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Pessarakli, M. (ed.): **Handbook of Photosynthesis. 2nd Ed.** – Tailor & Francis, Boca Raton – London – New York – Singapore 2005. ISBN 0-8247-5839-0. 928 pp., USD 159.95, GBP 92.00.

First edition of this manual was certainly successful and this is why after eight years a new edition appeared. On the first sight it differs from the first edition not only by a change of cover colour (a darker tone of green), but also by larger volume dimensions (220×285 mm *versus* 180×260 mm). The second edition is not a revised edition, but has some characteristics of a new book.

The first edition contained 63 chapters in XIV parts, but the new one contains only 46 chapters in XIV sections that have similar titles. The chapters are supplemented with full references to the respective papers. There are 27 to 271 references per chapter, mostly to papers published in the last fifteen years. In the 1st Ed. only short references were presented and such manner remained in some chapters (chapter 34) that were transferred without change from the first edition (last reference in this case is from the year 1995). This is strange, because during eight years new facts were certainly found in all analysed fields and hence these chapters appear as old-fashioned. I do not think that abstracts should be cited in manuals of this type. On the other hand, the chapters and topics contained only in the first edition are not cited here. There is also a change in style of the chapters - they are induced by contents preceding the text. Some figures and schemes were newly produced, some were overtaken from the first edition.

Who wrote the chapters? Most authors, some well known and some less known, are from the U.S.A. (21), followed by India (9), Argentina (6), Bulgaria, Hungary, Japan, and Slovakia (5 each), France and Pakistan (4 each), Canada, Germany, and the U.K. (3 each), China, Czech Republic, the Netherlands, and Poland (2 each), and Israel and Spain (1 each). Thirty four of these authors wrote chapters to both editions, 49 are new comers.

There are almost no new topics in this book and thus the reader only sees that some topics are missing (chloro-respiration, effects of leaf age, plants cultivated *in vitro*, stomata patchiness, midday depression, photosynthetic bacteria, *etc.*). Some chapters have different numbers in both editions (*e.g.* chapters 1 and 9, 7 and 11).

I do not think that publishing this book under the same title was a good solution. It will certainly lead to a mess in references. If a book appears in a new edition, the main lay-out should remain the same or the title should be changed (at least to, say, New Handbook of Photosynthesis).

What are the positive sides of this edition? First, larger letter size and the two-column setting help in reading. The index is detailed enough. Some new chapters bring interesting information. Hence I believe that this second edition will again find its readers.

Z. ŠESTÁK (*Praha*)