

New Guinea Vegetation

K. Pajmans, Editor

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Preface

Resources reconnaissance surveys in Papua New Guinea by the Division of Land Use Research, CSIRO, began in 1952, at the request of the Papua New Guinea Administration, which financed the whole project. Following fifteen regional surveys, it was decided to produce a book on the vegetation based on the survey information. As it seemed desirable to widen the scope of the book, two scientists outside CSIRO were invited to contribute. Thus the book came to consist of three parts: in Part I Max van Balgooy discusses the origin and distribution patterns of the flora; Part II gives a comprehensive account of the main vegetation types; and in Part III Jocelyn Powell describes the role of the vegetation in the life of the native population. Part I deals with the whole New Guinea region, while Parts II and III are concerned mainly with Papua New Guinea.

The individual parts can be read separately, although cross-references are made where appropriate. The views of the authors do not always coincide, and the vegetation history in particular, which is based partly on conjecture, has given rise to some differences of opinion. The authors have tried to avoid unnecessary technical terms so as not to discourage readers who are unfamiliar with the jargon of a particular discipline. All references cited in the parts have been brought together in a single bibliography at the end of the book. With very few exceptions measurements are in metric units. Botanical names have, as far as practicable, been brought up to date and may be different from those used in the literature cited, but well known synonyms are added in brackets. Because of many uncertainties and changes in nomenclature it was not possible to provide all botanical names with the names of the original authors and it was therefore decided not to quote any authorities. Thanks are due to Dr. T.G. Hartley of the Herbarium Australiense, Canberra, who has checked the botanical names used.

Plates 1-43, 46, 48 and 49 are from the CSIRO Papua New Guinea surveys collection, and 44, 47 and 50-3 are Dr Powell's. The aerial photographs in Plates 16, 25, 33, 40 and 42 are Crown Copyright reserved. Their publication has been made possible by courtesy of the Director, Division of National Mapping, Department of Minerals and Energy, Canberra. The figures were prepared by the Drawing Office of the CSIRO Division of Land Use Research, Canberra.

The island of New Guinea, lying wholly within the tropics, has environments ranging from coastal swamps to snow-capped mountain peaks. Our knowledge of its flora is still incomplete and patchy; in some areas it is known reasonably well, but in other areas,

which remain unexplored, the flora has yet to be investigated. Consequently there is much scope for further study. The vegetation of New Guinea is relatively unspoilt in comparison with many other tropical areas, and many natural habitats can still be preserved, a challenging task for a newly independent country.

K. Pajmans

Contents

Preface	v
Tables	xi
Figures	xiii
Plates	xv
Note on the use of 'New Guinea'	xvii
Part I Phytogeography	M.M.J. van Balgooy
Introduction	1
Floristics of New Guinea	5
Families	5
Genera	8
Species	16
Origin of the New Guinea flora	16
Part II Vegetation	K. Pajmans
Introduction	23
Major environments and structural forms	24
Method of description	25
The beach ridges and flats	27
Vegetation and habitat	27
Vegetation types	28
Man-made vegetation	30
The saline and brackish swamp	31
Mangroves and their habitat	31
Types of mangrove vegetation	32
Man-made vegetation	36
Resources	36
The lowland freshwater swamps	37
Swamp vegetation and its habitat	37
Types of swamp vegetation	37
Plant succession	48
Resources	49

The lowland alluvial plains and fans	49
Vegetation and habitat	49
The forest	49
Environmental controls	51
Other vegetation types	52
Man-made vegetation	59
Plant succession	59
Resources	62
The foothills and mountains below 1000 m	64
Vegetation and habitat	64
The forest	64
Environmental controls	65
Predominance of certain trees	68
Quantitative data on forest structure and floristics	70
Other vegetation types	74
Origin and status of eucalypt savanna and lowland grassland	79
Man-made vegetation	80
Plant succession	81
Resources	84
The lower montane zone	84
Vegetation and habitat	84
The forest	85
Environmental controls	86
Predominance of certain trees	88
Other vegetation types	91
Origin and status of the high-mountain grasslands and tree fern savanna	94
Man-made vegetation	96
Resources	97
The upper montane zone	97
Vegetation and habitat	97
Vegetation history	101
The vegetation of Irian Jaya	104

Part III **Ethnobotany** J.M. Powell

Introduction	106
Staple and supplementary crops	107
The coastal and lowland swamp dwellers	112
The lowland shifting agriculturalists	118
The highland margins	126
The highland agriculturalists	126
Other useful plants	134
Narcotics, stimulants and intoxicants	134
Medicinal plants	135
Ritual and magic	147
Art	150
Tools and weapons	152
Hunting and fishing	155
Canoes and rafts	157
House building	160
Food preparation, containers and vessels	166
Cordage, bark cloth and other textiles	168
Clothing and personal ornamentation	170
Discussion	174
Subsistence agriculture: the plant base	175
Former vegetation and environment: a hypothetical reconstruction	176
Archaeological and palynological evidence for agriculture	179
Other useful plants and products	181
Population: the nutritional base	182
The present situation	183
Bibliography	185
Index of Botanical Names	201
General Index	210

Tables

- 1.1 Families in West Malesia not known from New Guinea 6
- 1.2 Families in Australia not known from New Guinea 6
- 1.3 Families in New Guinea not known from West Malesia 7
- 1.4 Families in New Guinea not known from Australia 7
- 1.5 Number of genera with indigenous species in New Guinea per distribution type 11
- 1.6 Number of genera per distribution category 13
- 1.7 Number of montane genera per distribution type 15
- 1.8 Number of montane genera per distribution category 15
- 1.9 Annotated list of mountain genera 19

- 2.1 Major environments and vegetation types 26
- 2.2 Numbers of individuals and species of trees with a diameter breast height of 10 cm and over in mixed tropical rain forest 71

- 3.1 Plants used as food 108
- 3.2 Chemical composition of staple crops 115
- 3.3 Chemical composition of some supplementary crops 116
- 3.4 Chemical composition of coconuts 123
- 3.5 Plants used in the treatment of cuts and wounds 136
- 3.6 Plants used in the treatment of burns 137
- 3.7 Plants used in the treatment of sores 137
- 3.8 Plants used to relieve headaches, general body pains and swellings 140
- 3.9 Plants used to relieve toothache and other mouth infections 141
- 3.10 Plants used in the treatment of fevers, including malaria 142
- 3.11 Plants used in the treatment of coughs, colds and sore throats 143
- 3.12 Plants used in the treatment of dysentery, diarrhoea and stomachaches 144

- 3.13 Plants associated with the control of fertility and childbirth 147
- 3.14 Plants used in rituals and magic 148
- 3.15 Plants used to make tools and weapons 152
- 3.16 Plants used in the construction of canoes and rafts 158
- 3.17 Plants used in house, shelter and fence building and decoration 162
- 3.18 Plants used as ropes in construction of houses, shelters, fences, etc. 165
- 3.19 Leaves used for lining cooking ovens and wrapping food for cooking 167
- 3.20 Plants used for making string and bark cloth 169
- 3.21 Leaves and flowers used in everyday and ceremonial dress 172
- 3.22 Other species used in personal adornment 173

Figures

- 1.1 Demarcation lines around New Guinea 1
- 1.2 Relation between number of genera and area 5
- 1.3 Distribution of *Connarus*, *Coriaria*, *Batis* 9
- 1.4 Distribution of *Rhododendron*, *Pittosporum*, *Balanophora* 10
- 1.5 Distribution of *Kopsia*, *Dendromyza*, *Archidendron* 10
- 1.6 Distribution of *Sericolea*, *Hibbertia*, *Eupomatia* 12
- 1.7 Distribution of *Bikkia*, *Quintinia*, *Nothofagus* 12
- 2.1 Topographic map of New Guinea 23
- 2.2 Major environments of Papua New Guinea 24
- 2.3 Number of trees per girth class of 1 foot on 0.8 ha 72
- 2.4 Number of species per unit area, average of four 0.8 ha sample plots 73
- 3.1 Locations of specific studies consulted 107

Plates

- 1 *Ipomoea pes-caprae* and other creeping herbs, sedges and grasses 28
- 2 Planted coconut replacing natural vegetation 30
- 3 Cut-off river section being colonised by *Sonneratia* 32
- 4 Mangrove forest lining saline tidal creek 33
- 5 Mangrove forest with ground layer of *Acrostichum aureum* 33
- 6 Woodland of *Avicennia* 35
- 7 Dense nipa palm vegetation in estuary 36
- 8 Herbaceous swamp vegetation 38
- 9 Sepik River area 39
- 10 Swamp grass lining flooded river 40
- 11 *Saccharum robustum* 40
- 12 Seasonally dry *Pseudoraphis* grassland 41
- 13 Sago palm woodland 43
- 14 *Pandanus* swamp woodland 44
- 15 Swamp forest in fluctuating back swamp 45
- 16 *Camptosperma* swamp forest 45
- 17 *Terminalia brassii* swamp forest 47
- 18 *Melaleuca* swamp forest 47
- 19 Interior of tall forest on alluvium 50
- 20 Tall mixed savanna on undulating terrain 53
- 21 *Melaleuca* savanna on seasonally inundated plain 54
- 22 Tall *Saccharum spontaneum-Imperata cylindrica* on plain 56
- 23 Sedge-grassland on seasonally inundated flat 58
- 24 Pioneering vegetation in inner river curve 60
- 25 Pioneering vegetation from the air 60
- 26 *Pterocarpus indicus* being felled 63
- 27 *Araucaria hunsteinii* forest 63
- 28 Dense thin-stemmed forest on low hills 67
- 29 Buttressed trunk of old *Casuarina papuana* tree 69
- 30 Fire-disclimax *Themeda australis* grassland 75
- 31 Eucalypt savanna 77
- 32 Eucalypt savanna and forest on foothills 77
- 33 Areas of grassland reverting to forest 78
- 34 Pioneering vegetation on lava flow 80

- 35 Interior of lower montane forest 82
- 36 'Elfin woodland' 83
- 37 Interior of *Nothofagus* forest 85
- 38 Grassland, tree fern savanna and lower montane forest 88
- 39 Tree fern savanna of *Cyathea* 89
- 40 Grassland, tree fern savanna and lower montane forest from the air 90
- 41 Lower and upper montane forest 93
- 42 'Fern-leaf' pattern of eucalypt savanna and forest 93
- 43 Garden with taro and bananas 98
- 44 Woman making sago 113
- 45 Taro and sweet potato garden 121
- 46 Sweet potato garden 127
- 47 Sugarcane, lima bean and sweet potato garden 128
- 48 Trunk of *Calophyllum* tree being hollowed out for canoe 157
- 49 Lowland village in Western District 161
- 50 Typical highland house 161
- 51 *Pandanus* fibre and rope in Tari market 170
- 52 Netted string aprons 171
- 53 Women's clothes in the highlands 171

Note on the use of 'New Guinea'

In accordance with normal scientific practice 'New Guinea' has been used throughout this book to mean the whole island of which Papua New Guinea and Irian Jaya are political divisions. When Papua New Guinea is used, it refers specifically to the political entity that bears that name. The 'highlands' refer to the mountains and intermontane valleys of the central cordillera of New Guinea, while the 'Highlands' refer to the administrative districts in Papua New Guinea.