XI. NEW JOURNALS

Austrobaileya replaces the Contributions from the Queensland Herbarium, and was devised to accommodate also shorter taxonomic notes. The Contributions amount to 20 numbers, with one article each; a cumulative index of names is in no 20, p. 73-88. In format and execution Austrobaileya resembles its predecessor but the useful page heads should be retained. Volume 1 number 1 (1977) was received in March 1978. It carries 9 papers on 74 pages, and a map with subdivisions of Queensland on the back flap. Frequency and price are unknown. Editor: L. Pedley, Queensland Herbarium, Meiers Road, Indooroopilly, Qld. 4068, Australia.

Brunonia replaces Contributions from Herbarium Australiense or rather seems a continuation of it in the same scope under a new name, and paged through per volume. The first issue appeared on 24 February 1978, it has 129 pages, carrying 11 papers. It will be "issued at irregular intervals". Subscription is A$ 10 per annum. Editor is B.J. Walby, CSIRO, Box 89, East Melbourne, Vic. 3002, Australia.

Journal of the Adelaide Botanic Gardens was founded to "accept original articles on a wide range of descriptive botany, particularly those on the systematics of the Australian flora and on horticultural plants." In format and execution it resembles Austrobaileya and predecessor. Volume 1 number 1 was published in October 1976; it carries 6 papers on 67 pages, and a map with subdivisions of South Australia on the back flap. A second issue was received; price not indicated. Edited by the Director, Botanic Gardens, Northern Terrace, Adelaide, S.A. 5000, Australia.

The Pterocarpus / A Philippine Journal of Forestry is published twice a year; vol. 3 no 1 (June 1977) p. 1-100 was received. It carries 10 papers, with a fair amount of forest biology; see under Rabor, and Rojo, in the Bibliography. No doubt the latter author, known for his Pterocarpus monograph of 1972, influenced the naming. Fruits of the various species, drawn for that work by Ruth van Crevel, adorn the cover. Execution is fine, in clear two-column print; the line

illustrations are good. Subscription rate is US$ 10 a year. Editor is I.L. Domingo, Forestry, UPLB, College, Laguna, Philippines 3720.

Sylvatrop / The Philippine Forest Research Journal is a quarterly. Volume 2 number 4 (Oct.-Dec. 1977) pages 225-302, dated 18 December 1977, was recently received. This issue carries 10 papers, more biological in scope than the title might suggest, witness a paper on the monkey Macaca philippinensis in captivity, and on the algae of the Hundred Islands, NW. Luzon. See also under Rojo in the Bibliography. The editorial concept is exemplary, format like Kalikasan. Subscription US$ 10 a year, $ 15 for two years. Editor is Martin R. Reyes, Forest Research Institute, College, Laguna, Philippines 3720.

WHY TROPICAL TREES HAVE ROTTEN CORES

It is generally assumed that a rotten core in an adult tree is detrimental. On the contrary, I hypothesize that the rotten hollow core is often an adaptive trait, selected for as a mechanism of nitrogen and mineral trapping. A rotten core is a site of animal nests, animal defecation, and microbial metabolism that should result in a steady fertilization of the soil under the base of the tree. If it can be shown that none of this natural fertilizer is harvested by the tree's own roots then the hypothesis is rejected. Theoretically, a tree could be programmed for a rotten core through the mechanism of depositing amounts and kinds of heartwood secondary compounds that would be sufficient to exclude organisms until the tree is large enough to tolerate structurally a rotten core, with subsequent access by rotting organisms and others to the central part of this core through unhealed breaks in branches, roots, or trunk. A complementary trait should be an increased deposition in the outer heartwood, a deposition that would contain the rotten-core organisms and therefore protect the sapwood and structural soundness of the tree. Such a hypothesis assumes that as a tree reaches adult size, it need not grow an ever-larger solid trunk and that a hollow core is not structurally lethal. Hollow cores are expected most frequently in nutrient-poor sites, habitats, or life forms not plagued by high winds, and in situations containing animals and microorganisms that will use a hollow core without overwhelming the living tree. In short, the hollow core becomes a clever use of an otherwise useless piece of wood.—D.H.Janzen, Biotropica 8 (1976) 110.