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**Book reviews**

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**O'Brien, S.J. (ed.): Genetic Maps 1984. A Compilation of Linkage and Restriction Maps of Genetically Studied Organisms, Vol. 3.** Cold Spring Harbor: Cold Spring Harbor Laboratories 1984. 583 pp., several figs. Soft bound \$ 33.60.

The third edition of Genetic Maps, edited by S. J. O'Brien, has been extended by compilations of a number of organisms not listed before and by information on data bases for protein and nucleic acid sequences. This makes the collection more generally interesting and enables the reader in finding required information on genetic and molecular data with minimum effort. New organisms compiled include, in particular, animal retroviruses and a number of vertebrate organisms. For man, new lists are enclosed assembling data on biochemical markers, a neoplastic cytogenetic map and a map of oncogenes and cancer loci. For *Drosophila melanogaster*, a list of cloned sequences has been included.

The latter type of compilations will necessarily be out of data at the time of publication. Nevertheless, it will be extremely useful in the future, since one will soon arrive at a saturation level for the genomic sites in *Drosophila*. In this case any gene required can easily be traced.

The reading of the book raises the question when these data will be available at centralized computer facilities which would also contribute to the desirability of keeping the compilations at the most recent state of actuality. In view of the amount of information collected, the price of Genetic Maps is a pleasant feature of this book.

W. Hennig, Nijmegen

**Thomson, J.R. (ed.): Advances in Research and Technology of Seeds, Part 9.** Wageningen: Pudoc 1984. 131 pp.

For breeders, two reports of this recent part of the review series edited by the International Seed Trading Association since 1975, are of importance: the first is by Gustav Anderson of the Swedish Seed Testing and Certification Institute at Lund and reports on cultivar identification. International rules for testing varietal purity are commonly accepted. Sowing in field plots delivers more information about the seed than laboratory tests for cultivar identification and purity. However, because these are rather costly and take considerable time, interest is once again drawn to confirmation under controlled conditions. The simple method of identification and separation of varieties by visual analysis of seed form and size and weight determinations is now widely supplemented by such laboratory methods as electrophoresis of proteins, enzymes and isoenzyme patterns.

The other important review by J. H. B. Tonkin from the National Institute of Agricultural Botany at Cambridge, England, concerns pelleting and pre-sowing treatments. The increasing efforts in improving seed performance with advanced production methods have been introduced. In addition to scarification, vernalization, physical and chemical pretreatment, pelleting is widely used for seed disinfection, inoculation with nitrogen fixing bacteria and as antagonists against root diseases. Synchronisation of germination could be an important breeding goal, but can also be obtained by priming treatments.

H. F. Linskens, Nijmegen