BOOK REVIEWS

Diatoms and the Continuing Relevance of Morphology to Studies on Taxonomy, Systematics and Biogeography. Celebrating the Work and Impact of Patricia A. Sims on the Occasion of her 80th Birthday. J. Witkowski, D. Williams & J. P. Kociolek (eds). *Nova Hedwigia*, Beiheft 144. Stuttgart: J. Cramer in der Gebrüder Borntraeger Verlagsbuchhandlung. 2015. 228 pp, 5 tables, 560 black and white photographs and illustrations. ISBN 978 3 443 51066 4, ISSN 1438 9134. 119 € (paperback).
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This is a review of two halves, because this is a publication that one can approach from two different directions. First, it is a Festschrift honouring the contributions made by Patricia Sims, a stalwart of the Natural History Museum in London since 1951 and a diatomist with a reputation both as a formidable scientist and as a warm individual. But, as a volume of the *Beihefte zur Nova Hedwigia* it occupies an uneasy borderland between a journal part and a 'book'. Technically, *Nova Hedwigia*'s supplements are for monographs that are longer than a conventional paper, but the scope has expanded to include proceedings of symposia and Festchriften. As the recipients of Festschriften are often, by nature, curious individuals with wide-ranging interests, the result can be collections of papers united only by a professional link between author and subject. From the perspective of a reader who lacks this link, the result can be little different to just another journal part.

As a celebration of Patricia Sim's career, the editors have made a good job of pulling together a series of contributions that encapsulate her interests, leading with an annotated bibliography by David Williams and Grethe Hasle that lists the large number of new taxa that she described. This opening paper reminds us that Patricia Sims was part of the first generation of diatomists to recognise the value of scanning electron microscopy. That all but two of the other papers in this Festschrift make use of this instrument illustrates the impact that early pioneers such as her have made to the discipline. Three of the papers deal with *Biddulphia* and relatives, a group of genera of particular interest to Patricia Sims, and four of the others deal with the taxonomy and morphogenesis of marine diatoms generally. Four of the remaining papers concern freshwater diatoms; of these, David Mann's investigation of 'unconventional diatom collections', focusing on cytological preparations of Lothar Geitler, offers some fascinating perspectives, not just of meiosis and auxosporulation but also of the arrangement of species within epiphytic communities. Finally, Williams, Yesilyurt and Tuji provide a guide to the publications of the German phycologist Paul Friedrich Reinsch (1836–1914).

I suspect that the publisher's sales of this volume will be mostly to institutions that have a standing order to *Beihefte zur Nova Hedwigia*, and therefore it is a little invidious to ask whether this volume is worth 119 euros plus shipping costs. I expect that my

experience of the volume will be typical of many: however interesting the papers in a volume such as this, only a few (three in my case) have any direct relevance to my work. As far as I can see, it is not possible to buy individual articles from this volume online, so anyone whose institution does not subscribe to the series will have to decide whether to buy the whole volume or to track down the articles via search engines. It took just a couple of minutes to find the first two papers I hunted for on ResearchGate, from where I could send reprint requests to the authors. I suspect that, with a little more effort, I could have tracked down most of the others too. That illustrates an unfortunate truth: the publishing model for volumes such as this has not kept pace with the realities of the 21st century. That is ironic, because a celebration of the career of a successful scientist is, in effect, recognition of someone who most definitely *had* kept pace with a changing world.

MARTYN KELLY

Syllabus of Plant Families. A. Engler's Syllabus der Pflanzenfamilien, 13th edition. Part 2/1: Photoautotrophic Eukaryotic Algae. Glaucocystophyta, Cryptophyta, Dinophyta/Dinozoa, Haptophyta, Heterokontophyta/Ochrophyta, Chlorarachniophyta/ Cercozoa, Euglenophyta/Euglenozoa, Chlorophyta, Streptophyta p.p. W. Frey (ed.). Stuttgart: Borntraeger Science Publishers. 2015. 324 pp., 67 figures. ISBN 978 3 443 01083 6. 89 € (hardback).
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This is a multiauthor work edited by Wolfgang Frey. The authors of chapters are Wolfgang Hofbauer (Glaucocystophyta, Eustigmatophyceae); Hiroshi Kawai and Takeshi Nakayama (Introduction to Heterokontobionta p.p., Cryptophyta, Dinophyta, Haptophyta, and Heterokontophyta [except diatoms, Phaeophyceae and Eustigmatophyceae], Chlorarachniophyta, Euglenophyta); Eileen Cox (diatoms); Bruno de Reviers, Florence Rousseau and Thomas Silberfeld (Phaeophyceae); Jiří Neustupa (Chlorophyta, Streptophyta p.p. [except Ulvophyceae, Charophyceae], Trentepohliales); Frederik Leliaert, Juan Lopez-Bautista and Olivier de Clerck (Ulvophyceae, except Trentepohliales); Frederik Leliaert (Palmophyllales); and Irmgard Blindow and Michael Schudack (Charophyceae). The green algae (Chlorophyta + Streptophyta p.p.) account for 111 of the 301 pages of taxon accounts.

Part 2/1 in the revised 'Engler & Prantl Pflanzenfamilien' covers the groups traditionally referred to as 'algae'. Well, not quite all of them because, for some reason (page limits?), the red algae have been left to part 2/2, whereas the prokaryotic 'blue-green algae' have been put in part 1/1, together with a motley collection of eukaryotic groups traditionally classified as 'fungi'. These seem curious decisions. If the idea was to provide a coherent systematic account (which one might assume would be the intention in a 'syllabus of plant families'), why separate the oomycete fungi (in part 1) from their autotrophic cousins in the heterokont classes (part 2/1), or the