Vonshak, A. (ed.): ***Spirulina platensis (Arthrospira).*** **Physiology, Cell Biology and Biotechnology.** – Taylor & Francis, London 1997. ISBN 0 7484 0674 3. 233 pp., GBP 49.95.

Arthrospira platensis alias *Spirulina* is one of the most important microalgae, that is used as food and, except sea-weeds, also the oldest "algal vegetable". Natives by Chad Lake as well as Aztecs have been collecting and eating it for centuries. Its present production is over 1 000 tonnes/year, with continuously expanding market. The book about the alga covers many problems of biotechnology—from morphology, ultrastructure, cultivation methods to contents of chemicals, *etc.* The text is devided into 12 chapters: Tomaselli, L.: Morphology, ultrastructure and taxonomy of *Arthrospira (Spirulina) maxima* and *Arthrospira (Spirulina) platensis*. Mohanty, P. *et al.*: The photosynthetic apparatus of *Spirulina*: electron transport and energy transfer. Vonshak, A.: *Spirulina*: Growth, physiology and biochemistry. Vachhani, A.J. and Vonshak, A.: Genetics of *Spirulina*. Vonshak, A.: Outdoor mass production of *Spirulina*: The basic concept. Torzillo, G.: Tubular bioreactors. Tredici, M.R. and Zittelli, G.C.: Cultivation of *Spirulina (Arthrospira) platensis* in flat plate reactors. Belay, A.: Mass culture of *Spirulina* outdoors - The earthrise farms experience. Laliberté, G., *et al.*: Mass cultivation and wastewater treatment using *Spirulina*. Cohen, Z.: The chemicals of *Spirulina*. Vonshak, A.: Use of *Spirulina* biomass.

The book is worth to be studied, it is a large body of useful and fresh information about the blue-green alga. There is only one important problem missing in the book, a detailed study about cyanotoxins that are not rare in another cyanobacteria. This scope is relatively fresh, but it can seriously affect the use of the product as food. Some strains of cyanobacteria produce very effective, dangerous toxins, and it is vitally important to prove that this very strain of *Arthrospira*, used for mass production, is not poisonous. Very long using *Spirulina* in Africa and Mexico speaks for the absence of this danger, but the genome of different strains can vary as well as content of toxins; it is better to be sure. The list of anticancer and antiviral therapeutic effects in Table 11.1, reduction of lipids, impact of immunity prove that biologically active compounds are generally present in *Spirulina*. The expanding interest about "green, natural food" may collapse quickly after only a suspicion that green pills contain a cyanotoxine.

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Veit, W.: **The Music of Sunlight.** – Sunlight Books, Forked River 2000. ISBN: 0-9678081-4-6. 169 pp.

To some of us photosynthesis is a fascinating subject and, given the fact that all of our lives depend upon it, there is every reason why it should be. Naturally, not everyone sees it that way. A recent book review in a prestigious scientific journal even expressed mild astonishment at the fact that it *could* be made interesting. Perhaps that has much to do with the way that it is taught. Certainly it can be made to seem as dull as ditch-water and many university teachers, denied the wherewithal to buy apparatus which would be regarded as remarkably inexpensive by the average physicist, have to struggle to ignite the necessary spark of interest in students who see it as a minor part of a biology curriculum. Maybe Wilbert Veit had the sort of teacher whom we all remember, at least in later life, with immense affection and gratitude. Maybe he was just born that way, like so many other *so-called* amateurs who have contributed so much to the scientific process. Certainly there is nothing amateur about his science but, in addition, he is still capable of seeing photosynthesis as a "molecular adventure". He has added to it a rare combination of imagination and communication. When I walk with my six-year-old granddaughter she spots things that I miss. She wonders about them, still untroubled by the demands of examinations, demanding explanations. Veit has the same fresh eyes. He does us all a service, students and teachers alike.

Many years ago I took my own kids to see a movie in which some band of intrepid travellers were shrunk to such a diminutive size that they could travel, in a tiny submarine, through the canals and tunnels within the human body. Veit shrinks his teenager hero, Eddie, to the size of an electron and allows us to accompany him on his journey, *via* the mountains of the photosynthetic apparatus and the dark caverns of carbon assimilation, from water to carbon dioxide. 'The Music of Sunlight' could be described as science fantasy but only in the sense that Eddie undertakes a fantastic journey based on sound scientific fact.

A few lines from this book seem to me to convey what learning about science should be about. On an island near the end of Eddie' journey (where "ferry docks" readily strikes a chord, to those of us in the business, with ferredoxin) he has a conversation with an islander. "You learn something from all of this, mon?" "Well," Eddie answered sheepishly, "I guess so, but mostly I'm just having fun, you know". That says it all. <http://www.molecadv.com>

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