Book Reviews

Commonwealth Agricultural Bureaux: Perspectives in World Agriculture. Compiled by CAB.
Old Woking, Surrey: The Gresham Press 1980. 532 pp., 40 figs., 45 tabs. Hard bound £ 24,–

On the occasion of the 50th anniversary of the founding of the Imperial Agricultural Bureaux which were reorganised as the Commonwealth Agricultural Bureaux in 1948, a book was given out which was more than just a nostalgic commemoration. Although looking back and reviewing the past, the emphasis is on a vision of the future. This makes the book a valuable one. It provides a glimpse of the changing needs of agriculture and ponders if this applied science will be able to contribute to the future of mankind. This collection of information and viewpoints is permeated with genetical aspects. J.G. Hawkes contributes an article about the taxonomy of cultivated plants and their importance in plant breeding research. According to M.H. Arnold, the future task of plant breeders is to especially upgrade protection from hazards and potential for yield, as well as improve quality, stability and efficiency of production. Genetic manipulation in the broad sense of transfering genetic material across the boundaries of species and genera will continue to play an important part in plant breeding, particularly in providing new sources of resistance to pests and diseases and in making available new reserves of genetic variation. In his view, selection in breeding systems will, however, remain the plant breeders' most powerful tool. A review of 50 years of research in genetics and in reproduction in farm livestock, and its prospects for the future, is given by A.L. Rae and R.B. Land. They state that the knowledge and techniques are already available to be able to make continuous changes in livestock populations. The real problem is in what direction these changes should be made. Feed resources and efficiency will be major forces in indicating the direction animal improvement should take, but the maintenance of gene pools for animal breeding is emphasized, although this may be an unpopular and unprofitable objective.

The Golden Jubilee Volume contains, in 21 chapters, more hot topics in tropic and subtropic agriculture. These include articles on forestry, horticulture, weed science, plant pathology and mycology, applied entomology and apiculture, nematology, helminthology, soil science and biological control, agricultural engineering, dairy and veterinary sciences. The book gives an indication of the magnitude of the task, the responsibility of plant and animal breeders for further improvement of crops and livestocks, and also the idea of some of the limits to world agriculture. Anyway: The CAB, which originated in the sunset of the colonial period, have contributed. They merit congratulations and further encouragement. H.F. Linskens, Nijmegen

Heslop-Harrison, J.: Aspects of the Structure, Cytochemistry and Germination of the Pollen of Rye (Secale cereale L.). Supplement no. 1 to Annals of Botany, volume 44, 1979.
London: Acad. Press 1980. 79 pp., 14 figs., 18 tabs. $ 18.00

It is not precisely clear just what the motivation was for the editors of this venerable English journal to add a series of supplements to the volumes. The first supplement is a combination of research paper and literature review of the discussed topic. The subject-matter received the same treatment given many other articles which present fundamental results: a critical literature discussion, integration of original observations and experiments with already known facts, as well as the presentation of submicroscopical and cytochemical observations and physiological experiments. The importance of rye pollen as a major carrier of allergens in western Europe justifies the experiment, which succeeds thanks to the clear and superior manner of presentation. Personally I would have preferred this fine paper to have been included into the regular volume of the journal. The danger is that this valuable information may be lost in the bibliographic sense. H.F. Linskens, Nijmegen