

Plant profile: *Calypogeia sphagnicola* (Arn & Perss.) Warnst. & Loeske.

By John Steel

Order: Jungermanniales
Family: Calypogeiaceae

Next time you are wandering across a *Sphagnum* bog – okay, okay, maybe it’s not something you do every day – so if you ever find yourself wandering across a *Sphagnum* bog, go down on your knees and have a close look among the *Sphagnum* crowns and if you are very lucky you may just find clumps of fine leafy strands mixed in amongst them. Take out your ever-present eyeglass, have a closer look and it may just be this little gem. Its name comes from the Greek, *kalyx* = flower cup + *hypo* = under + *ge* = earth, (referring to the perigynium or underground pocket in which the sporophyte matures) and *sphagnos* + moss and the Latin, *cola* = dwelling.

Up to two centimetres long and sometimes reaching the considerable width of two millimetres, it’s not something that will leap out at you. If you do find it, contain your excitement and give yourself a pat on the back. I have chosen this pretty, little hepatic to highlight Rudi Schuster’s work (Schuster 2000; see book review this issue) and also because it was described from specimens found on Swampy Summit here in Dunedin. Its distribution is not well documented so any reports of further finds would be welcome.

Reference: Schuster, R.M. (2000). Austral Hepaticae part I. *Beiheft zur Nova Hedwigia* 118:1-524.

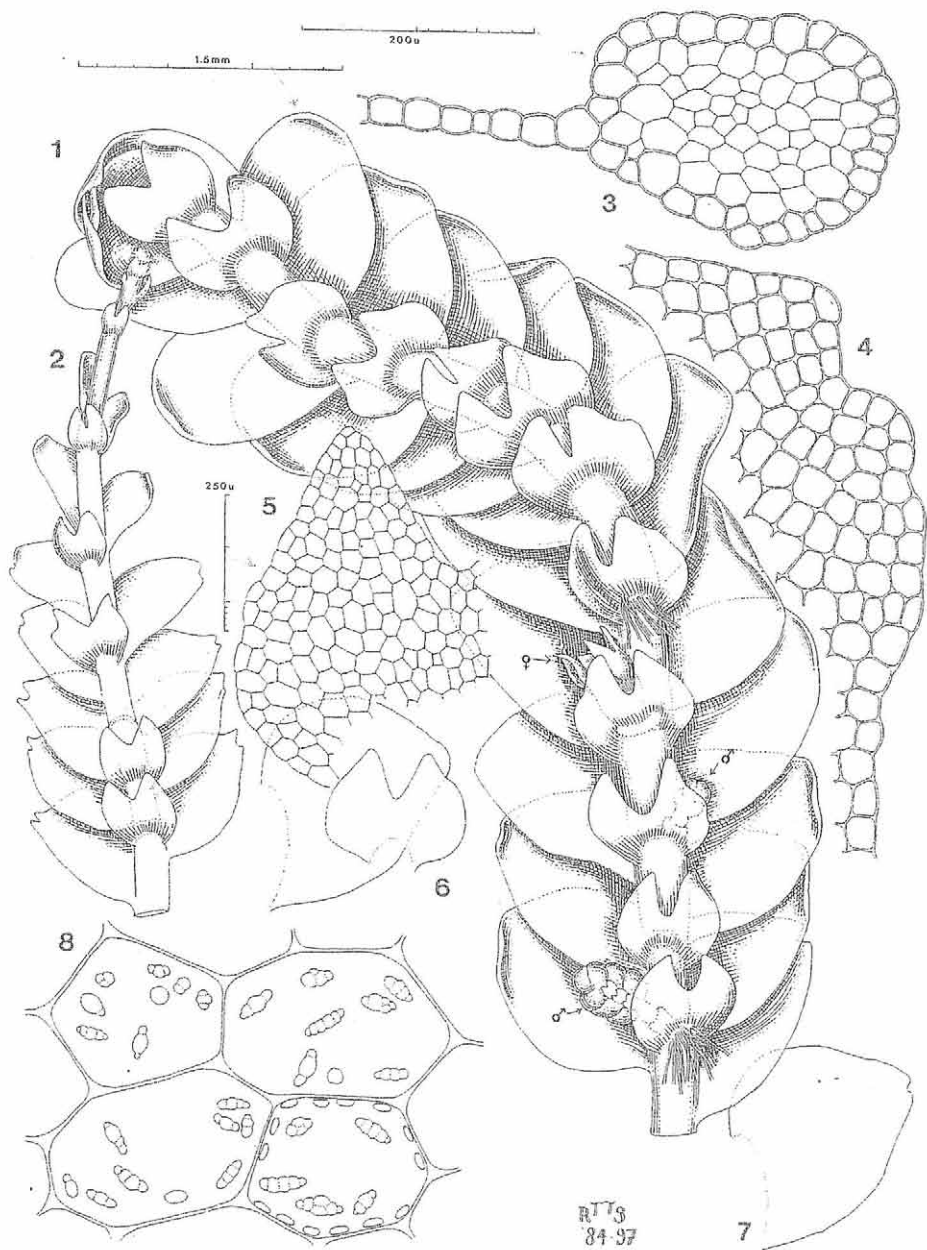
BOOKS

Book reviews – by John Steel

Schuster, R.M. (2000). Austral Hepaticae part I. *Beiheft zur Nova Hedwigia* 118:1-524.

P/back. J. Cramer, Stuttgart. \$US150 + \$US10 p&p.

Rudi Schuster is one of the world’s few, leading authorities on liverworts and has a prodigious publication record. He has long been a respected authority on New Zealand liverworts and this book is a most welcome and necessary addition to our knowledge. The taxonomy of the hepatic flora of New Zealand has a long way to go and much of the published information is difficult to access, often appearing in journals not available here, so having it all in one place is a pleasing advance on the current state of affairs.



Calypogeia sphagnicola (Arn. & Perss.) Wstf. & Lske. 1. Large shoot, ventral aspect, with ♂ and ♀ branches (X 25; 1.5 mm scale). 2. Apex of gemmiparous shoot, ventral aspect (X 25; 1.5 mm scale). 3. Stem cross-section (X 160; 200 μm scale). 4. Leaf-lobe apex (X 160; 200 μm scale). 5. Half of underleaf (X 76; 250 μm scale). 6. Leaf + underleaf (X 25; 1.5 mm scale). 7. Leaf (X 25; 1.5 mm scale). 8. Median leaf cells with oil-bodies and, lower right, chloroplasts. [All from plants from Mt. Swamy, Dunedin, S. L., N.Z.; RMS.] Schuster, 2000.

Schuster examines those genera occurring in the present landmasses that once formed Gondwana, *i.e.* South America, Australia, New Zealand, Africa, India and Antarctica. There are approximately one hundred and fifty genera with six hundred species of liverwort and hornwort in New Zealand (Glenny, 1998) and this volume covers twenty-nine of these genera. It begins with a brief explanation of the hepatic classification used and is followed by the keys, which fill the remainder of the book. Most species are illustrated, and these illustrations are superb in their detail. (See this issue's Plant Profile.) A representative example from each genus is illustrated allowing comparison and highlighting those interesting features which may aid clarification of those taxa not shown.

This volume brings together and updates what is known about this, oft ignored, part of our extensive, and elusive, cryptogamic flora. Extensive references are cited but there is no reference list which, I assume, will be included in the final volume. When I spoke to Dr. Schuster on his last visit to Dunedin in 1996, he expressed doubt that his flora would ever be completed. Looking at this remarkable product from a lifetime's work, it would be sad indeed were this to prove so. At first sight, this volume may appear expensive, but when one considers the quality and sheer volume of the information contained, it has to be well worth the money. It can be obtained direct from the publishers by e-mail to lubrecht@frontiernet.net who will advise details of payment, including credit card.

Reference: Glenny, D. (1998). A revised checklist of New Zealand liverworts and hornworts. *Tuhinga* 10:119-149.

Dawson, J.; Lucas, R. (2000). *Nature guide to the New Zealand forest.*

312 pp. Soft covered. Random House New Zealand, Auckland. \$44.95.

This is an excellent, general introduction to New Zealand forests. It opens with a brief discussion of the flora and fauna to be found there and is followed by six chapters, colour-coded for easy access. The first, and largest, deals with the trees and shrubs and begins with several pages of colour photographs for identifying them by their leaves. These are very clear and the best I've seen for New Zealand plants, though for me, I find the occasional mixing of scientific and common names somewhat irksome. Then follows descriptions of the individual species, each accompanied by good quality photographs. Many of these show complete plants and are too small to be effective, the close-ups, however, are excellent in their detail. Similar chapters follow; firstly, vines, epiphytes and mistletoes and secondly, the forest floor. This latter is less comprehensive, understandably, but includes examples of the many varieties of species of vascular plants, fungi and a few mosses, liverworts and lichens. The final three chapters cover the birds, the lizards, frogs and bats, and the insects and other invertebrates, respectively. The first two are comprehensive, the last one, not unexpectedly, less so, covering a few of the more common species.