

Symplocaceae, Tetrameristaceae, Torricelliaceae, Trigoniaceae and Turneraceae. Most of these are very small with four or fewer species in Peninsular Malaysia, and several with only one species. The larger accounts include the Balanophoraceae, Podocarpaceae and Symplocaceae.

The authors and editors are to be congratulated on two beautiful, scholarly and very valuable works.

#### REFERENCES

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**Natural and Cultural History of the Golfo Dulce Region, Costa Rica.** Anton Weissenhofer, Werner Huber, Veronika Mayer, Susanne Pamperl, Anton Weber & Gerhard Aubrecht (scientific editors). *Stapfia* 88, also *Kataloge der Oberösterreichischen Landesmuseen* N.S. 80. Freistadt, Austria: Plöchl-Druck. 2008. 768 pp. ISBN 978 3 85474 195 4 (hardback). £80.

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This is an excellent book, with high quality printing, and contains 64 scientific papers touching on many aspects of plant and animal research carried out at, or around, the La Gamba tropical research station in the Piedras Blancas National Park, Golfo Dulce region, Costa Rica. The park was only established in 1991, and the tropical field station in 1993. The introduction provides a background to the region, the people and national parks, as well as to the scientific work which is being conducted.

The book as a whole is divided into five parts: *Abiotic Aspects*, *Plant Biology*, *Animal Biology*, *Plant–Animal Interactions* and *Human Aspects*. Each part is then divided into papers by specialist authors.

*Abiotic Aspects* includes contributions on *Geography*, *Geology* and *Climate*, while *Plant Biology* covers *Ecosystems and vegetation*, *Plant diversity*, *Life forms*, *Ecophysiology* and *Fungi and lichens*. This part includes contributions on ecosystems studied using long-term research plots; introduces the diversity and biogeography; deals with alien plants and invasion patterns; provides a survey of life forms and of Rubiaceae in the Golfo Dulce region; and gives examples of medicinal plants. One paper lists a surprising number of terrestrial litter trappers, covering 10 plant families. A survey on fungi and one on lichens end the *Plant Biology* part. Many excellent photographs are provided, including a human toenail destroyed by a *Fusarium* sp.

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The largest part, with 23 papers, is dedicated to *Animal Biology*, and covers *Spiders, Insects, Amphibians, Birds, Mammals* and *Limnology*. The contributions are diversity surveys, or cover topics such as reproductive biology, ecology, diversity and the effects of deforestation on groups like spiders, bees, butterflies, birds and reptiles in the La Gamba area. A survey of the mammals, and one specifically on bats, are presented. The limnology section includes a survey of the river network for the Piedras Blancas National Park, leaf litter decomposition and the role of leaf anatomy and tannin in litter decay in a tropical stream. It also includes a survey of freshwater bryozoans, and a study on the ecology of fishes of the Quebrada Negra.

*Plant–Animal Interactions* includes six contributions on *Pollination* and two on *Ants and plants*. The pollination survey in plants of the Golfo Dulce region is very comprehensive, with excellent photographs of pollinators in action. Two pollination and phenology papers are included, one on the bat-pollinated *Ceiba pentandra* (Bombacaceae/Malvaceae) and one on other tree species. A detailed study on style release experiments in Marantaceae is described. The pollination by bees of the perfumed flowers of *Gloxinia perennis* (Gesneriaceae) is described in detail, with excellent photographs. Two papers deal with ant/plant symbiosis including a study of the interactions between ant behaviour and extrafloral nectaries.

*Human Aspects* includes 18 papers, covering *History and development, History of nature exploration, History of nature conservation, Current conservation projects* and *Ecotourism and local development*. This part includes papers on the indigenous peoples, the history of scientific exploration in the area, and on conservation.

The book sums up well the impressive research which has been carried out in this region.

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