

Hindák, F.: **Fotografický Atlas Mikroskopických Siníc.** [Photographic Atlas of Microscopic Cyanobacteria.] - Veda, Bratislava 2001. 128 pp. ISBN 80-224-0658-9. In Slovak with abstract in English.

An A4 size book printed on good quality paper presents over 300 fine colour photographs of 140 freshwater taxons of cyanobacteria (called also blue-green algae) that belong to 60 genera. Twenty-nine of these cyanobacteria species are new records for Slovakia. The organisms were collected mainly in Middle Europe, *i.e.* Slovakia, Czech Republic, Austria, and Switzerland, in some cases also in France and the subtropics. The photographs were made using the microscope *Leitz* with interference contrast. Slime envelopes were set off using Indian ink. No photographic filters were used. Three to four photographs are presented per page (Figs. 41-347), in addition the main places where the material was collected are shown (Figs. 1-40). A short identification key to the genera is added as well as a comprehensive glossary of important scientific terms. Clear definitions explain the terms that are not always correctly used (akinetes, heterocytes). Scale bars at each figure give the size of these organisms (mostly 10 μm). A brief list of cited literature and an index of species are supplemented.

Happily enough both the Slovak and Czech languages have a special term for these organisms, "sinice", that already many years ago showed their phylogenetic and taxonomical position between algae and bacteria. The term Cyanobacteria is now used most often, especially in

the photosynthetic literature that brings many studies of pigment complexes, photosystems, enzymes, and physiological activities of these interesting photosynthesisers. The recent terminological proposal is Cyanoprokaryota (Komárek and Agnostidis 1998). Cyanobacteria are a very important study material, not only because they are found in fossils, their morphology is unique, they live often in extreme biotopes (*e.g.* high temperature) but also because of their role in nature. They may grow alone or in communities, are associated with fungi in lichens, have various colours, form water blooms (forming toxins dangerous for human and animal health), *etc.* They can be also grown in mass cultures, used as producers of substances for pharmaceutical industry, are indicators of water quality.

All this shows the importance of this book. Its introductory text is brief and understandable, the book can be used for teaching at both high school and university level. Therefore I regret that the text (less than 30 pages) is only in Slovak and thus directly understandable only to Slovak, Czech, and Polish scientists (the English abstract is only two pages long and does not bring enough necessary information). A parallel English edition of the book would certainly be an easy task for a publisher, and I believe the English version will find readers all over the world.

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