



The magic and enchantment of bryophytes

Jeff Scott reviews *The magic and enchantment of bryophytes (extended edition)*. Zhang Li, Zuo Qin & Mao Lihui. 2019. Phoenix Science Press, Nanjing, China. 128.00 Yuan. ISBN 978-7-5345-9462-5.

As an occasional visitor to China, I had been hoping that this book would be a useful identification aid to some common Chinese species. In that, it fails. But that is not its aim. Professor Zhang Li and his collaborators' purpose is "to use the artist's eyes and brush strokes to capture and portray the

unique and little-known beauty of bryophytes to our readers". In this, they succeed wonderfully. How many of us had our interest in bryophytes kindled by that first look under the microscope or hand lens into this secret world?

This is a large format volume, sumptuously illustrated with excellent photographic images

and paintings. The main section of the book consists of an eclectic mix of 110 bryophyte species. A double page is devoted to each species with photographs and a short description in Simplified Chinese and English; the facing page is a painting of the bryophyte. The paintings are 'artistic', rather than 'botanical'. There then follows a short section consisting of three composite paintings of bryophytes: *Impression, Eastern Himalayas*, a painting by Li Shihua of 37 bryophytes in a mountain setting (think Margaret Mee); *Becoming Alice* by Xu Lili, depicting the artist's young daughter surrounded by 32 species of bryophytes; and *Autumn in Western Yunnan* by the same artist. These collages are then dissected on the subsequent pages with photographs of the species and a description. This is similar to a poster produced in 1987 by the National Museum of Wales in collaboration with the BBS, showing a collection of common bryophytes in a woodland setting. The final smaller section *Bryophytes in Chinese Classics* showcases the calligraphic art of poetry featuring bryophytes.

As mentioned above, the choice of species is somewhat eclectic. It includes *Encalypta tibetana*, endemic to China and known only from the highest altitude regions of western China; *Funaria hygrometrica*, as common in China as it is here; and on the preceding page we have *Brachymeniopsis gymnostoma*, thought to have been extinct in China for 80 years but rediscovered by Zhang Li in 2012. For the British and Irish bryologist there are also some familiar friends here – *Pellia endiviifolia*, *Fissidens bryoides* (with the delightful Chinese common name of "phoenix-tail feather moss"), *Syntrichia ruralis*, *Hylocomium splendens* and *Brachythecium rivulare*, amongst others. There are some striking images and descriptions: the capsules of *Campylopus subulatus* with white

tassels like a ballerina's tutu and "mimicking the grace of egrets' heads"; the similar capsules of *Calypstrochaeta ramosa* subsp. *spinosa* described as resembling "waterfowl passing through a pond and frolicking in clustered lotus leaves"; the strange flagelliform deciduous branches at the tips of *Dicranodontium didymodon* looking all the world like miniature bamboo stems.

There are many "well, fancy that" facts to be discovered. For instance, "some species of *Niphotrichum* ... are often incorporated into green roof plantings, because of their ability to tolerate high light intensity, high temperatures and extreme aridity". Who knew? Also, *Physcomitrium sphaericum*, rare in both Britain and Ireland, in China "is very common in disturbed habitats ... in green belts surrounding cities and at the base of old bonsai pots"!

The distribution of the species described is a bit vague and some do not occur in China but do grow in other parts of South Asia. Others, like *Ptychomitrium mittenii*, are endemic to Australia and, perversely, *Sphagnum fimbriatum* does not grow in China. So, one must be careful not to assume that all the species will be found in China.

Not intended as a field guide maybe, but its magic and enchantment lie elsewhere.

Jeff Scott