Field Guide to Butterflies of The Philippines, by Peter B. Hardy and James M. Lawrence (2017).

Siri Scientific Press, Manchester. UK, 488 pp.

The Philippines is an archipelago of more than 7,100 islands situated in southeast Asia. Currently, there are around 927 species of butterflies known from the country, of which a third of the total is endemic. The book's introduction gives a summary of the region's biogeography, and also covers one of the country's most pressing environmental issues, the decline of forest cover. It also reviews the geography and climate of the country.

The butterfly biology section provides introductory information on how to separate butterflies from moths. The life cycle and morphology of the different life stages are summarized, coupled with illustrations on the general morphology of egg, larval, and pupal stages for each butterfly family. Basic adult butterfly morphology is also illustrated. The adult intraspecific variation section covers a summary of sexual dimorphism, seasonal variation, individual polymorphism, geographical variation, and mimicry.

The species accounts section covers all the current species coupled with distribution, recorded hostplants, and notes on endemicity and rarity. Although it lacks identification keys, that is presumably because of the outstanding variation between species, and in the case of the Hesperiidae, genitalia dissection is sometimes required for proper identification. Not all species and no life histories are illustrated. The Philippine Lepidoptera Butterflies and Moths, Inc. (PhiLep) provided some of the photos taken in the wild, and the contributors are mentioned in the introduction. There are also illustrations of pinned specimens from the Manchester Museum, Manchester, United Kingdom. Finally, updated and compiled island distributions and recorded hostplants of species are included in the book.

This book is certainly very useful for schools, research institutions, and universities, especially in the Philippines. As a person who grew up in the country, there is definitely a need for schools to have natural history books in their libraries and P. Hardy and J. Lawrence's book should be in those libraries to help students, teachers, researchers, and citizen scientists in their subjects in biology and environmental science.

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003 *Troides magellanus* ♀ (190mm) Mt. Kitanglad, Mindanao 6.6.2008 *(P.C. Lee)*

006 *Atrophaneura semperi* (140mm) Mt. Kitanglad, Mindanao 5.6.2008 *(P.C. Lee)*

004 *Trogonoptera trojana* ♂ (190mm) Palawan *(J. van Beijnen)*

006 *Atrophaneura semperi* (140mm) Mt. Kitanglad, Mindanao 5.6.2008 *(P.C. Lee)*

004 *Trogonoptera trojana* ♀ (190mm) Palawan *(J. van Beijnen)*

007 *Pachliopta neptunus* (110mm) Palawan 6.10.2015 *(J. van Beijnen)*

005 *Trogonoptera brookiana* (160mm) Tonggo Swamp Forest, Capiz, Panay *(J.A. Alaban)*

008 *Pachliopta atropos* (105mm) Binduyan, Palawan 7.2.1993 *(P.B.H.)*

Species Accounts

Papilionidae

Subfamily Papilioninae

001) *Troides rhadamantus* (Boisduval, 1836)
GOLDEN BIRDWING
Plate 1 and 136

Distribution: Philippines, excluding Balabac, Calamian, Palawan.
Recorded hostplants: ARISTOLOCHIACEAE: *Aristolochia tagala* (Native Dutchman's Pipe/Indian Birthwort).
Endemic; common. Can utilise a wide range of habitats and can sometimes be seen taking nectar from flowers in gardens.

002) *Troides plateni* (Staudinger, 1888)
DR. PLATEN'S BIRDWING
Plate 1 and 136

Distribution: Balabac, Calamian, Palawan.
Recorded hostplants: ARISTOLOCHIACEAE: *Aristolochia* sp.
Endemic; uncommon/local. Replaces the very similar *T. rhadamantus* on Palawan and associated islands.

003) *Troides magellanus* (C. & R. Felder, 1862)
MAGELLAN BIRDWING
Plate 1, 2 and 136

Subspecies and distribution:
(i) *magellanus* (C. & R. Felder, 1862) – Bohol, Busuanga, Cebu, Cuyo, Homonhon, Leyte, Luzon, Marinduque, Masbate, Mindoro, Mindanao, Samar.
Recorded hostplants: ARISTOLOCHIACEAE: *Aristolochia debilis, A. tagala* (Native Dutchman's Pipe/Indian Birthwort), *A. zollingeriana*.
Uncommon/local.

004) *Trogonoptera trojana* (Honrath, 1886)
PALAWAN BIRDWING/TRIANGLE BIRDWING
Plate 2 and 136

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