

POLLEN OF SHOREAE-
DIPTEROCARPACEAE
The Taxonomic Significance

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Preface

Pollen of Shoreae-Dipterocarpaceae: The Taxonomic Significance is a book on Dipterocarpaceae. The Dipterocarpaceae family is ubiquitous across mainland and maritime Southeast Asia and are of major importance in the timber trade. Species within the family are often well-adapted and used as habitat indicators within forestry and ecological research. Their distribution is pantropical, from the northern South of America to Africa, the Seychelles, India, Indochina, Indonesia, Malaysia, and the Philippines. Dipterocarpaceae is a big plant family consisting of 16 genera and 695 known species of mainly tropical lowland and rainforest trees. The largest genera are *Shorea* (196 species), *Hopea* (104 species), *Dipterocarpus* (70 species), and *Vatica* (65 species). Many are large forest-emergent species, typically reaching heights of 40–70 m, some even over 80 m (in the genera *Dryobalanops*, *Hopea*, and *Shorea*). Many species are endangered as a result of agriculture, housing, the furniture industry, extensive illegal logging, and so on. This book presents the analysis of the pollen morphology of the tribe Shoreae species. The results show a range of morphological metrics, notably pollen grain size, type, and its' exine ornamentation for taxonomic purposes especially in differentiation and classification. This book is handy for researchers, taxonomists, forest officers, palynologists, students, and the general public. This study was funded by FRGS/1/2021/WAB02/UPM/02/3 Grant (Palynological evidence from mangroves using microscopy techniques as a proxy for sea level changes in Peninsular Malaysia) and publication of this book is funded by DPB-2023-139 (Dana Penerbitan Buku UKM). This book is an adaptation from part of my PhD thesis *The Systematic Study of the Tribe Shoreae in Malaysia*.

Noraini Talip