

although to the bryologist it may seem hardly a burden.

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Li, Hui-Lin. *Woody Flora of Taiwan*. Morris Arboretum Monographs. Livingston Publishing Company, Narberth, Pennsylvania. 974 pages; endpaper maps; 371 figures (line drawings). \$18.75.

In this clearly written, well-illustrated treatment of the woody plants of Taiwan (Formosa), Dr. Li has given the field botanist a splendid introduction to the rich flora of this interesting island and a thoughtful summary of his taxonomic opinions. A geographical and phytogeographical introduction begins the work, in which notes on the topography, soils, climate, vegetation types, forest resources, exploration, and floristic composition are discussed. It is of interest to note that the island of Taiwan contains 48 mountain peaks which exceed 10,000 feet in height!

The flora treats members of 105 families (Gymnosperms and Angiosperms only) of which five are monocotyledonous, eight are gymnospermous, and ninety-two are dicotyledonous. Trees, shrubs, and woody vines are included; herbs are excluded. No ferns or other cryptogams are treated. Families follow the Engler system.

Taiwan is important phytogeographically in its position which mediates between the quite different floras of China, Japan, the Philippines, and Micronesia. According to Masamune (1936) there are in Taiwan 15 families, 95 genera, and 537 species of pteridophytes, and 175 families, 1079 genera, and 3304 species of spermatophytes. The specific endemism is about 40%. Generic endemics are much fewer, there being about ten, of which half are orchids. The families with the largest numbers of species are Orchidaceae (364), Gramineae (311), Compositae (200), Leguminosae (163), Cyperaceae (160), Rosaceae (104), Rubiaceae (98), Euphorbiaceae (86), Labiatae (79), and Urticaceae (66). About 33% of the seed plants are woody. Li treats 411 genera, and about 1030 species. Phytogeographically, the flora of Taiwan most resembles that of the Chinese mainland, but the lowlands contain Asian elements. The high peaks are allied with those of the China mainland, particularly western China, and the Himalayas. There are secondarily strong affinities with the floras of Japan and the Ryukyu Islands. Only the southernmost part of Taiwan, but there quite clearly, shows a floristic relationship to the Philippines. This relationship is not as strong as formerly thought, but still noticeable. The three endemic woody genera are *Formosia* Pichon (Apocynaceae), *Micheliopsis* Keng (Magnoliaceae), and *Sinopanax* Li (Araliaceae).

The volume is well made and in general well produced. The following minor errors were noted.

p. 21, line 1 of second paragraph; "endeavor" should read "endeavoring".
line 5 of the same paragraph, "genera" should read "genus".

- p. 135. Under *Leucosyke*; Moritzi, not Moritz.
- p. 357. *Abrema* (sic) should be *Abarema*, under *Pithecellobium*.
- p. 403. Thouars, not Thouras; under *Tristellateia*.
- p. 405. *Daphinphyllum* should be *Daphniphyllum*.
- p. 480. *Trupinia* should be *Turpinia*.
- p. 492. *Dodonea* should be *Dodonaea*.
- p. 613. Thymeliaceae should be Thymelaeaceae.
- p. 657. *Medinilla hayataiana* Keng, 1955, is used, with synonym *M. kawakamii* Hayata, 1916; presumably a later homonym, but the explanation ought to be given.
- p. 727. *Planchonella* rather than *Pouteria* seems preferable; this is however a taxonomic opinion.
- p. 747. Imperfectively (sic) should be imperfectly.
- p. 772. *Geniostema* (sic) in the key, should be *Geniostoma*. The same error is repeated three times on page 778.
- p. 786. *Formosia* Pichon. No illustration, although this is an endemic genus, and monotypic! This seems an important lack.
- p. 844. *have not with*.
- p. 937. *Rubus yamamotoanus* not *yamamotonus*.

Finally, in this work Li describes 4 new species (*Rubus polyanthus*, p. 304; *Rubus yamamotoanus*, p. 319; *Tetrastigma alatum*, p. 528; and *Sloanea formosana* p. 538).

Three new varieties are described, in *Pouzolzia*, *Rubus*, and *Ilex*. New combinations are made for taxa in the following genera: *Taxus* (p. 34), *Laportea* (p. 226), *Rubus* (p. 315, 320), *Buxus* (p. 440), *Ilex* (p. 461, 463), *Ampelopsis* (p. 521), *Tetrastigma* (p. 529), *Homalium* (p. 605), *Daphne* (p. 616), *Stellera* (p. 619), *Hedera* (p. 669), *Vaccinium* (p. 700, 704), *Diospyros* (p. 733), *Styrax* (p. 753), *Viburnum* (p. 898), and *Yushania* (p. 915).

In summary, this is a useful volume which will perhaps become definitive for this region's woody plants.

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