

Contents

Introduction J.P.M. BRENNAN 1

Postdrifting Mesozoic Floral Evolution T. DELEVORYAS 9

Africa, the "Odd Man Out" PAUL W. RICHARDS 21

Floristic Relationships Between Tropical Africa and
Tropical America ROBERT F. THORNE 27

Angiosperm Evolution and the Relationship of the Floras
of Africa and America ALBERT C. SMITH 49

Palms in the Tropical Forest Ecosystems of Africa
and South America HAROLD E. MOORE, JR. 63

Leguminous Resin-producing Trees in Africa and South America
JEAN H. LANGENHEIM 89

Phytogeography and Evolution of the Velloziaceae EDWARD S. AYENSU 105

Variation in the Bottle Gourd CHARLES B. HEISER, JR. 121

Growth Habits of Tropical Trees: Some Guiding Principles
P.B. TOMLINSON AND A.M. GILL 129

Evolutionary Relationships Between Flowering Plants and Animals
in American and African Tropical Forests HERBERT G. BAKER 145

A Comparison of the Hylean and Congo-West African
Rain Forest Ant Faunas WILLIAM L. BROWN, JR. 161

The Genesis and Nature of Tropical Forest and Savanna Grasshopper Faunas,
with Special Reference to Africa NICHOLAS D. JAGO 187

Diptera Parasitic on Vertebrates in Africa South of the Sahara
and in South America, and Their Medical Significance F. ZUMPT 197

Problems Related to the Transoceanic Transport of Insects,
Especially Between the Amazon and Congo Areas
C. G. JOHNSON AND J. BOWDEN 207

CONTENTS

- Limnology of the Congo and Amazon Rivers G. MARLIER 223
- Ecology of Fishes in the Amazon and Congo Basins TYSON R. ROBERTS 239
- Paleoclimates, Relief, and Species Multiplication in Equatorial Forests
P.E. VANZOLINI 255
- A Parallel Survey of Equatorial Amphibians and Reptiles in
Africa and South America R.F. LAURENT 259
- Birds of the Congo and Amazon Forests: A Comparison DEAN AMADON 267
- The Comparative Ecology of Rain Forest Mammals in Africa and
Tropical America: Some Introductory Remarks FRANÇOIS BOURLIÈRE 279
- Some Considerations of Biological Adaptation by Aboriginal Man
to the Tropical Rain Forest FRANK W. LOWENSTEIN 293
- Some Problems of Cultural Adaptation in Amazonia, with Emphasis
on the Pre-European Period BETTY J. MEGGERS 311
- Recent Human Activities in the Brazilian Amazon Region
and Their Ecological Effects HARALD SIOLI 321
- The Congo Basin as a Habitat for Man MARVIN P. MIRACLE 335
- Temperate Zone Influence on Tropical Forest Land Use:
A Plea for Sanity F.R. FOSBERG 345