Vistas in Botany, Vol. IV, Recent Advances in Plant Taxonomy. Edited by W. B. TURRII L. 314+ix pp. Pergamon Press, Oxford. 1964. 5 gns.

This volume, comprising seven essays on different aspects of plant taxonomy, contains nothing of immediate interest to the phytochemist. The reason for this, as the editor explains in his preface, is that such linkages between taxonomy and other branches of botany as histology, biochemistry, and physiology might be included in future volumes of *Vistas in Botany*. Furthermore, since the preface was written in 1961, such striking advances have been made in chemical taxonomy that a review prepared before then would by now be completely outdated.

The topics dealt with include pollen analysis, embryology, cytology, phytogeography, and fossil plant taxonomy. Of these, two may be selected for especial mention. What P. Maheshwari says of embryology can be taken as a model of what other biosystematists feel about their contributions to taxonomy.

"There need be no fear that the embryologist would erect a classification or a phylogenetic scheme of his own"..." with the main lines of phylogenetic classification already chalked out by the systematist, it is possible for the embryologist, the cytologist, and the anatomist to use this as a background and to help in making it more perfect. A natural system has to be discovered (for it is already there) and not invented... Once a group has been assigned to its true place, every character that is studied will only serve to strengthen its position."

My second quotation, from the concluding section of the essay by P. Ehrendorfer on "Cytologie, Taxonomie und Evolution" speaks for itself:

"Die exakte Erfassung, Beschreibung, Benennung und Ordnung der organismischen Mannigfaltigkeit durch die Taxonomie bildet die Grundlage für jede weiterführende Untersuchung, etwa im Rahmen der Physiologie, Genetik, Biozönologie u.s.w. Exakte Taxonomie ist aber nur möglich auf der Basis der konkret gegebenen rezenten Sippenund Populationsstruktur und der raum-zeitlichen stammesgeschichtlichen entfaltung der Formenkreise"... etc." (8 pages.)

The book, printed in excellent style in Poland, has a regrettably large number of printing errors. This, no doubt, is in large part due to the death, in 1962, of the editor, an appreciation of whom by Sir George Taylor, Director of the Royal Botanic Gardens, Kew. follows the editorial preface.

E. C. BATE-SMITH