Genetic Resources of *Phaseolus* Beans: edited by P. GEPTS, Martinus Nijhoff, Dordrecht, Netherlands. 613 pp. £76.50.

Since the end of World War II, there has been great interest shown in increased food production in tropical countries. In this connection, *Phaseolus* beans have been considered important as a food source. Through the activities of bodies such as the Centro Internacional de Agriculture Tropical and the International Board for Plant Genetic Resources, the scope of research into *Phaseolus* has enlarged and the number of research workers is larger than ever before. The book under review deals with the genetic resources, in the broad sense, of this important genus. There are five sections in the book, each containing a number of chapters written by different authors.

Section I deals with *Phaseolus* germplasm exploration; seed and storage methodologies', a centralized database; the *Phaseolus* world collection; wild and botanical forms of Phaseolae-Phaseolinae; and the international *Phaseolus* germplasm network. In section II, emphasis is placed on the domestication and evolution of *Phaseolus* spp. and includes topics such as archaeology; morphological, physiological and biochemical changes under domestication; the wild relatives and ancestors of *Phaseolus vulgaris* and the protein phaseolin. Genetics is the theme of Section III and the various chapters refer to genotypic and phenotypic markers; linkage of marker genes; genetic structure of bean landraces in Malawi; and a Middle American and an Andean gene pool. In the first three Sections, *Phaseolus vulgaris* is emphasized but Section IV concentrates on other bean species, namely *lunatus, acutifolius* and *coccineus.* Section V covers utilization of *Phaseolus* genetic resources and contain chapters on the situation in Brazil; interspecific hybridization between *Phaseolus* species; selection methods; transfer of quantitative traits; and the development of commercial bean cultivars in the U.S.A.

Because of the method of book production, presumably camera copy, many of the photographs reproduced in the text are unsatisfactory. However, a number of these are shown in colour at the end of the book. This is very sensible because of the colour variation of *Phaseolus* seeds. There is no doubt that the book is an essential reference for those interested in legumes, genetic resources and crop evolution. For the more general reader, it might have benefited from introductory and summary chapters. Nevertheless it contains an enormous amount of information about plants of great value in the worlds' food resources.

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Herbals: their Origin and Evolution: a Chapter in the History of Botany 1470–1670: by AGNES ARBER. Third edition with an introduction and annotations by W. T. STEARN. Cambridge University Press, Cambridge, 1987. xxxii+358 pp. £15 (U.K.), $24.95. ISBN O 521 33879 4 (paperback).

Agnes Arber published her classic work on the early herbals as long ago as 1912, bringing out a second edition in 1938. This volume, a paperback in the Cambridge Science Classics Series, has the 1938 text and additions by William T. Stearn including an eight page introduction on herbals and Agnes Arber herself; *ca* 170 additional references in the important sources given in Appendix 2; an updated subject matter index (Appendix 3) to Appendix 2; a new Appendix 4 of additional notes updating the original text, and a final Appendix 5 consisting or reprints of two papers published by Arber. [The colouring of sixteenth-century Herbals, *Nature* **145**, 803 (25 May 1940) and From Medieval herbalism to the birth of modern botany, in Science, Medicine and History edited by A. Underwood, Oxford University Press (1953)].

The original edition was reviewed in *The Journal of Botany*, for 1913, pp. 197–198, the editor ecstatically saying: "We do not think a book on Herbals could have been better done. . .". The scholarship of Stearn added to that of Arber has given us a volume unsurpassable in its field. The appearance of this edition has also made this fascinating subject available to the present generation of scientists and students at an affordable price: something Cambridge University Press should be congratulated on.

The 270 pages of Arber's book are divided into chapters as follows. 1. The early history of botany (Aristotelian and Medicinal botany). 2. The earliest printed herbals (15th century). 3. The early history of the herbal in England (The *Herbariuum* of Apuleius Platonicus, Banckes' *Herbal* and *The grete herball*). 4. The botanical renaissance of the sixteenth and seventeenth centuries (The herbal in Germany, the Low Countries, Italy, Spain, Portugal, Switzerland, France and England; the origin of herbaria; the revival of Arristotelian Botany). 5. The evolution of art of plant description. 6. The evolution of plant classification. 7. The evolution of the art of botanical illustration. 8. The doctrine of signatures and astrological botany. 9. Conclusions. Appendix One consists of an invaluable chronological list of the principal herbals and related botanical works published between 1470 and 1670.

For anybody whose research takes them back to these old books, Agnes Arber and Stearn have made the job much easier and given an understanding into the contemporary issues and lives of the herbalists. The sources used by these early writers give a valuable insight into the relationships of the books to each other. There is still a great deal that we can profitably learn from the old herbals. The tragedy is that they are now so valuable and usually locked away, with very restricted access, even in the best of libraries, that they are not used as they could be. It is to be hoped that the republication of Agnes Arber's book will stimulate the production of reasonable priced facsimiles of these early works.

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