An Artistic Approach to Bryology

Reviewed by

ROBERT A. KLIPS
Herbarium, Museum of Biological Diversity, 1315 Kinnear Rd, The Ohio State University, Columbus OH 43212, U.S.A.
email: klips.1@osu.edu


The Magic and Enchantment of Bryophytes is a large format book (approximately square, 27 cm per side), the primary focus of which is artwork. It features beautiful full-page paintings of 65 different species chosen from a wide range of habitats, mostly in China and other Asian locations. It is a collaboration principally among Zhang Li, research professor of bryology at Fairy Lake Botanical Garden in Shenzhen, China, and two artists: Li Shihua and Xu Lili. The paintings are based on photos taken by Zhang of the bryophytes in their natural habitats, which are presented on separate pages opposite each painting. Approximately two-thirds of the paintings were originally done on canvas using acrylic paint and, except for two "computer generated" drawings, the remaining paintings were rendered on paper using either watercolor, acrylic, gauche or colored pencil. It is a bilingual edition, written in traditional Chinese and English.

The book is geared toward people wishing to appreciate these small intriguing plants from an aesthetic perspective, and is carefully arranged to be of value to those lacking prior knowledge about bryophytes as well as seasoned experts wishing to approach their field from a fresh perspective.

The scientifically accurate yet very beginner-friendly chapter, “Introduction to Bryophytes,” precedes the paintings. This chapter describes a general life cycle and sets forth key morphological features of the three bryophyte phyla in the order they are presented in the book: liverworts (of which 13 species are included), mosses (50 species) and hornworts (2 species). The bryophytes are grouped by family. At the end of the book, a phylogenetically ordered “Index to Bryophyte Photos” helps readers understand the organization of the book and provides a helpful background for better understanding the descriptive text accompanying each set of nicely detailed macro photos plus one painting for each species.

Each description is a single paragraph, drawing attention to peculiarities of form, reproduction, physiology, ecology, taxonomic placement and worldwide distribution. For instance, we are informed that “the female receptacles of Clevea hyalina are quite extraordinary and truly fascinating, inflated, nearly transparent and either heart-shaped or irregularly cylindrical. Darker spherical bodies immersed in the involucre are sporophytes.” In the description of Campylopus fragilis, the authors explain that the pale fragile hair-like structures densely clustered in leaf axils toward the tops of the stems, conspicuous in the painting and photos, are agents of vegetative reproduction. Grimmia species, we are told, are typically drought tolerant bryophytes, and characteristics that optimize survival in harsh alpine environments are set forth (small size, growth in cushions and translucent leaf tips).

While the technical information, both in the Introduction and in the photo captions, is pertinent and clear enough to equip a newcomer to bryology with the scientific information needed to understand these plants, the primary strength of this impressive book is the sense of “magic and enchantment”