

George, E.F.; Sherrington, P.D.: Plant Propagation by Tissue Culture. Handbook and Directory of Commercial laboratories. Eversley, U.K.: Exegetics Ltd. 1984. viii + 709 pp., 11 figs., 40 tabs.

This handbook presents facts and figures on the vegetative propagation of plants *in vitro*, with special attention to its application in commercial laboratories. Two important other applications of commercial potential (to remove diseases, and to conserve disease-free stocks of plants and collections of crop plants) have also been included.

The book is divided into 10 chapters. After an introductory chapter (1) on plant cell, tissue and organ culture, the following subjects are treated: 2. Plant propagation, propagation *in vitro* and micropropagation methods; 3. Problems of genetic variability; 4. Disease elimination and germplasm storage; 5. Factors affecting growth and morphogenesis; 6. Tissue culture media; 7. Plant growth regulators; 8. Practices and problems; 9. Progress in micropropagation (with a subdivision in: ornamentals, tree species, fruit and nut crops, etc.); 10. List of commercial tissue culture laboratories.

It is a pity that the book is poorly illustrated with photos, diagrams, figures, etc., although the number of very valuable tables is abundant. The directory of commercial laboratories active in the propagation of plants *in vitro* looks far from complete, as can be judged by the list of companies given for the Netherlands, Belgium and W. Germany.

Despite a few shortcomings this valuable handbook should be welcomed as a good source for those who are involved in the micropropagation of plants *in vitro*. The aim of the authors in writing a handbook which will present a picture of the entire subject is certainly reached. It was also a good idea to emphasize the effects of cultural conditions and to treat the many difficulties to be encountered as well as the ways to overcome these.

The bibliography (85 pages), a taxonomic index (10 pages), and a subject index (20 pages) at the end are certainly an important guide for further reading.

R. L. M. Pierik, Wageningen

Barnard, C.J. (ed.): Strategies of Exploitation and Parasitism. Producers and Scroungers. Kent: Croom Helm Ltd. 1984. vii + 303 pp., several figs. and tabs. Hard bound £ 19.95.

In this book scroungers are defined as animals which use the behavioural or physiological investments of others (producers) to reduce their cost of obtaining a resource. The examples extend from complete parasitism to the stealing of prey or the usurpation of matings in the territory of a displaying male (kleptogamy). The usurpation of parental care (cuckoo) also fits the definition and even the mimicking of dangerous animals is reduced to the same denominator.

The book gives very many examples of scrounging in this wide sense, the author index encloses about 500 names.

A major emphasis is on the evolutionary relationship between producers and scroungers, particularly strategies of adaptation and counteradaptation by each party to the impact of the other. Several aspects are treated by different authors: C. J. Barnard – General aspects, the evolution of food-scrounging strategies; C. R. Kennedy – Host-parasite interrelationships, coevolution; F. Vollrath – Kleptobiotic interactions in invertebrates; A. Arak – Sneaky breeders; M. Anderson – Brood parasitism within species. Here a model is given for the spread of an allele promoting parasitism in a bird population. Three chapters are mainly devoted to modeling. G. A. Parker applies a producer/scrounger model to sexuality. Anisogamous sex is treated as such a relation because the contribution of the male to zygote survival is considered “typically virtually zero”. S. L. Vehrencamp presents a model on exploitative strategies within co-operative societies (insects, birds, mammals). R. Sibley describes a graphical model representing the pay-offs to two strategies, producer and scrounger, as dependent on the numbers of both in the group. This model is of a unifying quality as an extension of the well-known method of de Wit for the analysing of two-species interactions.

The book can be recommended.

W. H. van Dobben, Wageningen