

---

## Book Review

---

**Suomen Rupijäkälät. Edited by Soili Stenroos, Saara Velmala, Juha Pykälä and Teuvo Ahti.** 2015. Norrlinna 28. Helsinki: Luonnontieteellinen Keskusmuseo Luomus. Pp. 454. Page size 260 × 180 mm. ISSN 0780-3214, ISBN 978-951-51-0837-1. Hard cover. Price: €96.00. doi:10.1017/S0024282915000456

Finnish lichenologists have completed another wonderful book, *Crustose Lichens of Finland*, which is a continuation of *Lichen Flora of Finland* (Stenroos *et al.* 2011). The two books are of the same format, with similar construction and design, so everyone who is familiar with *Lichen Flora of Finland* knows what can be expected from the new volume. Indeed, high expectations for another picturesque publication are very much fulfilled. A selection of the most common or important crustose lichens known from Finland is presented, this being only about a quarter of the total number of crusts in Finland so that 300 species are treated in detail out of the total 1249. Treatments of species containing morphological-anatomical descriptions, chemical data, ecology, distribution in Finland and globally, and general remarks, fill the main part of the book (pp. 41–351). Common synonyms and threat status are given where relevant, and each species is illustrated with a thumbnail distribution map in Finland and an excellent colour photograph. Photographs deserve additional appreciation – most of them are of extremely high quality, many whole page size revealing diagnostic characters of the taxa, and often offering beautiful images. Lack of scales to illustrations cannot be considered a serious drawback.

In the introductory part, several traditional chapters are included: how the data are organized on the species pages, biology of lichens, main characters of crustose lichens, environmental conditions where they grow in Finland, role of lichens in bioindication, lichens in the Finnish Red List, and instructions for collecting and identification of crustose lichens. One chapter in the introductory part is unusual and most useful – about the modern technique, stacking, which was applied to photograph the samples. Focus stacking is a digital image processing technique which combines multiple images taken at different focus distances to give a resulting image with a greater depth of field than any of the individual source images. Each photograph in the book has been achieved by stacking 40–240 separate images. Although the focus distance for separate images could be set automatically, the number of shots behind one photograph is impressive and gives an indication of the amount of work put into this publication. Among other important details, the stacking software used here could have been mentioned as well. The introductory chapters of the two books together form quite a comprehensive survey of the main issues related to lichens and their

research; furthermore, both books have short glossaries of specific terms.

The book has one disadvantage compared to the previous macrolichen book of Finland: the absence of any identification keys for genera or species. This reproach is probably not a surprise for the authors and to solve the problem would have been a real ‘mission impossible’ as the included species form only one part of all recorded taxa which might be found. However, the genera are briefly characterized and the number of recorded species in Finland for each genus is given. Compiling a key for the treated genera would have been possible, but evidently the authors decided that the main function of this book is elsewhere and it should not be considered primarily for identification.

Another feature is that this book is about the lichens in Finland, and, accordingly, written in Finnish. So, although the content of these publications is of a high scientific standard, the presented text remains incomprehensible for most of the international lichenological community because of the language barrier. A small Finnish-English dictionary added towards the end of the book (pp. 357–359) is of some help but as the Finnish grammar is pretty complicated (e.g. nouns are declined using 15 cases, and both nouns and verbs may have not only different endings but also change their root in different forms of the word), understanding the Finnish texts is definitely a challenge to everyone except Finnish speakers and Estonians. A few additional elements of the text in English (e.g. legends for Tables and Figures in the introductory part) or a few further words (e.g. phrases used to explain the symbols of distribution maps) in the dictionary would have helped a wider audience.

And last, but not least, at the end of the book (pp. 360–441) is a complete list of Finnish lichens, lichenicolous and lichen-like fungi amounting to 1965 taxa, as of the beginning of 2015. Close to 350 taxa have been added since the first modern checklist of lichens and allied fungi of Finland (Vitikainen *et al.* 1997). The list is arranged in the form of a table which makes it easy to use. Besides the Latin name and authors, Finnish and Swedish common names are added for those taxa having these, as well as the most important synonyms. Modern taxonomy has been followed, for example genera *Athalia*, *Callome*, *Enchylium*, *Calogaya*, *Flavoplaca*, *Hydropunctaria*, *Lathagrium*, *Polycauliona*, *Rostania*, *Rusavskia*, *Scytinium*, *Vahlia*, etc. are accepted. For each species, the provincial

distribution in Finland is indicated, and using the small map together with the table of abbreviations on p. 11, the appropriate province can be easily located. Finally, habitats and substrata where the species has been recorded in Finland are listed for each taxon. The names of habitats are abbreviated, using the same classification as in the Red List of Finnish species (Rassi *et al.* 2010). The latter publication is bilingual throughout, in Finnish and English, so it would have been very easy to add English translations to the explanations of abbreviations in Finnish; many international users of the book would have been truly grateful.

It is quite clear that the preparation of this publication has been an enormous work, and therefore all contributors, besides the editors, deserve to be mentioned. Here they are: Teuvo Ahti, Helge Eskelinen, Jaana Haapala, Filip Högnabba, Kimmo Jääskeläinen, Annina Launis, Leena Mylly, Juha Pykälä, Soili Stenroos, Saara Velmala, and Orvo Vitikainen (authors of the text); Helge Eskelinen, Helge Gundersen, Veli Haikonen, Reidar Haugan, Leena Helynranta, Kimmo Jääskeläinen, Jon T. Klepsland, Mikko Kuusinen, Annina Launis, Sampsa Lommi, Juha Pykälä, Soili Stenroos, Einar Timdal, Saara

Velmala, and Orvo Vitikainen (photographers); Kimmo Jääskeläinen, Juha Pykälä, Orvo Vitikainen, and Teuvo Ahti (authors of the checklist).

This is a publication which is definitely a must for the bookshelves of every lichenologist in northern Europe. Moreover, it is a beautiful addition to any bookshelf, belonging to a lichenologist or not.

### **Tiina Randlane & Andres Saag**

#### REFERENCES

- Rassi, P., Hyvärinen, E., Juslen, A. & Mannerkoski, I. (eds) (2010) *The 2010 Red List of Finnish Species*. Helsinki: Ministry of the Environment, Finnish Environment Institute.
- Stenroos, S., Ahti, T., Lohtander, K. & Mylly, L. (eds) (2011) *Suomen jäkäläopas*. Helsinki: Luonnontieteellinen Keskusmuseo.
- Vitikainen, O., Ahti, T., Kuusinen, M., Lommi, S. & Ulvinen, T. (1997) *Checklist of Lichens and Allied Fungi of Finland*. Helsinki: Botanical Museum, Finnish Museum of Natural History.