

The Morphology of Pteridophytes. By K. R. SPORNE. 192 pages, many figures. 1962. Hutchinson & Co., Ltd., London. 12 s 6 d.

It is difficult not to become enthusiastic about this little book. In less than 200 pages Sporne reviews the main structural features of pteridophytes, discusses alternation of generations, and presents a concise and up-to-date account of the Psilophytopsida, Psilotopsida, Lycopsida, Sphenopsida and Pteropsida. The final chapter contains some general conclusions among which we find an admirably balanced discussion of the influential but fading Telome Theory, reference to Bower's Enation Theory, and a brief account of the bearing of cytological and experimental data on the distinctions between the sporophyte and gametophyte generations in spore-bearing plants. This last chapter is especially welcome. It is rare, indeed, to find a book in structural botany which does not abruptly end in the descriptive details of a particular organ.

The taxonomic framework of the book is squarely based on Reimer's system in the 1954 edition of Engler's "Syllabus der Pflanzenfamilien." One of the most valuable aspects of Sporne's treatment is his acquaintance with fossil plants, and his careful integration of it with the existing knowledge of living plants. But this is not a fossil book; a casual glance at the bibliography shows much very recent work. The illustrations, mostly redrawn from other works, are consistently good although often too crowded on the page.

The most amazing thing about "The Morphology of Pteridophytes" is the incredibly low price, a mere two dollars. Surely this is the biggest bargain in botanical books today. Sporne's book will appeal not only to those of us who lounge in the shaded halls of descriptive botany, but also to more adventurously inclined botanists with even the slightest appreciation of things ferny.

A most valuable addition to morphological literature; a gem.—JOB KUIJT, Department of Biology and Botany, University of British Columbia, Vancouver, Canada.

Vascular Plants of the Pacific Northwest. By C. LEO HITCHCOCK, ARTHUR CRONQUIST, MARION OWNBEX, AND J. W. THOMPSON. Illustrated. University of Washington Press. Part 3, pp. 1-614. 1961. \$13.50.

Publication of this third part of the projected five-part Vascular Plants of the Pacific Northwest marks the passing of the halfway point in this notable series. In an earlier review (Madroño 16:74-76) I made several general comments and criticisms largely still relevant to the present part, which covers Saxifragaceae through the Garryaceae. The Englerian sequence is followed through the Umbelliferae, though the placement of the Garryaceae following this family is a departure in keeping with recent evidence concerning the affinities of this former amentiferan.

In this portion of the series, most groups were treated by C. L. Hitchcock; *Rosa* and the Umbelliferae were prepared by Arthur Cronquist. The conservative taxonomic approach evident earlier is continued here. Such conservatism, while attractive in offering a greater assurance of arriving at a name for a taxon, runs the risk of obscuring important facts regarding variation patterns in the broadly-conceived species. To a large extent, however, this problem is alleviated by pointing out such patterns in the discussion of the species. Perplexing genera such as *Lupinus* and *Astragalus* are handled well. There is a key to fruiting plants and another to flowering material of *Astragalus*, the treatment of which was prepared with the assistance of Rupert Barneby, whose *A. amni-amissi* appears to be the only new species described in the families covered by this part of the series. The treatment of the lupines is one of the most workable to appear in years. It is refreshing to learn that at last *Rosa*, mistreated by taxonomists for so long, has had her real species delimited! A number of species and a few genera have disappeared as casualties of lumping; *Pseudocymopterus* and *Pteryxia* have been swallowed by *Cymopterus*.

The larger type in this part, the use of italics, and glossier paper considerably improve the appearance of the printed page. The inclusion in the keys, though not



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