
The New Gray's Manual of Botany

It has been forty-two years since Gray's Manual appeared in a new edition. In that period most of us have become so familiar with the Seventh Edition of 926 pages that in some of our homes it has occupied a place comparable to that of the Bible, the dictionary or the telephone directory. The 8th Edition with its 1632 pages is, of course, a much larger book. The addition of 706 new pages, in spite of the extra thin quality of the paper, naturally increases its bulk.

The extra pages represent the work of specialists who have revised many genera with the addition of new species. In recent years intense study of collections made in eastern Quebec and Newfoundland have brought to light many isolated or relict species while studies now being carried on in Virginia, Missouri, and Minnesota show that three or four times as many new species which should be included in future editions, than the inclusion of the Canadian species has totaled in the 8th Edition.

When Asa Gray issued his first Edition in 1848 he had the assistance of three well known botanists of that period, Carey, Oakes and Olney, in the preparation of the Eighth Edition. Dr. Fernald had contributions from 400 "enthusiastic cooperators," as he calls them. Two illustrations will indicate the change in size. In the Seventh Edition the genus *Rubus* contains 38 species and in the Eighth it is expanded to 205 species. This has necessitated the use of 45 pages as over against the 6 pages in the earlier edition. Similarly in the treatment of the genus *Crataegus*. The number of species is increased from 65 to 103 and this has added 33 new pages. To lesser extent the increase in size of the current edition is also due to the fuller list of localities in which plants occur and also a wider offering of English names. The editor was advised by the Latin professor at Harvard, Dr. Pease, to translate all Latin names, even such common ones as *alba* or *albiflora*, since "nowadays no understanding of the simplest Latin words can be assumed."

With regard to the keys in the new edition, considerable change has been made. The dichotomous keys with the use of the small letters, often pages apart, are not nearly so convenient as the keys in the Seventh Edition. In the latter the major division of the keys are indicated in heavy black-faced type which makes the alternative alphabetical letter easier found by the beginner and elementary student. In such families as the Cruciferae and the Compositae the omission of the Artificial Keys is a great loss to the beginning student and the small "Key to the Subfamilies and Tribes" (p. 1358) is scarcely adequate for sophomores beginning systematic study of the Composites.

On the whole the new edition of Gray's Manual is a notable achievement in this field of botany and brings into the purview of the systematists in the schools and colleges, the additions and revisions that specialists have been working upon during recent years. But the new edition rather removes the Manual from the class of a ready household companion and text-book for beginners, to the sphere of a reference work. A position comparable to the library status occupied by the 3 volume illustrated set of Britton and Brown's Flora. The enlarged format militates against its use by field classes. The fact remains that the new edition is a splendid work for the serious student or collector with some knowledge of systematic botany.—*H. H. M. Bowman.*

Gray's Manual of Botany, 8th Edition, illustrated, July, 1950. A Handbook of the Flowering Plants and Ferns of the Central and Northeastern United States and Adjacent Canada. Edited by Merritt L. Fernald, Harvard University. American Book Company, \$9.50.