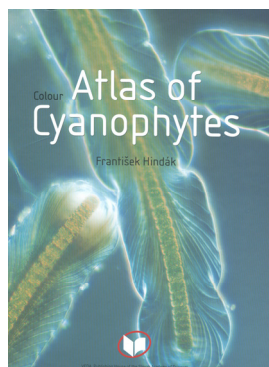


Book review



František Hindák – “*Colour Atlas of Cyanophytes*”

Reviewed by:

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VEDA Publishing House of the Slovak Academy of Sciences in the spring of 2008 published a new book entitled “*Colour Atlas of Cyanophytes*” prepared by František Hindák. Professor F. Hindák has been working in the Botany Institute of the Slovak Academy of Sciences in Bratislava for many years and he is a respected specialist in algology. His main fields of interest are within algology – taxonomy and ecology of freshwater cyanophytes and alga, and within hydrobiology – phytoplankton of stagnant and running waters; he is also conducting a laboratory cultivation of cyanophytes and algae. His beautiful, colourful pictures of cyanophytes and plankton algae have been known for some time. Now the readers can learn about cyanophytes in the form of a colourful atlas.

The atlas is comprised of 253 pages and two parts. The first is of an introductory and theoretical nature and contains a description of the basic

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characteristics that can be useful for the identification of individual taxons. The morphology of a cyanophyte cell is presented with regard to functional diversification to heterocytes and akinetes, as well as the specification of reproductive methods. Moreover, ecology, taxonomy, ways of collecting and storing cyanophytes and photography techniques are discussed. Then there is a glossary of scientific terms useful for the proper understanding of cyanophytes' descriptions. The genera determination key is also a very important and helpful tool of the atlas. The key is structured in such a way that it contains the characteristics of individual genera that can be found in the atlas.

For the most part the atlas is comprised of photographs. The first few pages show pictures of various water reservoirs, especially from the territory of Slovakia, where the study material was collected. Apart from the documentary aspect, the pictures present aesthetic and artistic values. Other pages mostly show four pictures of individual species of cyanophytes each. The pictures are ordered according to the assumed ordination. Thus, the first 44 genera from the order of Chroococcales are presented (*Synechococcus*, *Cyanobium*, *Cyanothece*, *Cyanobacterium*, *Myxobaktrom*, *Romeria*, *Johannesbaptistia*, *Aphanocapsa*, *Planktocyanoapsa*, *Gloeothece*, *Rhabdogloea*, *Rhabdoderma*, *Aphanothece*, *Radiocystis*, *Cyanodictyon*, *Lemmermanniella*, *Cyanonephron*, *Cyanocatenula*, *Cyanocatenula*, *Cyanogranis*, *Microcrocis*, *Mantellum*, *Pannus*, *Merismopedia*, *Coelomoron*, *Snowella*, *Woronichinia*, *Gomphosphaeria*, *Microcystis*, *Eucapsis*, *Gloeocapsa*, *Asterocapsa*, *Chroococcus*, *Gloeocapsopsis*, *Cyanosarcina*, *Geitleribactron*, *Chamaecalyx*, *Chamaesiphon*, *Stanieria*, *Chroococciopsis*, *Cyanocystis*, *Clastidium*, *Stichosiphon*, *Pleurocapsa*), then 15 genera from the order of Oscillatoriales (*Arthronema*, *Arthrospira*, *Spirulina*, *Glaucospira*, *Pseudanabaena*, *Limnothrix*, *Jaaginema*, *Planktolyngbza*, *Leptolyngbya*, *Planktothrix*, *Trichodesmium*, *Crinalium*, *Tychonema*, *Borzia*, *Komvophoron*, *Hormoscilla*, *Katagnymene*, *Phormidium*, *Oscillatoria*, *Lyngbya*, *Schizothrix*, *Microcoleus*, *Trichocoleus*, *Leibleinia*, *Heteroleibleinia*, *Homoeothrix*) and 24 genera from the order of Nostocales (*Raphidiopsis*, *Isocystis*, *Anabaenopsis*, *Cylindrospermopsis*, *Aulosira*, *Aphanizomenon*, *Anabaena*, *Wollea*, *Richelia*, *Cylindrospermum*, *Nodularia*, *Cyanospira*, *Trichormus*, *Chlorogloeopsis*, *Nostoc*, *Ammatoidea*, *Microchaete*, *Calothrix*, *Dichothrix*, *Gloeotrichia*, *Rivularia*, *Tolypothrix*, *Petalonema*, *Scytonema*, *Hapalosiphon*, *Stigonema*). For most species the photographic documentation is presented on several pictures. Thanks to that the author could demonstrate the changeability in morphotypes, so frequent in cyanophytes, and proper anatomical details important for the determination of species could be exposed. The pictures are very authentic so seeing them seems like watching the material under the microscope alive in front of our eyes. This shows the author's perfect mastery of photography. Many of the pictures are pieces of art of great value.

I recommend this great book to all who are interested in blue-green algae: taxonomists, ecologists, beginners and advanced researchers in phycological and hydrobiological studies. This beautiful atlas can also be an excellent gift for people not connected with biology to make them realise how beautiful the world seen through the microscope is.

About the Reviewer

Prof. Marcin Pliński, Ph. D., is head of the Sea Biology and Ecology Department at the Institute of Oceanography of the Gdańsk University. His main fields of interest are taxonomy and the ecology of cyanophytes and Baltic algae. He is the author of the series “Flora Zatoki Gdańskiej i wód przyległych” (“The flora of Gdańsk Bay and adjacent waters”).