REINWARDTIA
Published by Herbarium Bogoriense, Bogor. Indonesia
Vol. 8, Part 2, pp. 333 — 334 (1972)

NOTE ON HYMENODICTYON (RUB.) AND ITS OCCURRENCE IN MALESIA, ESPECIALLY IN WEST JAVA

C. G. G. J. VAN STEENIS

Rijksherbarium, Leyden, Netherlands

The genus *Hymenodictyon* is a genus of often large, often deciduous trees which is widely distributed over the African and Asian-Malesian tropics, with 11 species recorded for Madagascar. Within Malesia it is found in most major islands cq. island groups, but from Borneo and New Guinea there are no collections yet known to me. From the Malay Peninsula it was recorded only once, viz. from the Langkawi Is. in the extreme northwest on the border with Thailand. Over the whole range records are very patchy and scarce.

The above given distribution would suggest a slight preference for a seasonal climate. This is also stated by Backer & Bakh. f. (Fl. Java 2:297) who say that it occurs in Java only in the eastern half, "especially in periodically dry areas, rare".

In scanning the collections at Leyden, it appears, however, that the climatic response is certainly not valid for the whole of Malesia, as specimens of the island Morotai (N. Moluccas), South Sumatra (Palembang Res.), and West Java are certainly from everwet rain-forest. It is probably more the rarity of *Hymenodictyon* than the climate which encouraged this suggestion. I get the impression that it is rather indifferent to climate, but that its rarity is probably caused by its reproduction and ecology which approach that of a nomad plant, which can only settle temporarily in dense rainforest and needs open space and spots for its germination and upgrowth seedlings and saplings. This would also explain why it is more frequently found in dry areas, because these offer more open spaces that the dense rain-forest.

The data from the invaluable work of Troup on the, Silviculture of Indian Trees (vol. 2: 625 *seq.)* support this opinion. He says that: — *"H. excelsum* Wall, occurs scattered throughout the dry, mixed deciduous forests of India and Burma, being particularly common on loose dry deposits of boulders and débris along the base of the outer hills

in the sub Himalayan tract, especially where the subsoil level is at great depth". The associates he mentions are characteristic for seasonal climatic conditions. "It is also frequently met with on sandy or stony soils on alluvial ground near rivers, and in savannah lands. Bare ground is favourable to germination and subsequent survival, young seedlings being killed off in quantity where weeds are present; shade also contributes towards failure of natural reproduction which explains to some extent its comparative scarcity in many localities". This is, therefore, well in agreement with the occurrence in Malesia and points to nomad ecology.

However, Troup does not mention its occurrence in rain-forest localities, which is in Malesia certain for Morotai and Palembang, and with two indubitably native localities in the everwet forest of West Java, viz. an old collection from Mt. Gedeh — because of its sterile state hitherto filed under Rubiaceae *inc. sedis* — and a new collection from the extreme part of SW. Java, viz. Peutjang I. off Udjong Kulon Peninsula.

The locality on Mt. Gedeh, one. of the most intensively explored areas in Java, sustains also its rare and possibly ephemeral occurrence, as it has never been collected again there in a century. The records are:

WEST JAVA, Mt. Gedeh: *Hoidsoortcn van den Gedeh, No. 567*, sterile, vern. (prpbably Sundanese) ki-gala. This collection was according to me (Fl. Mai. 1: 248. 268) made at the instigation of Junghuhn, probably end 1850s. Udjong Kulon Peninsula: Peutjang I., at sealevel, fl. J. 1964, *N. Wiraivam 408.*

As to the precise species identity there is uncertainty, three species having been recorded from Malesia, viz. *H. excelsum* Wall., *H. horsfieldii* R. Br. from Java and *H. koordersii* K. Sch. from Celebes. Backer & Bakhuizen van den Brink Jr. maintain the view of Valeton that the first two are different species. It may well turn out that we have only one species, but this needs further detailed research.

It is a pleasure to contribute to this Reinwardtia instalment dedicated to Dr. A. J. G. H. Kostermans who, assisted by young colleagues, stimulated so much the botanical exploration of Udjong Kulon and adjacent isles and discovered or re-collected not a few most interesting woody plants in this part of West Java which was, since Kuhl & Van Hasselt's exploration one and a half century ago, botanically badly neglected.