely demonstrates the scientific endeavour that stands behind these publications: The updated plant list is accompanied by two colour photocopies of critical herbarium specimens, plus five original distribution maps generated by Strid from the Flora Hellenica database. Two of the collected plants (*Lathyrus nissolia*, already in the preliminary version; and *Salvia ringens*, discovered during the excursion) are new records for the flora of Evvia. W.G.

41. Grégorios A. IATROU – Ekdromê stên periohê: Faraggi Bouraikou – Oros Helmos, Nomou Ahaias. Ellênikê Botanikê Etaireia, 8° Panellênio Epistêmoniko Sunedrio, Patra 5-8 Oktobriou 2000. – Ellênikê Botanikê Etaireia, Patra, 2000. [28] unpagged sheets, table, colour map, colour photographs; paper, plastic front cover sheet.

The Greek Botanical Society held its 8th National Congress in Patras in October 2000, followed by a full-day excursion to the Vouraikos gorge and Mt Helmos, in the north-eastern part of the Ahaia Province. The excursion guide booklet, prepared by Gregory Iatrou, includes chapters on the geology, vegetation and flora of the mountain, and on the botany of the gorge. Its principal value lies in its often excellent colour pictures of rare and characteristic plants: *Alchemilla aroanica*, *Asperula boryana*, *A. oetaea*, *Globularia stygia*, *Linum elegans*, *Minuartia juniperina*, *M. stellata*, *Rindera graeca*, *Teucrium aroanium*, *Viola chelmea*, and *V. graeca* for Mt Helmos; *Achillea umbellata* subsp. *monocephala*, *Asperula arcadiensis*, *Aurinia moreana*, *Colchicum peloponnesiacum*, *Onobrychis ebenoides*, and *Petrorhagia graminea* from the gorge. W.G.

42. Arne STRID & Kit TAN (ed.) – Flora and phytogeography of NW Greece (Epirus and Macedonia). Report of a student excursion from the University of Copenhagen 20 May - 2 June 1999. – Privately published, Copenhagen, 2000 (ISBN 87-982179-7-6). [5] + 119 pages, tables, maps, facsimiles (2 in colour), 4 extra plates of colour photographs; paper, plastic front cover sheet.

There is a tradition of student excursions from Copenhagen to Greece (see OPTIMA Newsletter 31: (13). 1997). This one, consisting of a small group of 8 students plus 5 leaders or accompanying persons, visited remote mountain areas in the north-western part of the country, in the north of Epirus and western Macedonia. During 12 days in the field and at 28 sites, the group managed to collect the impressive total of 1438 gatherings. They represent close to 900 species, including one previously unknown from Europe (*Anthemis wiedemanniana*) and two never before collected in Greece (*Myosotis speluncicola*, *Viola herzogii*). *Astragalus gladiatus*, discovered in Greece in 1998, may not have been recorded in print previously.

The present excursion account, though privately published, is commercially available. It was written by the participating students then edited by the two principal tour leaders, inseparable like Siamese twins in editorial matters. Apart from the lists of collected and observed plants, first by localities then in a tabular index, it includes informative and well written introductory chapters on the botany and physical geography of the area visited. In the text on history of botanical exploration the names of two of the most assiduous botanical explorers, Zaganariaris and Authier, might have been mentioned.

The 25 colour photographs printed on extra plates are a valuable addition to botanical iconography. Most of them are close-ups of individual species, some common elsewhere (*Vaccinium myrtillus*, *Anemone ranunculoides*, *Allium ursinum*) but others seldom seen, such as the rare local endemic *Ranunculus cacuminis*.

W.G.

- 43. Walter STRASSER – Zur Flora der griechischen Insel Lefkas (Lefkada).** Als Ergänzungen: Aufnahmen auf dem südlichen Peloponnes und in NW-Griechenland. – Privately duplicated, Steffisburg, 2001. [1] + 60 sheets, tables, map, drawings; paper back and plastic front cover sheet.
- 44. Walter STRASSER – Botanische Wanderungen in der West-Türkei.** 25. März - 6. April 2001. – Privately duplicated, Steffisburg, 2001. [1] + 17 sheets, table, map, 34 drawings; loose sheets with clamp back, plastic front cover sheet.

Strasser's excursions of 2001 were two in number, both East Mediterranean. He and his wife first went with a study group to SW Turkey, then alone to Greece. Each excursion yielded one of the customary pamphlets in which he exposes his botanical results. The general arrangement is the same as was previously described (see OPTIMA Newsletter 35: (16). 2000).

The Turkish trip, which led from Ephesos on the western coast to Pamukkale in the interior and south to Kaunas near Marmaris, was perhaps less botanical than usual. The cumulative list is of the "more interesting" species only (c. 330), and there is no mention of specimens having been prepared. For many of the visited places no plant lists are shown.

The Greek trip lasted one whole month (13 April to 13 May, including the transfer journey) and consisted of three portions, dealt with separately in the account: South Central Peloponnese (from Sparta to the Mani Peninsula, and one place on Mt Erimanthos south of Patras; 370 species); the Island of Lefkas (c. 470 species); and Aetolo-Akarnania (c. 200 species).

Both lists are illustrated with Strasser's familiar drawings of plants, and on that account they can be considered as complementary to his illustrated field identification guides for the Peloponnese, the East Aegean area, and Cyprus (see OPTIMA Newsletter 34: (5-6). 1999; 30: (19). 1996; 35: (10-11). 2000). The Greek pamphlet, on the front page and pp. 30-31, includes illustrations of 12 supplementary taxa, all found on Lefkas; and the Turkish one adds 34 taxa on pp. 9 and 11-17.

W.G.

Chorology

- 45. Oriol de BOLÒS I CAPDEVILA, Xavier FONT I CASTELL & Josep VIGO I BONADA (ed.) – Atlas corològic de la flora vascular dels Països Catalans. Volum 10, 11** [ORCA: *Atlas corològic*, 10, 11]. – Institut d'Estudis Catalans, Secció de Ciències Biològiques, Barcelona, 2000, 2001 (ISBN 84-7283-555-3 & -606-1). [670], [778] pages, maps 2107-2425, 2426-2799; paper.

Congratulations to the editorial team for so strictly adhering to their tacit schedule of one *Atlas* volume per year (see OPTIMA Newsletter

35: (18). 2000, for the previous review). The volume produced in 2000 marks a jubilee, being number 10 of the series.

Three quarters of volume 10 relate to the single major family treated, *Caryophyllaceae*, whereas volume 11 deals with 15 small to medium sized families amongst which *Chenopodiaceae* and *Boraginaceae*, each with over 50 species, are largest. Both new volumes together comprise 693 maps, of which all except the first (see below) correspond to the segment of species numbered 1397 to 1877 in the *Flora manual dels països catalans*. Several of the maps are in their second edition, having been published previously in volumes 1 or 2. When there was no update these early maps have not been reprinted, so if you look for them in their proper sequential place they seem to be missing. Such is the case of *Erica vagans*, *Androsace cylindrica*, *A. pubescens*, *Olea europaea*, *Phillyrea media*, *Myosotis pusilla*, *Lappula zapateri*, and *Omphalodes linifolia*.

The first map in volume 10 refers to *Asplenium ruta-muraria*. It is one of the four that I had reported missing (see OPTIMA Newsletter 31: (14). 1997). Two or three are still in the backlog: those for *Azolla filiculoides*, *Cystopteris montana*, and perhaps *Aristolochia baetica* – but the latter is omitted from the 1998 "general compilation" (OPTIMA Newsletter 34: (11). 1999), so its Catalan record may be in error.

A comparison of the *Atlas* with the corresponding portions of the *Flora manual* of 1990 reveals surprisingly few differences. Some new species have meanwhile been described: *Thesium catalaunicum* and 11 *Limonium* agamospecies. Several taxa have been mapped that were but recently discovered in the area: four additional genera: *Halopeplis* (*H. amplexicaulis*), *Phyllococe* (*P. caerulea*), *Corema* (*C. album*), and *Caralluma* (*C. munbyana* subsp. *hispanica*), as well as 12 species and one subspecies: *Rumex palustris* (surprisingly widespread), *R. cristatus* (an expanding alien), *Herniaria latifolia*, *Spergula fallax*, *Spergularia tangerina*, *Chenopodium ficifolium*, *Atriplex suberecta* (introduced from S. Africa), *Vaccinium uliginosum* subsp. *uliginosum*, *Limonium sinuatum*, *L. insigne*, *Echium saetabense*, *Lappula marginata* (as ed. 2), and *Cynoglossum germanicum*. Other "additions" are of taxa that had not been distinguished before (*Arenaria aggregata* subsp.

oscensis, *Dianthus algetanus* subsp. *turolensis*, and two additional subspecies in *Limonium auriculae-ursifolium*). *Opuntia vulgaris*, *O. subulata*, *Einadia nutans*, *Amaranthus spinosus*, and *Periploca graeca*, unnumbered in the *Flora manual* because they are not naturalised, are widespread enough to deserve being mapped.

On the other hand, some taxa given in the *Flora manual* as very rare, and perhaps either casual or recorded in error, or confined to the French part of Catalonia, have been omitted (*Callitriche lenisulca*, *Cerastium diffusum* subsp. *gussonei*, *Herniaria incana*, *Silene cretica*, *Spergularia purpurea*, *Bassia hirsuta*, *Limonium album*, and *Convolvulus althaeoides* subsp. *tenuissimus*). Subspecies are no longer recognised, or recognised only in part, in *Cerastium semidecandrum*, *Silene latifolia*, *S. vulgaris*, *S. nutans*, *Petrorhagia prolifera*, *Dianthus caryophyllus*, *Salsola kali*, *Vitaliana primuliflora*, *Fraxinus angustifolia*, and *Cerinthus major*; *Montia fontana* subsp. *variabilis* is, by implication, included in subsp. *amporitana*.

As before, the number of name changes has been kept at a minimum: *Opuntia ficus-barbarica* has become *O. ficus-indica*, *Arenaria tetraquetra* subsp. *condensata* is *A. aggregata* subsp. *aggregata*, *Silene cerastoides* has been corrected to *S. sclerocarpa*, *Dianthus pyrenaicus* subsp. *costae* is treated as a separate species, *D. costae*, and within *D. pungens*, subsp. *tarraconensis* is changed to subsp. *brachyanthus* whereas subsp. *cognobilis* is treated at species rank as *D. benearnensis*. *Rhagodia* has been changed to *Einadia*, *Primula acaulis* subsp. *vulgaris* to subsp. *acaulis*, and *Limonium minutum* subsp. *caprariense* to subsp. *minutum*. All these changes are necessary consequences of the rules of nomenclature and of the accepted taxonomy. W.G.

46. Pierre DUPONT – Atlas floristique de la Loire-Atlantique et de la Vendée. Etat et avenir d'un patrimoine. **Tomes 1 + 2.** – Siloë, Nantes, 2001 (ISBN 2-84231-177-9). 175 + 559 pages, maps, tables, 16 extra plates with colour photographs and one colour map, 1 loose insert with overlay maps; 2 volumes, flexible cover. Price: Euro 45.73.

This is the chorological atlas of the vascular flora of two neighbouring Départements on the Atlantic coast of France: an area of shores and

estuaries, plains and low hills nowhere reaching 300 m of altitude; a vast, wind-swept countryside of wetlands and dunes, meadows and woods, with agriculture and grazing as its traditional resources. It is Pierre Dupont's homeland, a country that he knows and loves as few others do. To this territory the present work, his life's fulfilment, is devoted.

The two volumes are of unequal bulk and complementary contents. The first, thinner one includes general chapters on physical geography, vegetation and flora, written in an easy and informative style and pleasant to read. Equally well written but much less pleasing is the portion titled "Destruction and safeguard of nature". These chapters of smooth and elegant text in ever polite language, objective and non-polemic throughout, are a desperate cry, a moving plea against the ignorance and indolence of the "system". French academia and administration are notoriously misinformed and inactive not to say hostile in matters of studying and safeguarding organismic diversity and its natural habitats, and accordingly, public awareness is poorly developed – but then, frankly, such phenomena are by no means limited to France!

The second volume brings the factual data in the form of 1632 regional distribution maps, by unit grid squares of 20 × 20 km. These maps deal with the near-totality of the over 1800 species of the vascular flora, with comments on the local and general distribution of every taxon. For 40 of them, the situation is further illustrated by grid maps for the whole of France. The immediate conclusion one may draw from this data material is the astounding turnover rate, with 101 species definitely gone and replaced, if one may use the term, by over 350 alien taxa.

This work is not, of course, Dupont's alone. He acknowledges the co-operation, sporadic or substantial, of 180 people. They were busy recording, and some have contributed to the 105 choice colour photographs, mostly of individual species, in the first volume. Yet Dupont's role can hardly be overrated. Had he not devoted most of the first decade of his retirement to the work it would never I dare say have been accomplished. Dupont has been the first and often lone promoter of plant distribution mapping in France, he has provided the French data for the so far published volumes of the *Atlas florae europaeae*, and he has set up the whole national

mapping scheme – which would have deserved better backing and much more substantial support than it did in fact receive. The French chorological atlas has remained a torso, covering a mere 15 % of the country's vascular flora (see OPTIMA Newsletter 30: (28-29). 1996); and the present work, while floristically complete, covers but 2.5 % of the territory of France. Yet, the two works combined are an impressive achievement, a worthy monument to Pierre Dupont's lifetime endeavour. W.G.

Regional Studies of Flora and Vegetation

47. **Joan FONT GARCIA & Lluís VILAR SAIS – Plantes vasculars del quadrat UTM 31T DG99 Sant Climent Sescebes** [*ORCA: Catàlegs floristics locals*, 10]. – Institut d'Estudis Catalans, Secció de Ciències Biològiques, Barcelona, 2000 (ISBN 84-7283-545-6). 76 pages, maps, tables; paper.
48. **Llorenç GIL VIVES & Lleonard LLORENS GARCIA – Plantes vasculars de l'illa de Formentera.** Quadrats 31S CC57, CC58, CC67, CC68, CC69, CC77 i CC78 [*ORCA: Catàlegs floristics locals*, 11]. – Institut d'Estudis Catalans, Secció de Ciències Biològiques, Barcelona, 2001 (ISBN 84-7283-601-0). 49 pages, maps, table; paper.
49. **Lluís VILAR SAIS, Modesta JUANOLA GIRALT, Joan FONT GARCIA & Lluís POLO ALBERTÍ – Plantes vasculars del quadrat UTM 31T DG84 Girona** [*ORCA: Catàlegs floristics locals*, 12]. – Institut d'Estudis Catalans, Secció de Ciències Biològiques, Barcelona, 2001 (ISBN 84-7283-602-9). 67 pages, maps, graph, tables; paper.

Just as for the *Atlas* series referred to previously (item 45), to which the "local floristic catalogues" are companions, the present lot starts with a jubilee number. To summarise the scheme (earlier presented in more detail: see OPTIMA Newsletter 35: (18). 2000): each pamphlet normally includes as its backbone a list of vascular plant taxa recorded in one given 10×10 km mapping grid unit, preceded by a small but varying amount of general information on that square. Floristic catalogues Nos. 10 and 12 follow that general pattern.

Sant Climent Sescebes (No. 10) lies in the north-easternmost tip of Spain. On average maps you will look for it in vain. The grid square corresponding to it skirts the frontier borough of La Junquera to the west; to the north, it reaches up to the border chain of Les Albères (894 m), from where it slopes southward down to c. 50 m of altitude. The bedrock is granitic for the most part, with a small island of carbonatic rock close to the village. The flora, with 1115 recorded taxa (species and subspecies), is surprisingly rich, only slightly less so than that of higher-altitude areas. For recording purposes the square has been subdivided into two natural units of unequal size, a smaller mountain area in the north, above 400 m of altitude, where deciduous oak woods predominate, and the lower-lying domain of evergreen holly oaks to the south.

No. 12 is the Girona square, spread around the homonymous town in the valley of the river Ter. It is a lowland area throughout: its highest elevation, the Puig Estela, is a hill that barely reaches 380 m of altitude. Three subdivisions are recognised, defined by correlated features of altitude and mother rock: the hill range that occupies the square's eastern border and its smaller counterpart to the west are built of Palaeozoic schist; a strip of Palaeogene limestone, of medium altitude, deflects the river course just east of the township; elsewhere, all through the large central portion of the square, the alluvial valley bottom is flanked by terraces of soft Neogene sediments with some intrusions of basaltic rock. Floristically, with 1106 listed taxa, the area is almost exactly as rich as the previous one.

No. 11, Formentera, is a special case, as it concerns not one but no less than eight grid squares. Yet the total surface area of the smallest of the Balearic Islands, 82 km^2 , is less than that of a full square (100 km^2). Formentera, which

reaches 108 m at its highest point, consists entirely of young, Neogene and Quaternary sediments: marly limestone, fossil dunes and coral banks. It was fused with its northerly neighbour, Ibiza, during the last ice age. Two small islets belong to it, s'Espalmador and s'Espardell, the latter of which has not been explored. For each of the 574 taxa of the island's vascular flora the local distribution is recorded in terms of the 13 grid square quadrants of 5×5 km that have been surveyed. W.G.

50. Jordi CARRERAS, Albert FERRÉ & Josep VIGO – Mapa de vegetació de Catalunya 1 : 50 000. Noarre 150 (34-8). Tírvia 182 (34-9). – Institut d'Estudis Catalans & Institut Cartogràfic de Catalunya, Barcelona, 1999 (ISBN 84-7283-478-6). 89 pages, graphs, tables, maps, colour legend, with folded colour map by Jordi CARRERAS, Empar CARRILLO & Albert FERRÉ; laminated cover and twin plastic pouch.

51. Josep M. NINOT & Josep VIGO – Mapa de vegetació de Catalunya 1 : 50 000. Bellver de Cerdanya 216 (35-10). – Institut d'Estudis Catalans & Institut Cartogràfic de Catalunya, Barcelona, 1999 (ISBN 84-7283-498-0 & 84-393-5108-9). 81 pages, graphs, tables, map, colour legend, with folded colour map by Jordi CARRERAS, Empar CARRILLO & Josep M. NINOT; laminated cover and twin plastic pouch.

52. Jordi CARRERAS & Josep VIGO – Mapa de vegetació de Catalunya 1 : 50 000. Benasc 180 (32-9). – Institut d'Estudis Catalans & Institut Cartogràfic de Catalunya, Barcelona, 2001 (ISBN 84-7283-570-7 & 84-393-5382-0). 70 pages, graphs, tables, map, colour legend, with folded colour map by Jordi CARRERAS, Empar CARRILLO, Ramon M. MASALLES, Josep M. NINOT & Josep VIGO; laminated cover and twin plastic pouch.

In my last review of this series of vegetation maps (OPTIMA Newsletter 35: (19). 2000) I included an overview of all sheets I had seen or was aware of, but had no means to know whether that inventory was complete. Well, it is – except for a precursor map, No. 295 Banyoles, that was issued in 1983 by a different publisher.

This I know because, perhaps in fulfilment of a general wish, a plan of the published sheets and those yet to come is now printed on each map cover. According to that overview, we may expect a dozen more maps in addition to the 9 extant ones, after which the whole northern, Pyrenean strip of Catalonia, down to the latitude of Olot, will be covered – but not the centre and south for which no mapping plan appears to exist.

The first of the three new sheets, in chronological order, covers an area to the west and north-west of Andorra which, apart from some recent alluvial valley fills, is totally built of Palaeozoic bedrock, mainly schist. It includes Catalonia's highest summit, the Pica d'Estats on the French border (3143 m). The map is oversized because it includes the southern half of the Noarre sheet (the northern half is entirely on French territory, and vegetation mapping is confined to the Spanish portion of Catalonia).

The second sheet, "Bellver de Cerdanya", is geologically somewhat more varied. Apart from the predominant old rocks the geological map shows sizeable high-mountain areas covered by glacial deposits, and to the south some Mesozoic igneous rocks and conglomerates. This area lies to the south of Andorra (not covered by the vegetation mapping) and nowhere attains the 3000-meter line.

The last of the three, "Benasc", is three-quarters blank as it mostly concerns the Huesca Province in Aragon. The Pic d'Aneto (3403 m), which Catalan Floras claim as their highest peak, is in the centre of the sheet, well outside the mapped area. W.G.

53. Salvatore BRULLO, Fabrizio SCELSE & Giovanni SPAMPINATO – La vegetazione dell'Aspromonte. Studio fitosociologico. – Laruffa, Reggio Calabria, 2001 (ISBN 88-7221-160-3). 368 pages, drawings, graphs, maps (partly in colour), tables, colour photographs; paper with dust-cover.

When reviewing a phytosociological excursion account edited by two of the present authors (see OPTIMA Newsletter 35: (19). 2000), I referred to the Aspromonte as a "little known area". This may have been justified then but is no longer – not, that is, when botany is meant. The southernmost mountain of peninsular Italy

has been thoroughly explored by the authors during the last twelve years. The Aspromonte proper, a heavily wooded pyramid skirting 2000 m of altitude and mainly built of Palaeozoic micaceous schist, had not so far the reputation of being particularly rich as to its flora. It turns out that 5 % of its plant species are "endemic", and that its vegetation cover is amazingly manifold – especially when the area in its wider sense is considered, as the authors did: the whole extent of the Aspromonte National Park (76,000 ha; founded 1994) plus the surrounding land, down to sea level.

As the title tells, this is primarily a phytosociological work. The chapter in which the syntaxa are defined and formally described makes up three quarters of the book, 270 pages; it includes 209 tables of vegetation relevés, each for its own association (also, the individual associations are grid-mapped – a pioneer endeavour in the field of "phytocoenochorology"). A further chapter is devoted to vegetation dynamics, and the single index provided is to vegetation units. There is a list of plant names but it is limited to those mentioned in the relevés, with no claim of being a complete checklist, and regrettably, it lacks page references.

Yet the book is much more than just another regional study that exemplifies the routines of Braun-Blanquetian methodology, for two main reasons. First, it is richly and beautifully illustrated by colour photographs of plants and landscapes plus some nice drawings of rare species. Second – and unexpectedly for those who do not know Salvatore Brullo – it includes, within a most readable if short chapter on the flora, the description of ten new taxa (8 species, 2 subspecies) and validation of two new combinations, so nicely hidden that the indexers for the International Plant Name Index have failed to spot them to date (Jan. 2002).

I would be fairly enthusiastic about this book had its positive aspects been presented in a more user-friendly fashion. Its irritating weakness is inadequate indexing. In the absence of either a list of illustrations or an index to scientific names, the potential reader has to leaf through the whole volume in order to spot information of potential interest. W.G.

54. Pier Virgilio ARRIGONI, Riccardo Maria BALDINI, Mario CORSI, Gualtiero DELLA MONACA, Carlo DEL PRETE, Mauro LENZI, Guido MOGGI, Domenico ROSELLI & Giuseppe TOSI – Geobotanica e etnobotanica del Monte Argentario. – Laurum, Pitigliano, 2001. 254 pages, drawings and graphs, maps, facsimiles and photographs (mostly in colour); hard cover.

The peculiar, remarkable trait of Monte Argentario is its dual nature, half island half part of the continent. For the past 5 million years, since the beginning of the Pliocene era, it has been shifting to and fro between these states, eventually to become attached to Italy in the present, half-hearted way at the end of the Ice Ages. It is now linked to the mainland by two low strands of dunes enclosing a vast lagoon, with in its centre the borough of Orbetello placed on a third, partly artificial isthmus.

The present book is quite as remarkable as the subject to which it is devoted. Its salient features are its many-sidedness, the high level of scientific accuracy, and the generous way in which it is illustrated. The author team, working under the co-ordinating editorship of Florence botanist Pier Virgilio Arrigoni, may take justified pride in their collective achievement.

Subjects treated range from political history since Roman times through geology and climate to the plant cover, and on to ethnobotany. The rapidly vanishing treasure of traditional botanical knowledge and folk lore related to plants is here laid out in unusual breadth and thoroughness, making up for half of the book. The information is arranged in a dual way, first by local vernacular designations then by categories of uses, which is an excellent idea but inevitably causes considerable redundancy. At the end there is a charming chapter on an almost forgotten historical garden, the Giardino della Casa Bianca at Porto Ercole, by one of OPTIMA's founding fathers, Guido Moggi.

The book is gorgeously illustrated by drawings and colour photographs (mostly of plants), old documentary pictures and facsimiles, etc. Its weak point is source documentation and indexing. Bibliographies are dispersed at the end of the chapters, and indexes, when present at all, are cryptic. The scientific name index to the ethnobotanical part is in the middle of that chapter and refers only to vernacular designations,

not to the "uses" section. The checklist of the vascular flora, by Riccardo Baldini, also serves as a surrogate for an index to plant illustrations. As to the illustrations themselves, beautiful as they are, they are completely undocumented: neither is the photographer or artist mentioned (what of giving credit to holders of intellectual property rights?), nor are there indications of origin (many pictures might easily have been taken elsewhere). In some cases (plate 168) there is no caption at all. These shortcomings are a regrettable drawback in an otherwise almost perfect book – which I am sure will nevertheless find an enthusiastic readership. W.G.

55. Veska ROUSSAKOVA – Végétation alpine et sous alpine supérieure de la montagne de Rila (Bulgarie). [*Braun-Blanquetia* (ISSN 0393-5434), 25.] – Dipartimento di Botanica ed Ecologia dell'Università, Camerino, and Station Internationale de Phytosociologie, Bailleul, 2000. 132 pages, black-and-white photographs, tables, maps, graphs; paper.

No, Mount Olympus in Thessaly is not the highest peak of the Balkan Peninsula, although the mythical seat of the gods of Ancient Greece would seem to have a natural claim to primacy: Mt Rila in Bulgaria wins by a narrow margin of 7 or 8 metres, depending on the map you consult. To this mountain massif, built primarily of siliceous rock, the present vegetation monograph is devoted.

Veska Roussakova has dedicated over 30 years, the best part of her professional career, to the exploration of Mt Rila. In 1986 she produced a rough vegetation map of the mountain's higher zones, at a scale of 1 : 200,000. So far, however, no detailed and comprehensive vegetation analysis had been published. There it is.

The book is a classical vegetation monograph, following the "sigmatistic" tradition of Josias Braun-Blanquet. Half of it consists of tabular material, notable among others for its clean layout and print. Most of the 37 association-level vegetation units found on Mt Rila are here characterised and named for the first time; many of them are considered to be restricted ("endemic") to the massif. Same as for the vascular flora, geographical affinities of the vegetation units are primarily Balkanic and Arc-

tic-Alpine, with a faint Mediterranean influence on the southern slopes.

My predilection for nomenclatural matters being notorious, I cannot refrain from making one critical remark. True, one cannot expect all Balkan botanists to be experts in Latin grammar; but how can it be that no one so far has told Dr Roussakova and her many Bulgarian colleagues that the epithet of their beautiful endemic *Primula deorum* is a genitive plural, meaning "of the gods", and is not itself declinable? Yet not only in this work but in the whole relevant literature one finds the ludicrous *Primuletum "deori"* – a correctable error under the *Phytosociological Code*, where the analogous case of *Convolvuletalia sepium* (not "*sepii*"; derived from *Convolvulus sepium*, the bindweed "of the hedges") is given as an example.

Rila is a marvellous mountain with a rich vegetation in a gorgeous, varied landscape. I have visited it but briefly, but can tell that the 10 black-and-white photographs at the end of this work convey but a very pale image of it. My advice, then: do not hesitate, go and look for yourself. W.G.

56. Maria SARIKA-HATZËNIKOLAOU –
Ηλôridikê kai futokoinôniologikê ereuna
udatinôn oikosustêmatôn tês Êpeirou. –
PhD thesis, Ethniko kai Kapodistriako Pane-
pistêmio Athênôn, Athêna, 1999. 495 pages
+ 1 folded annex, tables (3 folded), maps,
graphs, 2 plates of colour photographs; hard
cover.

Maria Sarika's PhD thesis, written in Greek, has an extensive English summary at the end and an alternative English title that well summarises its contents: "Floristic and phytosociological study on aquatic ecosystems of Epirus (NW Greece)".

Wetlands have never been the favourite sites for foreign botanists visiting Greece. Probably their home countries are sufficiently wet to call for a change – at least that's how I explain my own, sad failure to appreciate the hidden charm of Greek lakes, ponds, and marshlands. Yet they are worth-while habitats for a botanist to explore, as was demonstrated as early as 1967 by Gradstein and Smittenberg: They studied the wet habitats of western Crete, and within less than two months discovered several species not pre-

viously known from the island, or Greece as a whole, and one species new to science.

As Greek botanists now increasingly take the exploration of their home country into hand, the situation is changing. Lavrentiadis, a well known plant ecologist of Salonica, spearheaded the new wetland fashion half a century ago, and a number of floristic and ecological studies of Greek marshlands and freshwater habitats have since been carried out locally. However, the wetlands of the country's north-western corner, Epirus, were not yet properly explored. Thanks to the present work, this is now starting to change.

Sarika's thesis does not of course deal with all aquatic habitats of Epirus. She confines herself to a selection of 8 lakes, belonging to three distinct categories: Lake Kalodhiki lies in the coastal lowlands at just above 100 m of altitude; Lakes Zaravina, Toumba and Pamvotis (better known as Lake of Ioannina) lie further inland at altitudes of 450-500 m; the four remaining sites are small mountain lakes of the Timfi and Smolikas massifs, at altitudes ranging from 1800 to 2200 m. The floras of the mountain lakes and those of the lowland ones have few species in common, and even within one and the same category the lacustrine floras and the vegetation they form differ to a surprising extent.

The inventory of the floras of all 8 lakes, including the shores (with many ruderal elements), sums up to 254 taxa (species and subspecies), of which just over 100 are truly aquatic. Although at least the mountain lakes had been visited by botanists repeatedly, their published floristic record was very incomplete (Strid's *Mountain flora of Greece* gives aquatics a stepmotherly coverage). No wonder, the new lists for each lake correspond to an increase of between 47 and 100 % with respect to the previous record. More remarkably, the present account adds 36 species to the flora of Epirus, of which 5 are new for the Greek mainland and 3 for the whole of Greece. Of particular note are the discovery in Lake Kalodhiki of *Utricularia gibba*, a pantropical species widespread in North Africa, barely reaching Europe in the south-west of the Iberian Peninsula; and of *Eleocharis mitracarpa*, known from southern Russia and SW Asia, once recorded from Kos in the eastern Aegean, for which the occurrence on the shore of the Io-

annina Lake is a significant westward extension of its range. W.G.

57. Ludwig NUTZ – Regeneration und Sukzession der Vegetation auf Brandflächen. Eine anwendungsorientierte Fallstudie auf der Kykladeninsel Naxos (Griechenland). [*Karlsruher Schriften zur Geographie und Geoökologie*, 10.] – Institut für Geographie und Geoökologie der Universität, Karlsruhe, 2000 (ISBN 3-9803630-9-0). [2] + VIII + 183 pages + 5 folded insets paged 185-191, tables, graphs, maps (some in colour), black-and-white photographs; paper. Price: DM 45.

There is a substantial body of literature on forest fires in the Mediterranean area. The present study stands out, not so much by being observation-based and centred on successional aspects but because it concerns an area from which the main problem tree is absent: There are no wild pines growing on the island of Naxos, nor elsewhere in the Cyclades, where the only native conifers are scrubby juniper species.

Nutz has observed plots of recently burnt vegetation, which he compared with unburnt neighbouring plots. He monitored these plots for four successive years, partly fencing them off so as to assess the influence of grazing. His results and recommendations (also summarised in English and – commendably – modern Greek) run counter to some deeply rooted assumptions and confirm what others before him have pointed out, or at least suspected: In terms of their influence on species diversity and the variety of landscapes, grazing is neutral and burning positive. With receding grazing pressure, a widespread tendency nowadays, fire is the best and often only practical way to prevent species-rich scrub communities from developing into *Quercus coccifera* woods.

Nutz's advice is to make controlled burning a standard procedure in local and regional management plans. Such a policy is practised elsewhere, e.g. in Australia, where its appropriateness is heatedly disputed. In Greece, setting woodland on fire is a criminal offence, and doing so for the purpose of landscape management would likely be anathema for those who have the conservation of Greek nature at heart. Even accepting, as I do, that the negative impact of

forest fires and grazing on organismic diversity is being exaggerated, one will likely dismiss Nutz's suggestions as premature and politically unwise. Which does not mean, of course, that they are not worth being seriously discussed. W.G.

58. Giorgi NAKHUTSRISHVILI – The vegetation of Georgia (Caucasus). [*Braun-Blanquetia* (ISSN 0393-5434), 15.] – Dipartimento di Botanica ed Ecologia dell'Università, Camerino, and Station Internationale de Phytosociologie, Bailleul, 1999. 74 pages, black-and-white photographs, tables, maps, graphs; paper.

This is but a tiny fascicle, but it is rich and varied in content. Its author endeavours to give a complete overview of the plant cover of the former Soviet Republic of Georgia – a mountain territory comprised between the crest of the main Caucasus, where the Russian border runs, and southward the Black Sea, Turkey, Armenia, and Azerbaijan; a country with so rich a flora that it hosts about one plant species per thousand inhabitants.

For the most part, the text is tersely written and informative. The western reader will appreciate the concise introduction into the Soviet tradition of defining and naming vegetation units, as it differs substantially from what we are used to. Within the main altitudinal zones or belts (four in the west, six in the eastern parts) the vegetation units (formations and associations) are defined by a combination of species that are dominant or subdominant in the different layers.

Regrettably, there is a great disparity of treatment between the various chapters. The arid belts are barely mentioned, the forests are described in a concise but informative way, then the chapters on high-mountain vegetation branch off and diversify into a number of barely related, marginal topics of eco-physiology, functional anatomy and the like. There is a short summary in German and Gruzinian at the end, barely adequate to describe the actual contents.

Welcome as it is, the book would have profited from a stricter editorial policy. W.G.

Applied Botany

59. Michael ZOHARY & Maria HOPF – Domestication of plants in the Old World.

The origin and spread of cultivated plants in West Asia, Europe and the Nile Valley.

Third edition. – Oxford University Press, Oxford, 2000 (ISBN 0-19-850356-3). xi + 316 pages, drawings, graphs, tables, maps, black-and-white photographs; laminated cover.

You are not supposed to read a textbook as if it were a novel, but Zohary & Hopf's work on plant domestication is an exception to the rule. I find it fascinating. Not for nothing has it seen three editions within a dozen years – each one conspicuously updated with respect to its forerunner, as borne out by the numerous additions of recent publications to the bibliography.

The book tells the story of the useful plants that were domesticated in Europe, the Mediterranean area and South West Asia (East Asia and the Palaeotropics are barely covered: in this respect the title is somewhat misleading). It builds on archaeological and historical documents as well as data on the morphology, cytogenetics and distribution of the present wild and cultivated taxa: an incredible wealth of details from diverse sources, skilfully and lovingly amalgamated into coherent, terse text. The bulk of the information is arranged by categories of useful plants (cereals, pulses, oil and fiber crops, fruit trees, vegetables, condiments, dyes). There is also a concluding chapter summarising the time dimension, which really gives you the feel for the intimate entrenchment of our whole culture with the "invention" and spread of agriculture in early historical times. W.G.

60. Pedro L. PÉREZ DE PAZ & Consuelo E. HERNÁNDEZ PADRÓN – Plantas medicinales o útiles en la flora canaria.

Aplicaciones populares. – Francisco Lemus, La Laguna, 1999 (ISBN 84-87973-12-4). 386 pages, drawings, graphs, facsimiles, tables, some black-and-white and 200 colour photographs; hard cover.

Bibliographically speaking this is an independent new work, but the Introduction makes it clear that *de facto* it is a second, much enlarged and partly rewritten edition of the *Catálogo de*

las plantas medicinales de la flora Canaria of Pérez de Paz & Medina Medina, published in 1988 (see OPTIMA Newsletter 25-29 (50-51). 1991). The core is again a tabular presentation of medicinal plants found in the Canary Islands, both in the wild and in cultivation. For each, the vernacular designations, properties and uses, and active chemical compounds are mentioned. The number of taxa considered has risen by almost 40 % and now reaches 803. Indexing has been improved, especially by expanding the former generic and family name index to cover all scientific names and to include references to the illustrations. The list of medicinal properties, while omitting some that are apparently still considered off bounds, such as hallucinogenic or psychoactive or aphrodisiac, has had the contrary of the latter (anaphrodisiac) added, as well as the formerly banished *abortiva*.

Whereas the new chapters of introduction to general botanical subjects may be of interest to the complete newcomer to botany, the illustrations make the book appealing to a large readership outside pharmacology. This aspect, already notable in the previous edition, has gained considerable weight in the present one. The number of colour photographs has more than trebled, the quality of colour blending was improved, and the formerly rudimentary captions were expanded into informative texts, with essentials on the plants' characteristics, occurrence, ecology, conservation status, etc. Regrettably, there is still no mention of the photographer or the geographical origin of the pictures.

The book has been sumptuously produced, with excellent typographical layout, solid and pleasant binding, and heavy glossy paper for the colour plates. It is a nice testimony of the skill and dedication of its authors and publishers alike. W.G.

61. João de CARVALHO E VASCONCELLOS – Infestantes da searas.

Chaves dicitómicas para a sua determinação antes da floração. **2^a edição.** [Série: Guias y Catálogos, 22.] – Direcção Geral de Protecção das Culturas, Oeiras, 2000 (ISBN 972-8649-04-5). [9] + 172 pages, 31 plates of drawings; laminated cover.

This and the four following titles look almost like a coherent series – which they are not, having been produced by different publishers in varying formats. Yet they sum up to an impressive, complementary body of information for Portuguese agriculturists who are keen to recognise and name the weeds that affect their cultures. Commendably, each of the five has an index of vernacular names.

Vasconcellos, one of the founding fathers of weed science or "malherbology", died almost 30 years ago. He was the author of the first edition of the present book, published in 1971 as one of his very last works and which has since guided generations of agronomists through their studies. His daughter, Teresa Vasconcelos, took care of the present, updated edition.

The work is a two-level illustrated key for the identification of juvenile stages of weeds of cereal fields. The first level is a key to families, the next to species (only in the legumes is there an intermediate key to genera). All are based exclusively on vegetative characters of the juvenile plants – quite a challenge when you think of the 70 species of grasses! Fortunately, the diagnostic drawings of details provide additional, indispensable guidance

W.G.

- 62. I. MOREIRA, T. VASCONCELOS, M. CAIXINHAS & D. ESPÍRITO SANTO – Ervas daninhas das vinhas e pomares. 2ª edição** revista e ampliada. [*Série: Guias y Catálogos*, 21.] – Direção Geral de Protecção das Culturas, Oeiras, 2000 (ISBN 972-8649-00-2). [8] + v + 209 pages, 92 plates of colour photographs; laminated cover.

This book, devoted to the weeds of vineyards and orchards, is again designed as an aid to identification, but it uses a different approach. There are no keys; instead, plants are to be matched with illustrations. One to three mostly congeneric species are characterised on each left-hand page; and facing the text there are up to 7 colour photographs showing various stages of their development. For dicots but not monocots, descriptions and pictures of seedlings are regularly included.

Not all of the (anonymous) photographs fulfil modern quality standards, and some are badly out of focus. Yet, they represent a valuable collection showing many seldom illustrating fea-

tures such as seedling stages and details of the vegetative and fertile parts. One wonders at the complete absence of data on the distribution, ecology, phenology, and weediness; one must assume that there are complementary sources of information, not mentioned, to fill these gaps.

The first edition of the book, not seen by me, has been published in 1986 under the same title and with the same plus four supplementary authors.

W.G.

- 63. Teresa VASCONCELOS, João Martim PORTUGAL & Ilídio MOREIRA – Flora infestante das culturas de sequeiro do Alentejo.** – Escola Superior Agrária de Beja, Beja, 2000 (ISBN 972-95296-1-2). [6] + III + 143 pages, 64 plates of colour photographs; paper.

- 64. João Martim PORTUGAL, Teresa VASCONCELOS & Ilídio MOREIRA – Flora infestante da cultura do tomate.** – Escola Superior Agrária de Beja, Beja, 2000 (ISBN 972-95296-2-0). [5] + IV + 94 pages, 40 plates of colour photographs; laminated cover.

These two books form a matching pair. The first is devoted to the weeds of non-irrigated fields of the Alentejo province, the second to those of tomato cultures. They are similar to the previous item in scope and layout, but differ by the absence of separate seedling descriptions and presence of tabular comparisons of easily confused species.

Photographic illustration is profuse but of below-average quality. Faded colours predominate. In a few cases the same picture has been used in both books, but as species overlap is low this is barely noticeable. Somewhat more frequent, especially with seedling photographs, are the cases of unacknowledged plagiarism of the previous book, by Moreira & al.

W.G.

- 65. Luís CATARINO, Ilídio MOREIRA, Teresa FERREIRA & Maria Cristina DUARTE – Plantas aquáticas infestantes de valas e canais.** – Instituto Superior de Agronomia, Lisboa, 2001 (ISBN 972-98085-9-7). [3] + 161 pages, drawings, table, graph, colour photographs; laminated cover.

The fifth among Portuguese weed books stands out by its transverse format and unusual subject: it is devoted to the aggressive flora of ditches and irrigation canals. This is the only one, among the five, to include a substantial general part in which ecological and economic aspects are discussed, as well as a concluding chapter on weed control, whether manual, mechanical, chemical or biological. It is also the only to treat algae, both macrophytic and microscopic, along with a water moss. As the number of species is low (just about 30 vascular plants) the treatment of each is relatively full, with details on habitat, biology, distribution, etc. Illustration is profuse and quite satisfactory, especially as it includes original plant drawings along with colour prints. W.G.

66. José FAYARDO, Alonso VERDE, Diego RIVERA & Concepción OBÓN – Las plantas en la cultura popular de la Provincia de Albacete. – Instituto de Estudios Albacetenses "Don Juan Manuel", [Serie I, Estudios, 118], Albacete, 2000 (ISBN 84-95394-08-1). 264 pages, drawings, facsimile, colour map, tables, colour and some black-and-white photographs; laminated cover.

A few years ago, three of the present authors published a book on the ethnobotany of two mountain areas in the south-western part of the Albacete Province, as No. 102 of the same publication series (see OPTIMA Newsletter 33: (10-11). 1998). This time, a similar work covers the whole province, and even though it is more richly illustrated, it is considerably smaller. This means, in good logic, that some of the aspects we had appreciated had to go, such as linguistic considerations. Others were much reduced, e.g. reference to popular myths, songs and superstitions. The consolidated tabular overviews ordered by vernacular and scientific names have been abandoned and replaced by more space-economic indexes.

This is by no means a criticism of the new book, it just tells you that the old one keeps its usefulness and importance. The present version lacks some of the immediacy and charm of the former one; rather, it is fashioned as a manual for consultation: well structured, with the information suitably digested in tables (over one hun-

dred) and easily found. Perhaps it is a bit dry by comparison, which is however compensated by the numerous photographic documents and Teresa Tomás's nice original drawings that illustrate the second part of the book: a selection of fluently written and informative ethnobotanical portraits featuring 50 of the province's most popular plants.

Just as its forerunner, this work has great merits in saving popular knowledge of plants from oblivion and loss. The authors have been careful to add as much new information as they could get hold of, and they also appear to have checked their former data for accuracy. I was interested to learn that young girls trying to find out whether their love is requited do not use *Bellis* as a test medium as previously stated, but *Coronilla scorpioides*. W.G.

Conservation Topics, Red Data Books

67. Róża KAŻMIERCZAKOWA & Kazimierz ZARZYCKI (ed.) – Polska czerwona księga roślin [ed. 2]. – Polska Akademia Nauk, Instytut Botaniki im. W. Szafera & Instytut Ochrony Przyrody, Kraków, 2001 (ISBN 83-85444-85-8). 664 pages, colour photographs, maps in colour, drawings; hard cover.

As the reader is told in the preface matter, this is not an entirely new work but the second edition of a book published in 1993 under identical editorship. The two editions, on comparison, differ substantially in several respects, not least in size and general appearance. The first edition was a paperback of 310 printed pages plus 20 extra plates with 80 colour photographs. Now the number of pages (664) and photographs (169) has more than doubled, the latter have been incorporated into the main text in their proper place and are no longer anonymous but credited individually to their author. The distribution maps are now printed on a colour background showing streams and relief. The former line drawings, which were rather heterogeneous and had been taken from a variety of sources, have been replaced by those that Jolanta Urbanik prepared for the iconography of the Polish Flora.

There are changes in contents, too. Whereas the sequence of the taxa and the subheadings in

the individual treatments remain, the information has become more detailed, the references cited more numerous, and – a special bonus for non-Polish readers – English summaries have been added for each species. The number of taxa treated has increased substantially (from 206 to 296), and so has the number of authors who contributed to the work (from 59 to 96). Of the species on an earlier Red Data List for the Polish vascular flora, 70 % have been accounted for.

A major merit of this book is that it does not confine itself strictly to a national perspective. With few exceptions, two distribution maps are provided for non-endemic species, one for Poland the other for Europe. This is of great relevance when assessing threat for individual taxa. Poland's flora has been greatly affected by losses or near losses in recent times, and 38 taxa (in the first edition, 34) are believed to have become extinct in the wild – but many of these are not at risk on a global or European scale. The first edition mentioned four cases of global extinction: *Cochlearia polonica* and *Taraxacum pieninicum* (both endemic), *Camelina alyssum* (a cultigen weed of flax fields), and *Gladiolus felicis*. The latter, now considered synonymous with *G. illyricus*, is not even mentioned in the second edition. The *Cochlearia* had survived in cultivation and has now been successfully reintroduced into the wild, where it prospers in three new localities. The dandelion has been rediscovered in its locus classicus in 1999 and is shown on a beautiful colour photograph taken in 2000. This leaves the man-made *Camelina* as man's only definitive victim so far – but whereas it is encouraging to note that the number of total extinctions, on paper at least, decreases, the general picture of often dramatic habitat degradation and concomitant reduction of ranges and locality numbers remains utterly alarming. W.G.

68. César GÓMEZ CAMPO (coordinador) – Conservación de especies vegetales amenazadas en la región mediterránea occidental. Una perspectiva desde el fin de siglo. – Centro de Estudios Ramón Areces, Madrid, 2001. 266 pages, black-and-white photograph, tables, graphs (two in colour), maps (one in colour); laminated cover.

This volume comprises contributions from a number of specialists, first presented at a meet-

ing sponsored by the Fundación Ramón Areces. It is a comprehensive overview of past achievements, present efforts and future priorities in the field of botanical conservation in the western Mediterranean countries, plus Portugal and the Atlantic Islands.

Rather than being coherently structured, the twelve chapters mirror the diversity of the book's general subject. Ten are devoted, each to one particular area, so that, except for Algeria and Tunisia, geographical coverage is almost complete. The two remaining chapters deal with general aspects, one related to *in-situ* the other to *ex-situ* conservation (population biology and seed banking, respectively). Most of the regional or country reviews place their main or exclusive emphasis on *in-situ* safeguard of threatened species in protected areas. The role of botanic gardens for *ex-situ* conservation and subsequent re-introduction into the wild is exemplified by the Cordoba garden for Andalusia and that of Soller for the Balearic Islands. The Italian contribution is particular by focussing on a single taxonomic group, the wild cabbages (genus *Brassica*). W.G.

69. Felipe DOMÍNGUEZ LOZANO (ed.) – Lista Roja de la flora vascular española. Red List of Spanish vascular flora. [*Conservación Vegetal* (ISSN 1137-9952), 6, número especial.] – Comité Español de la Unión Mundial para la Conservación de la Naturaleza, Madrid, 2000. 40 pages, graphs, tables, maps and photographs, all in colour; paper.

There are two principal Spanish plant red data books in existence, one for peninsular Spain and the Balearic Islands published in 1987 and the second for the Canary Islands, of 1996 (see OPTIMA Newsletter 25-29: (55). 1991; 33: (12-13). 1998). Each treats a selection only of the respective area's threatened plants, 300 species in either case.

The present list is very different. Whereas it limits itself to a bare minimum of data (just the IUCN category and an alphanumerical indication of how it has been assessed, without any note on distribution), it aims at completeness at the species level. It is not limited to endemic species but covers the whole Spanish vascular flora. Most importantly, it is the result of the collaborative

efforts of over 100 Spanish botanists based at 39 different institutions spread all over the country. Thus, it is soundly based on first-hand knowledge of the plants concerned. Also, the joint endeavour that has led to its establishment will doubtless have lasting beneficial effects for collaboration on a country-wide scale.

On a few pages (just 26 for the inventory proper) no less than 1414 species are listed as threatened. The Deficient Data category accounts for 265 of them – less than 15 % – whereas 408 are rated either Critically Endangered or Endangered. There are surprisingly few cases of actual or presumed extinction: 21 in all, of which 15 concern species that still occur outside of Spain. Three of the 6 endemics that are extinct in the wild are still extant in seed banks or in cultivation, and one of them (*Lysimachia minoricensis*) is in the process of being successfully re-introduced into suitable natural habitats.

Perhaps the most interesting lesson to be learnt from the list is the terrific turnover rate of species believed to be extinct. None of the three now stated to be definitely gone (*Carduncellus matritensis*, *Hippocrepis prostrata*, *Astragalus nitidiflorus*) were included in the Spanish Red Data Book of 1986; the two latter were treated as still extant in *Med-Checklist*. *Aeonium mascaense*, extinct but surviving in seed banks, was in 1996 considered to grow in a safe habitat, even though in critically low numbers. Conversely, one species given as extinct in the 1986 Red Data Book (*Allium rouyi*), and two so treated in *Med-Checklist* (*Limonium dufourii*, *Silene tomentosa*), are still alive: the two former are critically endangered, the latter (see OPTIMA Newsletter 31: (9). 1997) is not mentioned here – Spanish botanists are more careful than *Med-Checklist* in not annexing Gibraltar to their national territory.

To end on a slightly critical note: the list includes at least 6 undescribed species, mentioned under invalid names – the same that were already in the 1996 Red Data Book for the Canary Islands. Alas, my four-year-old plea has not yet been heard by Arnoldo Santos, the prospective author! W.G.

70. G. BLANCA, B. CABEZUDO, J. E. HERNÁNDEZ-BERMEJO, C. M. HERRERA, J. MOLERO MESA, J. MUÑOZ & B. VALDÉS – Libro Rojo de la flora silvestre

amenazada de Andalucía. Tomo I: Especies en peligro de extinción. **Tomo II:** especies vulnerables. – Consejería de Medio Ambiente, Junta de Andalucía, [Sevilla], 1999, 2000 [or 2001?] (ISBN [84-]89650-75-6 [both], 84-89650-78-0 [vol. II]). 302, 375 pages, colour photographs, maps in colour, drawings; 2 hard cover volumes.

In 1994 the Province Council of Anadalusia sanctioned by decree an "Andalusian catalogue of species of threatened wild flora" that had been prepared by a group of botanists and government officials. It recognised two threat categories, "in danger of extinction" and "vulnerable", with, respectively, 70 and 121 taxa (species and subspecies). The present twin red data book is based on these official catalogues; which means that all taxa listed there were taken into consideration, each in its proper volume. All were, however, reassessed on the basis of new field investigations complemented by the study of literature and herbaria.

A large number of botanists participated in writing these books. Each taxon was assigned to an author or, usually, a team of authors who in turn availed themselves of the expertise of local groups of naturalists. The treatments are detailed and informative, with a morphological description followed by sections on the biology, ecology, distribution and demography, threats, and protective measures.

In each case the threat category has been reassessed in terms of the new IUCN definitions. The conclusion often deviates from the original risk assessment, to the extent that in either volume the now accepted risk categories range from "extinct" to "low risk". One listed taxon disappears in synonymy. Nine taxa do not now grow in Andalusia: five of them probably never did (the former records being based on mislabelling or misidentification) and four are presumably extinct (but one of them was likely not native); *Diplotaxis siettiana*, surviving in seed banks, is the only global extinction on record. Of the remaining taxa, 29 are "critically endangered", 55 "endangered", 76 "vulnerable", and 21 are at "low risk".

For each present (or extinct) taxon a grid map of its (former) Andalusian distribution has been prepared, in which extinctions in single localities are not however highlighted. In addi-

tion, the world distribution has been mapped for all non-endemic taxa. A colour photograph – usually by one of the authors of the treatment – is provided in each case, along with an original drawing of the plant. The illustrator, throughout both books, is a gifted botanical artist, Rodrigo Tavera. It is unfortunate that in the second volume his drawings, prepared for full page width – and so printed in Vol. 1 – have been reduced to half that size, whereby they lost much of their informative detail and intrinsic beauty. (They are still detailed enough to show that the plant represented under *Ophrys atlantica* is not that species but *O. fusca* – whereas the photograph is correctly identified.) W.G.

- 71. Nikê EUTHUMIATOU-KATSOUNÊ (ed.) – Afierôma ston Ethniko Drumo Ainos. Dedication to the National Park of Ainos.** – Mouseio Fusikês Istorias Kefalonias kai Ithakês, Kefalonia, 1998 (ISBN 960-86323-0-7). 172 pages, drawings, facsimiles and maps (partly in colour), colour photographs; cloth with dust-cover.

Mount Ainos (1628 m), situated in the south-eastern part of Cephalonia (Kefallinia) in the Ionian Islands of Greece, is well known since times immemorial, being mentioned in Homer's *Odyssey* and Strabo's geography. It owes its present fame, in the first place, to its vast woodlands of Cephalonian fir (*Abies cephalonica*). It is primarily thanks to these unique woods, which survived through the ages thanks to various, wise protective measures, that the mountain was declared a national park four decades ago.

The avowed scope of this book is to make palpable, for the island inhabitants, the beauty and value of their mountain. Niki Efthymiatou-Katsouni, director of the Museum of Natural History in Davgata near Argostoli, undertook to publish it and wrote many of its chapters, drawing upon her skills of philologist: on myths and history as well as place names and their origin, in particular. Dimitrios Phitos supervised the natural history parts and contributed a small but richly illustrated chapter on the flora. Other contributions, by various authors, deal with aspects of the vegetation, the fungi, and the vertebrate fauna.

This is a beautiful book, pleasantly written and informative, sumptuously printed, almost

entirely bilingual (for a few chapters, the English text is but a summary). My only regret is that the plentiful colour photographs tend to be over-exposed. W.G.

Historical Subjects and Bibliography

- 72. H. Walter LACK – A garden for eternity.** The Codex Liechtenstein. – Benteli, Bern, 2000 (ISBN 3-7165-1225-7). 344 pages, illustrations in black-and-white and colour; cloth with dust-cover, in case. Price: DM 198.

Soon after the original German edition of this gorgeous volume, which I had extensively reviewed (OPTIMA Newsletter 35: (27-28). 2000, q.v.), an English translation has been published. It will doubtless help spreading the fame of the book all over the world, as will the fact that its author has been deservedly rewarded by the recent award of the Engler Medal in Silver of the International Association for Plant Taxonomy (see Taxon 50: 1278. 2002).

The English edition is fully equal to the German in its sumptuous outfit and superb printing quality. Gratifying for the reviewer is the fact that the two minor points of criticism he had raised have been taken on board immediately, being covered by an erratum at the end. W.G.

- 73. H. Walter LACK – Ein Garten Eden.** Meisterwerke der botanischen Illustration. **Garten Eden.** Masterpieces of botanical illustration. **Un jardin d'Eden.** Chefs-d'oeuvre de l'illustration botanique. – Taschen, Köln etc., 2001 (ISBN 3-8228-5727-0). 576 pages, photographs and facsimiles, mostly in colour; boards.

Austria's National Library, prominent among European institutions of its kind by the richness and value of its holdings, chose botany as the general theme of its millennium exhibit. Hans Walter Lack, head of the Museum and Library Department at the Botanical Garden and Museum in Berlin-Dahlem, was responsible both for the selection of the exhibited items and for preparing an illustrated book to document them.

The latter gives an impressive overview of the manifold ways in which plants have been illustrated all through the centuries. It starts with

the famous "Vienna Dioscorides", or Codex Aniciae Julianae, dating back to the beginning of the 6th century and renowned as the best extant example of an early illustrated botanical manuscript; and it ends in the present, the last item on display being dated 2000. Exactly 100 items were chosen, and from each, one to several illustrations have been selected for reproduction, mostly on a full page (more rarely two on a page). The avowed intent was to give the reader a feel of leafing through the books – the one impression the exhibit itself could not give.

It would be tempting, but of course not realistically feasible, to enumerate all these botanical treasures one by one. There are several unique items, florilegia and "libri picturati" of early date; some of them had remained hidden away for centuries in the National Library's archives, and are so far undocumented in scientific literature. Of the printed items, some are excessively rare, such as nature self-impressions of plants, and many are vintage copies with exquisitely hand-coloured plates. Many members of Austria's imperial family were sponsors or adepts of the scientia amabilis, which accounts for these accumulated riches – one of the most prominent being the nine-volume "Codex Fuchs" to which a whole book has recently been devoted (see below).

It must have been a difficult task to select adequate titles from the modern period, the years when imperial protection had come to an end. Few suitable items were available, as the library's purchases in the botanical field appear to have rapidly dwindled after World War I. As insiders will appreciate, Lack has resorted to a touch of autobiography to fill the gap. Walter Gams's duplicated thesis of 1959, while aesthetically unappealing, features a newly discovered, microscopic soil fungus, the to-be *Tolypocladium inflatum*, source of the immune suppressant cyclosporine to which Lack owes surviving a heart transplant. The poster "Plants on Porcelain" (1979) recalls a public exhibition in Schloss Charlottenburg commemorating the Berlin Botanic Garden's 300th anniversary, Lack's first major achievement as an exhibition organiser. The last and final item is his own book, *A garden for eternity*, presented above.

To avoid misunderstandings: This is a book on botanical illustration, not on plants. Those who look for information on the illustrated taxa

will likely be disappointed. No attempt to identify them has been made, nor are the plates and plants consistently mentioned in the explanatory, trilingual texts. As the index to botanical names does not point to the plates but to the text only, there is little hope to spot a particular plant illustrated in the book, even when it is correctly named in the caption. Some may see this as a shortcoming. They should bear in mind, however, that botanical iconography, which is the subject of the book, is a discipline in its own right. W.G.

74. Susanne BAUMANN – Pflanzenabbildungen in alten Kräuterbüchern. Die Umbelliferen in der Herbarien- und Kräuterbuchliteratur der frühen Neuzeit. [*Heidelberger Schriften zur Pharmazie- und Naturwissenschaftsgeschichte*, 15.] – Wissenschaftliche Verlagsgesellschaft, Stuttgart, 1998 (ISBN 3-8047-1568-0). 276 pages, graphs, tables, facsimiles; paper.

Written as a thesis for obtaining a doctoral degree in pharmaceutical history, this book provides an excellent introduction to the early European history of botanical learning. Ms Baumann used the umbel family as an example, drawing on sources of two categories, which she designates as "herbarium literature" and "herbal literature". In the first, she considered 8 illustrated manuscripts ("herbaria picta", ranging from the 6th to the 16th century and including the codices of Anicia Juliana and Fuchs in Vienna, Clusius in Kraków and Gessner in Erlangen) and three 16th century collections of dried plants ("herbaria viva", sometimes with associated woodcuts). In the second category are the herbals of 14 botanical authors – German, Dutch and Italian – all illustrated by woodcuts and printed in the 16th and 17th century.

Ms Baumann's thesis includes a variety of useful information, e.g. when it unravels the history, whereabouts and contents of the unpublished sources and provides a full bibliography of the published books. An interesting aspect is the way in which it retraces and documents the history of individual illustrations, from the original drawing or painting through the cut wooden block and its subsequent re-use to the plagiarised copies – often mirrored or reduced and/or schematised – made from earlier prints:

an intricate tangle of mutual relations connecting the literature of the time.

Central to the book is the identification of early umbel illustrations with named species – a task requiring botanical skill and experience and which Ms Baumann, with the acknowledged help of her parents, has performed with remarkable accuracy. She could thus recognise no less than 118 different taxa belonging to about 60 genera, for each of which she has determined and reproduced the earliest published woodcut. This iconography by itself is a treat for anyone interested in historical aspects of the art of botanical illustration. W.G.

75. Brigitte BAUMANN, Helmut BAUMANN & Susanne BAUMANN-SCHLEIHAUF – Die Kräuterbuchhandschrift des Leonhart Fuchs. – Ulmer, Stuttgart, 2001 (ISBN 3-8001-3538-8). 504 pages, facsimiles in colour and black-and-white, map; hard cover. Price: Euro 66.

The Baumann family presents us with an extraordinary compendium on the life and work of Leonhart Fuchs, one of the German founding fathers of modern botanical science. Their book centres on the 9-volume manuscript "De stirpium historia commentarii illustres" kept in the Austrian National Library in Vienna (the "Codex Fuchs" of Lack's *Ein Garten Eden*, see above), intended to provide a follow-up to Fuchs's book *De historia stirpium commentarii insignes* (1542) and its German version, the *New Kräuterbuch* (1543) but never published.

The printed work of Fuchs includes 517 woodcuts of plants. All but four of them are represented by watercolours in the Vienna codex, along with over 1000 additional paintings. To this impressive iconography of 1525 contemporary illustrations (plus 16 added by Fuchs's son after his death) the present book is primarily devoted. The corresponding manuscript text, which largely follows mediaeval standards and is of little relevance now, has been used only as a source of locality data.

The identification of Fuchs's plants in terms of modern botanical nomenclature was one of the authors' principal tasks. As far as the published woodcuts are concerned, they were on trodden ground, as all had been repeatedly assessed by experienced botanists (even so, five of

the earlier interpretations had now to be corrected). For the unpublished additional paintings, only stray identifications existed except for some groups – the orchids and umbels (see above) – that had been fully worked out. Therefore, most determinations provided here are new. As far as I can judge they were competently and carefully done, even though one may occasionally disagree (e.g., the alleged *Silene conica* in vol. 3(1): 179 is definitely *Vaccaria pyramidata*).

The book excels by its iconographic documentation. All of the 1541 illustrations in the "Codex Fuchs", including the 16 posthumous additions, are represented by small black-and-white facsimiles of ¼ their original size; 25 are shown in colour as full-page plates. The text is not however, as one might fear, narrowly confined to the book's main subject. It is a scholarly essay, rich in well researched and well documented historical data, to the extent that I cannot easily think of a better guide into the intricacies of European 16th Century botany. Ample pictorial evidence is provided to illustrate such supplementary aspects. No way to go into details in this review lest I get lost and carried away. Let me just mention one concrete example. Fuchs's namesake, Augsburg-born botanist Leonhart Rauwolff who was to become famous as an early explorer of the Levant, collected plants in southern France between 1560 and 1562 while studying at the universities of Montpellier and Valence. His dried collections, still extant at the Rijksherbarium in Leiden, were one of the main sources of plants that Fuchs had painted, and no less than 120 of Rauwolff's specimens have now been identified as the basis for watercolours in the "Codex Fuchs". W.G.

76. Heinz KALHEBER – Index ad iconographiam florum europaeae. Heft. 4. *Dicotyledones, Lauraceae-Rhamnaceae* und *Cucurbitaceae* (Nachtrag zu Heft 3). [Courier Forschungsinstitut Senckenberg (ISSN 0341-4116), 229.] – Senckenbergische Naturforschende Gesellschaft, Frankfurt a.M., 2001 (ISBN 3-510-61072-5). [1] + 294 pages; paper.

Guess why I get a pang of conscience looking at this book? It is the fourth in a series in which number two is still missing – for the simple reason that *Med-Checklist* volume 2 – for which I am responsible – is not yet ready. Kalheber relies heavily on *Med-Checklist* numbering and synonymy for his compilation – and unless he changes approach, having completed fascicle 4 he is now stuck. Should I perhaps better sit working on the *Med-Checklist* files rather than writing silly book reviews? Ah, but I couldn't do that just over the weekends and at odd hours!

This issue, as the previous ones, coincides in coverage with the *Med-Checklist* volume bearing the same number, i.e., it treats the dicot families from *Lauraceae* to *Rhamnaceae*, in alphabetical order. At the end, the *Cucurbitaceae* entries are appended, as in fascicle 3 that family had been left out inadvertently.

I will not again go into details of data presentation and coverage, which I have set out when reviewing issues 1 and 3 (see OPTIMA Newsletter 30: (52-53). 1996; 32: (22-23). 1997). The presentation of data has remained unaltered except for minor details, the most obvious being a matter of typography (italic font is now used for Latin plant names). One change that I regret is the fact that the key to abbreviations is no longer provided as a loose insert that one can use side by side with the Index proper, but has been fully incorporated. This makes consultation more difficult and underlines the redundancy of the reference list. An aspect that is rather confusing – not new but more prominent than before – is cross-referencing: synonyms and main entries look exactly alike. Confusion is increased by occasional errors, e.g. when under *Astragalus parnassi* subsp. *cylleneus* one is referred to *A. cylleneus* when the accepted entry is in fact *Astracantha thracica* subsp. *cyllenea*. One also wonders why *Astragalus suprapilosus* is treated as a synonym of "*A. physodes* sensu Flora eu-

ropaea non L." when the reverse would seem logical.

This index is not easy to use, but once you have got the knack of it you will find it invaluable. I wish that it may proceed. W.G.

77. Gérard AYMONIN & André CHARPIN – Bibliographie sélective des Flores de France nationales régionales et départementales complétée par les sessions extraordinaires de la Société botanique de France et de la Société botanique du Centre-Ouest. [*Journal de Botanique de la Société Botanique de France* (ISSN 1280-8202), 10.] – Société botanique de France, Paris, 1999. 88 pages, facsimiles; paper. Price: FF 100.

The current president and the long-time secretary general of the Société Botanique de France have combined their efforts to produce an excellent floristic bibliography of their country. It is a twin work: The bibliographic unit quoted in the heading is in a way an artefact that appears on the cover only (there is no title page). The first and larger part of the volume consists of the bibliography proper, authored by Charpin and Aymonin; it is followed by the chronological and bibliographic list of excursions ("extraordinary sessions") referred to in the subtitle, for which the authorship is switched.

One immediately wonders what the authors mean by "selective", other than their legitimate wish not to be castigated for possible omissions. As they explain in their preface, they have set a time limit (no pre-1753 literature), a geographical limitation (no overseas territories or departments – but mind you, Corsica is not overseas, Napoleon to testify), and a taxonomic boundary (vascular plants only). All this means restriction, but not selection. They also confine themselves to scientific works, which rules out popular books and those on nature conservancy and phytosociology (oops – sorry; perhaps there is really an element of selectivity there). But seriously: having scanned through their lists, I find that Charpin and Aymonin have used the term selectivity in a rather unusual sense, as a justification for including selected items that would not normally qualify. The designation "floristic bibliography" that I loosely used in the first

place describes their work better than "bibliography of Floras", as they have it.

This is not a criticism, quite the reverse. The authors have used their judgement to include in their list all items that they consider of relevance for the knowledge of the flora of France, its regions and departments. For this, they deserve our gratitude. W.G.

78. Franco Maria RAIMONDO & Pietro MAZZOLA – Le reliquie Tineane. *Florae siculae icones ineditae* di Vincenzo Tineo. – Naturama, Palermo, 2001. 213 pages, 93 black-and-white facsimile plates; cloth with dust-cover.

Vincenzo Tineo was just 22 years old in 1813 when he succeeded his father as director of the Palermo Botanical Garden. His was not, it seems, a bad choice. The younger Tineo brought the garden to international fame and built up its herbarium and library, in spite of severe drawbacks such as the ransacking and destruction of the collections by the raving mob, in 1820.

Tineo was a keen expert of the flora of his island and discovered many species he recognised as new, but publication was not his main strength. He described some of his novelties in half a dozen small papers but left most to others such as Gussone to publish, or just noted them on herbarium labels for subsequent botanists (think of Lojacono) to unearth and validate. He is known to have been working at a *Flora panormitana*, but apparently gave up when his pupil Parlatore started publishing a work with the same title (which ironically never went beyond the first of three planned volumes). A few years later another pupil, Todaro, snatched off his second pet idea by publishing *Orchideae siculae*. Tineo's draft texts or notes on both subjects, said to have once existed, are lost.

What has, however, survived are two folders with illustrations, mostly pencil drawings and a few prints from copper etchings, which were recovered by Borzì and have been kept for over a century in the archives of the Palermo Botanical Garden. Some got again lost in the meantime, and what remains is poorly documented, yet they constitute an important part of the Sicilian scientific patrimony. They have now been published at last.

The book consists of some introductory and bibliographic matter and of 93 plates with commentaries. Prominent among the plants featured are representatives of the genera *Valerianella*, *Allium*, *Callitriche*, many *Salicornieae*, grasses, sedges and orchids. Rendering the fine shadings of the paler among the pencil drawings was a challenge that the printer has not fully met, still the result in most cases is at least tolerable.

Indexing is poor, as synonyms have been omitted. This is a real shame because many of Todaro's names, for which the illustrations are potentially original material, appear in synonymy only. I am surprised that the authors have neglected to elaborate on this point, as Mazzola at least is known to be keen in nomenclatural matters. Potential candidates for typification by one of the drawings include the binomials *Ranunculus schowii*, *Veronica panormitana*, *Orobancha nebrodensis*, *Ophrys sicula*, *Allium vernale*, *Scilla sicula*, *Lobelia bivonae*, *Camphorosma viginimilleis*, *Ambrosinia reticulata*, *Rhus ziziphinus*, *Orchis panormitana*, *Cephalanthera maravignae*, *Orchis fasciculata*, *Trifolium cupanii*, and several varietal names.

Identification of the plants poses problems that could not always be resolved. This is partly due to lack of detail in the figures, but more often to the fact that the depicted taxa have been lost sight of, perhaps due to excessive rarity or subsequent extinction, or because they were malformed individuals or hybrids. *Ranunculus schowii* is one such mystery species, presumably related to *R. saxatilis* Balbis (non Vill.). One case of plain, bad misidentification is also to be noted: "*Lophochloa hispida*" is in fact *Phleum echinatum*. W.G.

Herbaria and Libraries

79. Sergey A. BALANDIN, Ivan A. GUBANOV, Charles E. JARVIS, Sergey R. MAJOROV, Sergey S. SIMONOV, Dmitry D. SOKOLOFF & Sergey V. SUKHOV – The Linnaean collection of the Herbarium of Moscow State University. – Dehliia, Moscow, 2001 (ISBN 5-86476-174-5). 23 pages (illustrated manual) + CD-ROM; boards. Price: £ 42.54 (plus VAT when applicable).

Moscow goes digital! And the result, let me add, is amazing. New, tailor-made software, remarkably good-looking, elegant graphical outfit, high-resolution colour images, easy and functional user interface – anything to please. But let me start by explaining the contents.

It is not generally realised that the historical collections at Moscow State University are among the few to house original Linnaean specimens, either seen and annotated by Linnaeus himself, or duplicating those he (illegally) got from early expeditions to the Lower Volga Region and Kamchatka. Specimens of the latter category (24) are found in the Goldbach herbarium, those of the former mainly in that of Linnaeus's pupil Ehrhart (31). In the herbaria of Hoffmann and Trinius there are a few Linnaean specimens (3 and 5, respectively) obtained from others in exchange. In all, 63 sheets in MW have so far been identified as being "Linnaean". All are shown on this CD as high-resolution scanned digital images.

To use the CD you need a modern PC or Macintosh computer with standard outfit (the minimum requirements for PC are a Pentium processor of 200 MHz, 64 MB RAM, MS Windows 95 or newer, and Internet Explorer 5.0). As use from the CD is rather slow, it is recommended to copy the files to the hard disk (we are not told how much disk space is needed; the answer is: about 350 MB). The information on the CD is organised in five main files with many sub-files, but this need not interest the user (with one exception given below), who is only required to double-click on the single additional file "first.htm", whereupon the whole information is accessed through a browser screen by following explicit on-screen instructions.

The main and central item is a database in which the images and correlated information are organised. Charles Jarvis of the Linnaean Typification Project is the author of comments on label data, synonymy and typification of Linnaean names, and other relevant nomenclatural and historical information. Images are provided of the plant specimens themselves and on other (varying) aspects such as the cover sheet, specimen and label verso, and watermarks – the latter scanned by using a novel apposite technique. It is possible to zoom into and out of each image by small steps.

Several smaller "chapters" of text are offered. Among them is a 64-page, profusely illustrated "pamphlet" on the history of botany in Moscow and Russia, which is remarkable for its original layout and is mandatory reading for those who want to fully understand the background of these historical collections.

One of the main folders on the CD is not accessible via the browser page but must be opened directly for consultation. It is named "bonus" and comprises 8 uncompressed image files in JPEG format, provided as a sample to demonstrate the high quality of the pictures as originally scanned. These files, we are told, "can be easily viewed with any appropriate viewer". Be careful to have an *appropriate* viewer, though! Digital file size varies from 9 MB to 38 MB per image, with which the software may be unable to cope; or if it manages, it may become very slow. If you save the CD contents to the hard disk you may consider leaving the "bonus" folder out, as you will rarely use it yet it eats half of the required disk space.

The CD comes with a nice explanatory leaflet of 23 printed pages, which under the Botanical *Code*, unlike the CD itself, is effectively published. Unless I err, the new lectotype designation for *Astragalus physodes* L. was first effected, although cursorily, on p. 11 of that leaflet. Distribution of the CD took place on or before 11 Sep 2001, whereas the full paper in which the lectotypification is discussed (Jarvis & al. in *Taxon* 50: 1129-1135) came out on 14 Jan 2002 (Tod Stuessy, pers. comm.). W.G.

80. Piero CUCCUINI – Gli erbari fiorentini (FI e FT) nell'ultimo mezzo secolo (1945-1992). Studiosi e materiali. **The Florentine herbaria (FI and FT) over the past fifty years (1945-1992).** Scholars and materials. [*Pubblicazioni del Museo Botanico*, 103.] – Museo Botanico dell'Università, Firenze, 1995. 119 pages, graphs, map; paper.

Cuccuini is co-author of a recent book on the holdings of the general herbarium in Florence (FI), centred on the collectors represented in it (see *OPTIMA Newsletter* 35: (31-32). 2000). He has now produced an interesting complementary publication: an inventory of users. The idea is logical and relatively easy to implement for a

herbarium that keeps a consistent record of both its visitors and its outgoing loans, yet I know of no other exactly parallel example.

The inventory covers a period of almost 50 years, when complete data were registered, except that for the initial period (till 1968) visitors are listed only by name and year, since no record was then kept of the genera on which they were working. Otherwise there is a single entry for each botanist in which his visits and loans, their dates and subjects are recorded.

This is a useful, informative global survey of recent botanical activities – naturally with an Old World bias, and omitting local staff. Unlike its companion volume it includes the cryptogamic collections, the "Erbario Tropicale" (FT), and visitors to the Webb Herbarium (FI-W). As a side-effect, it exposes visiting botanists with an illegible handwriting, who will find their name misspelled (hard to believe, I found that such is my case). W.G.

Dictionaries

- 81. D. K. HRISTODOULAKËS & G. K. PSARAS – Lexiko botanikôn orôn.** – Panepistêmiou Patrôn, Patra, 2001 (ISBN 960-130-051-6). 125 pages; paper.

This is the first dictionary of botanical terms in modern Greek. It is written primarily for the benefit of Greek botany students, who must have had a difficult time so far in acquainting themselves with the specific jargon of their discipline. As it not only explains the specialised terms – in Greek – but also gives English equivalents for each, and has an list of English-Greek translations at the end, the booklet also helps local students to read (and hopefully write) English texts. Even though this is not its primary intent, the booklet can of course also be used in the opposite sense: to help foreign readers understand Greek botanical publications (or, less likely, to write their papers in Greek).

Being a first attempt, it can hardly be expected that the dictionary be complete in coverage. Naturally enough, it has its biases, strengths and weaknesses. Adjectives are conspicuously underrepresented, plant names are absent below the level of class, and structural botany (especially micromorphology and anatomy) prevails

over the functional aspects. Future editions (I wish the book many) may permit filling some such gaps and more clearly defining the intended limitations. Meanwhile, let me commend the authors' successful attempt to make botanical teaching more effective in the country which, after all, is the birth-place and cradle of our whole plant sciences. W.G.

Festschrifts

- 82. Werner GREUTER, Theodoros GEORGIADIS, Theophanis CONSTANTINIDIS & Georgia KAMARI (ed.) – Dedicated to Dimitrios Phitos on the occasion of his 70th birthday.** [*Botanika Hronika* (ISSN 0253-6064), 13.] – Ergastêrion Botanikês tou Panepistêmiou Patrôn, Patra, 2000. 487 pages, drawings, graphs, tables, maps, black-and-white photographs; paper.

OPTIMA's founding member, Past President and Gold Medal bearer, Dimitrios Phitos, celebrated his 70th birthday in 1998 – which means that he had to wait almost two years for the present jubilee volume, his most prestigious birthday present, to be ready. I am sure he agrees that it was worth while waiting. His is, deservedly, one of the richest and most manifold festschrifts I know of.

Here are a few facts and figures. the Volume is comprised of 46 scientific papers, not counting the introductory dedication text, and in all, 80 authors have participated in writing it. Most texts are in English, but there is one written in Greek, one in French, and two in German. The subjects mostly centre on the floristics, taxonomy, and structure of vascular plants, but there are single papers on fungi, lichens and bryophytes, as well as on physiological, autecological, phytocoenological, phytochemical and conservational topics. Whereas clear a majority of the papers concern the territory of Greece, several deal with plants of neighbouring Balkan countries (Albania, Montenegro, Yugoslavia, Bulgaria, European Turkey), and some with more distant areas (Balearic Islands, Sicily, Anatolia, Transcaucasia, Jordan, and even Somalia).

A full dozen new taxa were first described in this volume: one genus, eight species, two subspecies and one variety, belonging in the families *Compositae*, *Cruciferae*, *Leguminosae*, *Plumbaginaceae*, *Rosaceae*, *Rubiaceae*, *Umbelliferae*, *Violaceae*; *Gramineae*, *Iridaceae*, and *Liliaceae*. In addition, five new combinations were validated at species or subspecies rank. Two among the described novelties (*Phitosia* in the *Cichorieae*, and *Trifolium phitosianum*) aptly commemorate Phitos's name. W.G.

Symposium Proceedings

83. Francesco Maria RAIMONDO (ed.) – **OPTIMA 2001, Palermo, Sicily. X Meeting**, Palazzo Steri, 13-19 September 2001. X^{ème} **Colloque**, Palazzo Steri, 13-19 septembre 2001. [programme, abstracts, list of participants]. – OPTIMA, Palermo, 2001. XIII + 310 + [2] pages, photographs, map; paper.

The jubilee meeting of our Organisation took place at a time that will be remembered in history. It started under the immediate impression of the dreadful events of the 11th of September in New York, when terrorist action shook the very foundations of our western civilisation. The participants were constantly aware of the gravity of the situation, but also of the fact that nothing was to be gained by yielding to apathy or despair. Whereas the air traffic situation, particularly in the connections with Israel, unfortunately prevented several prospective participants, including a keynote speaker, to join, the local organisers nevertheless succeeded in ensuring a seamless succession of events.

The Congress took place in the city centre of Palermo, in a magnificent old building, Palazzo Steri, that houses the rectorate of Palermo University. The scientific programme, consisting of 12 half-day symposia and three round-table conferences, appears at the beginning of the volume. The poster exhibit, which as usual was central to the event, took place in the central courtyard of the palace and in a nearby former chapel. It was divided into four main sections of which the two first, phanerogamic and cryptogamic botany, were in turn subdivided each into five poster groups. Of the 151 posters that had been an-

nounced 132 were actually on display, as there were 24 no-shows but also 5 latecomers in addition.

The bulk of the present volume, distributed to all registered participants, consists of the abstracts of lectures and posters that had been submitted in time. They were handed in electronically (or, in some cases, were re-typed) and appear in a uniform font and layout. The full proceedings are due to be published in due course in the Herbarium Mediterraneum Panormitanum's well known serial, *Bocconeae*. W.G.

84. Maria Antonietta COLASANTE & Paula J. RUDALL (ed.) – **Iris** and *Iridaceae*: **bio-diversity and systematics**. Proceedings of the International Iris Conference organized by M. A. Colasante, Rome 1998. [*Annali di Botanica, nuova serie* (ISSN 0365-0812), 1(2).] – Dipartimento di Biologia Vegetale, Università degli Studi di Roma "La Sapienza", Roma, 2001. 209 pages, coloured frontispiece, black-and-white photographs, drawings, tables, graphs; paper.

When presenting the abstract fascicle for the Iris Conference in this column (OPTIMA Newsletter 34: (25). 1999), I expressed the hope that the full proceedings would soon be published. Here they are, and in spite of the long time it has taken to produce them they look remarkably up to date.

The volume includes 15 full papers followed by 6 summary versions or abstracts, equivalent to 16 of the 20 lectures and three of the posters that had been presented, plus two additional items that were not on the programme in May 1998. The latter are of particular interest. One establishes a new, monogeneric Australian tribe *Diplarrheneae*. The other is on molecular phylogeny of the genus *Iris*, using two regions of chloroplast DNA compared for 86 ingroup species. Parsimony analysis of the results supports e.g. inclusion of *Hermodactylus* in *Iris* but recognition of *Siphonostylis* (the *I. unguicularis* group) as a distinct entity. Subject-wise, 3 of the papers are on classification of the family, 3 concern *Crocus*, and a large majority (13 items) treat various aspects of the genus *Iris*.

In an Appendix there is a lengthy enumeration of names (26 pages!) that claims to be "a preliminary list of rare or endangered *Iridaceae* species". It is nothing of the sort. Rather, it is a full, uncritical list of known species and subspecies in *Iridaceae*, which also includes some synonym pairs, both homotypic (*Iris sisyrinchium* and *Gynandriris sisyrinchium*) and heterotypic (*I. cretensis* and *I. cretica*).

The volume is a choice puzzle for bibliographers. It was planned to be the concluding volume 58 (2000) of the first series of the *Annali*, and as such it is referred to in all page headers. As its publication was delayed (Dec 2001 or Jan 2002), it became part two (independently paged) of the first volume of the second series. W.G.

85. Laura CARIMINI (ed.) – Atti del Convegno "L'Orto Botanico di Camerino 1828-1998" (Camerino, 29 settembre 1998). [*L'Uomo e l'Ambiente*, 35.] – Università degli Studi, Camerino, 2000. 141 pages, black-and-white photographs, facsimiles, graphs, maps; paper.

A meeting commemorating the 170th jubilee of the Botanic Garden in Camerino was held in the context of the 28th Colloque phytosociologique International, and the nine papers presented at that meeting are included here. In one way or another they all relate to botanical gardens: from first mythical examples (the Garden of Eden and that of the Hesperides, contemplated with a slight feministic bias) through medieval, Renaissance, and other historical gardens to the role of modern gardens and arboreta in plant species conservation. Some accounts are devoted to case studies: the famous old University Garden in Padua, that of Iași in Rumania, and of course the jubilee institution in Camerino. W.G.

86. Neriman ÖZHATAY [vol. I] / Nermin GÖZUKIRMIZI [vol. II] (ed.) – Plants of the Balkan Peninsula: into the next Millennium. Proceedings of the 2nd Balkan Botanical Congress. **Volume I, II.** – Marmara Üniversitesi, İstanbul, 2001 (ISBN 975-404-597-6 and -598-4). XI + [5] + 593; XII + 460 pages, photographs, drawings, graphs, maps, tables; paper.

Publication of the proceedings of what turns out to be one of the most important plant science congresses in the Old World has been remarkably quick. In spite of high production speed and considerable bulk, both volumes have been edited with remarkable skill and care. The editors have performed a tremendous task, one that only those can fully appreciate who have done a similar job themselves. Congratulations!

The scientific contributions presented at the Congress were allocated to one of seven Sessions and subject areas, and the present volumes have been delimited and arranged accordingly. From an OPTIMA perspective, the themes covered in the second proceedings volume (Session 6 on metabolism, growth and bioenergetics; Session 7 on genetics, biotechnology and plant breeding) are of less immediate relevance, and I will therefore concentrate on the first volume.

It starts with the two plenary lectures, of which I shall mention Vernon Hewood's on "Assessment, conservation and sustainability of the plant diversity of the Balkan Peninsula". The round-table conference on "Past, present and future of the flora of Balkan Peninsula" follows, then, the five first Sessions: a double one (Nos 1 and 2) on "Balkan flora vegetation, conservation / taxonomy, geobotany, evolution" (46 papers); No. 3 on "Ecology and environmental botany" (9 papers); No. 4 on "Structure and its dynamics" (17 papers), and No. 5 on "Phytochemistry and natural products, ethnobotany" (14 papers).

It is impossible and would be inappropriate to single out individual papers for the purpose of this review. One general trend should however be noted: as a consequence of this symposium (and not unexpectedly, thinking of its location), Anatolia now clearly belongs to the Balkans, at least for botanical purposes. The Turkish element largely predominates, both among the subjects treated and the authors. There are even two contributions relating to Azerbaijan. Whereas most papers deal with vascular plants, algae and fungi are also represented.

To end on a detail: one new taxon published here (there are two more, at the rank of forma, within *Quercus petraea*) has a name that reveals a so far unnoticed gap in our nomenclatural Code. This is *Trachelium jacquinii* subsp. *dalgi-ciorum* (incidentally, a taxon that is misplaced in *Trachelium*). In its section on orthography, the Code specifies that letters with a diacritic sign

are not to be used in Latin plant names but must be transcribed (accents are usually dropped). There is no instruction, however, on how to deal with missing dots on the letter "i"! W.G.

87. R. R. KLOPPER, G. F. SMITH & A. C. CHIKUNI (ed.) – The Global Taxonomy Initiative: documenting the biodiversity of Africa. Proceedings of a Workshop held at the Kirstenbosch National Botanical Garden, Cape Town, South Africa, 17 February – 1 March 2001 **L’Initiative Taxonomique Mondiale: documenter la biodiversité en Afrique.** Délibérations de l’atelier organisé au Jardin Botanique National de Kirstenbosch Garden, Cape Town, Afrique du Sud, 17 février – 1 mars 2001. [*Strelitzia*, 12.] – National Botanical Institute, Pretoria, 2001. XIII + 202; XIII + 204 pages, black-and-white photographs, tables and graphs; paper.

The Global Taxonomy Initiative, as you may or may not know, is the response of the Convention on Biological Diversity’s Conference of Parties when it recognised the fact that there is a Taxonomic Impediment to the implementation of that Convention. (This is a very antiquated way to put it, because there is not a single acronym in the whole, long sentence: no GTI, no COP, no CBD, let alone SBSTTA which I did not even mention. I apologise!)

Regional meetings to implement the GTI were recommended by COP V in Nairobi, in 2000. The Kirstenbosch workshop was held in response to that request. The 43 specialists in attendance represented 23 African and 9 non-African countries. Based on a questionnaire that had been distributed country-wise, they assessed the present situation of taxonomic knowledge and infrastructure in Africa as well as the relevant needs. At the end, they set up a list of ten general recommendations, to become known as the Kirstenbosch declaration.

This is a tersely written document full of tightly packed information. There is no way to summarise it adequately in the frame of a short review. My advice: Read it by all means if you are interested in what’s up, at the global level, with regard to promotion of taxonomic work and infrastructure. Read it if you want to understand what substance (or lack thereof) hides behind the current plethora of acronyms; what other potential parties in another continent plan (or plan not)

to do; how funding, both national and international may (or may not) be obtained. You will find no plant other than *Strelitzia* mentioned in the whole book, yet it may likely benefit plant taxonomy to a higher degree than many a botanical work.

The volume is Janus-faced. You can open it either way. You decide which side is front and which is back, depending on whether you prefer French or English. In the middle, you will find, the two cultures and languages meet. W.G.

New Periodicals

88. Folia horticola. – Ediciones Alternativas, Almeria. 2000, 12 pages; 2001, 13 pages; paper.

Retired near Almeria in southern Spain, Günther Kunkel keeps writing indefatigably. He has founded a small private publishing firm, Ediciones Alternativas, and with the aid of his faithful old typewriter (indeed!) and the assistance of his wife Mary Anne who skilfully illustrates his writings he authors and edits texts for the gardener and botanical aficionado.

Between September 1995 and December 1999 he issued 50 numbers of his own private journal, *Hojas sueltas* (loose leaves), to which I referred incidentally (in OPTIMA Newsletter 31: (21). 1997). As he explains in the last, 50th issue of that leaflet he decided to give his typewriter (and himself) a holiday – but it did not last long. A new millennium had started, so a new title was due. Here it is: *Folia horticola*.

The words are in Latin but the texts keep being written in Spanish. Of the two issues I got (I know there are at least three more, which I found cited on the Internet), the first is titled "Belleza peligrosa" (dangerous beauty) and deals with four poisonous *Apocynaceae*; the second, "Asilvestrando en nuestro jardín" (running wild in our garden), with five ornamental *Compositae*.

Kunkel has a kind but wicked sense of humour. I am convinced that the absence of volume and fascicle numbers in the new journal is intended to tease librarians and bibliographers. Or is it perhaps a device to avoid reminders for missing issues? W.G.