

Travaux Pratiques et Travaux Dirigés de Physiologie Végétale: by D. LAVAL-MARTIN and P. MAZLIAK. Hermann, Paris, 1979. 352 pp. 78 Francs.

This is a companion volume to Paul Mazliak's 1974 textbook of plant physiology and deals in the main with the practical aspects of the subject. Six areas of the subject are covered—photosynthesis, respiration, lipids, proteins, water relations and mineral nutrition—and within each topic, there are practical instructions on methods of analysis followed by discussions of how these techniques may be used in physiological research. Thus, in the section on lipids, TLC of the different lipid classes and GLC of the fatty acids are first described; the second half of the chapter then covers the use of these techniques in a study of changes in lipid composition during growth in etiolated pea seedlings and following germination in an oil seed. Emphasis throughout is given to quantitative aspects of the experiments being carried out.

In fact, the book as a whole is an unusual combination of practical methodology and of the theoretical background to physiological and biochemical research. It should be of especial interest to those who have to prepare practical classes in plant physiology or biochemistry. In view of the paucity of practical plant physiology texts, it is to be hoped that eventually it may appear in English translation. If this is done, the opportunity should be taken to update several of the bibliography entries at the end. For example, the authors should have been aware that Goodwin's 1965 textbook on plant pigments is now available in a much extended second edition (1976). Otherwise, the book seems to be very free of errors. Its unique quality is the linking together of both practical and theoretical aspects in the same volume and should be widely consulted wherever plant metabolism is taught at university level.

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