# LIBELLULINE DRAGONFLIES OF BOHOL, CEBU, AND LEYTE

A Thesis

Presented to
the Faculty of the Graduate School
University of San Carlos

In Partial Fulfillment
of the Requirements for the Degree
Master of Science in Biology

21 JUL 197

bу

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June 1972

UNIVERSIT II CARLOS

### GRADUATE SCHOOL UNIVERSITY OF SAN CARLOS CEBU CITY

This Thesis attached hereto, entitled "LIBELLULINE DRAGONFLIES OF BOHOL, CEBU, AND LEYTE," prepared and submitted by Mr. Cristobal Garcia Plateros in partial fulfillment for the degree of Master of Science in Biology is hereby accepted.

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#### ACKNOWLEDGMENT

The author is indebted to Dr. Fr. Enrique Schoenig, S.V.D., Chairman, Biology Department, University of San Carlos, for his valuable suggestions, comments, critical readings and corrections of the final draft; to Prof. Francisco Nemenzo, professor emeritus, University of the Philippines, for his helpful criticisms and suggestions regarding the prefinal draft; and to Mr. Ricardo Deang, senior entomologist, Bureau of Plant Industry, Cebu station, for his suggestions and corrections of the arrangements of topics in the prefinal draft.

The author wishes to thank Sr. Julita Ruelo, S.Sp.S., of Fu Jen University, Taiwan, for her comments, critical readings and corrections of the first draft; Dr. Syoziro Asahina, Entomology Department, The National Institute of Health, Tokyo, Japan, for sending me Xerox copies of some valuable references, and for verifying the identification of my materials; Dr. M. A. Lieftinck of Rhenen Netherlands, and Mr. Shozo Ishida of Okinoshima, Japan, for sending me copies of their publications and for verifying also the identification of my specimens; Prof. Julian Jumalon, Lepidoptera researcher, University of San Carlos, for his color determination; Mr. James Miller, for translating from French to English Sely's

publications; and Miss Dolores Jumao-as for her help in correcting the prefinal draft.

The writer is grateful to those who helped in collecting dragonfly specimens used in this study, and to my beloved wife and children, who are my inspirations, and whose continuous moral support made this study possible.

#### ABSTRACT

Dragonflies of the family Libellulidae, subfamily Libellulinae are the most common and the biggest group of the Odonate fauna. They are mostly sun lovers; and two or three species are crepuscular. These insects are rarely found in places where there are no bodies of water.

This paper presents mainly the taxonomic account of 12 genera and 17 species of the subfamily Libellulinae collected from Bohol, Cebu, and Leyte. The specimens studied are:

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Orthetrum sabina sabina (Drury)
O. testaceum testaceum (Burmeister)
O. pruinosum clelia (Selys)
O. chrysis (Selys)
Diplacina bolivari (Selys)
Cratilla lineata (Brauer)
Lathrecista asiatica (Fabricius)
Potamarche obscura (Rambur)
Diplacedes trivialis (Rambur)
Lineata servilia servilia (Drury)
Leurothemis terminata terminata (Rambur)
Lineata aurora (Burmeister)
T. festiva (Rambur)
Zyxomma obtusum (Selys)
Tholymis tillarga (Fabricius)
Pantala flavescens (Fabricius)
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Orthetrum chrysis has never appeared in the works of previous authors. This is possibly recorded for the first time in the Philippines particularly in Cebu.

Detailed generic and specific descriptions are made based on: (a) body colorations and forms; (b) wing color and venations; (c) genital structures; and (d) to a minor extent the flight and breeding habits.

Body colorations and forms vary with the species. They vary slightly in both sexes in non-dimorphic forms, but greatly in dimorphic species.

Wing venation vary slightly with intrageneric species, but considerably with species under different genera. Antenodal and postnodal nervures in the two

pairs of wings vary in numbers with the same individual. These venational characters are not diagnostic of a species.

Male genitalia vary insignificantly with intrageneric species, but greatly with the species under different genera. Female genitalia of species under different genera show certain degree of similarities in external appearance.

Certain species are slow fliers, some are swift and short fliers, and others are swift and strong fliers.

Each species shows a characteristics behavior of oviposition. Eggs are deposited either directly or indirectly into the water.

In the species studied, the males show dominance over the females in numbers of individuals, except in Neurothemis terminata terminata in which the condition is reversed. Heterochromatic females of N. terminata terminata are more abundant than the isochromatic forms.

Based on the collected specimens O. chrysis is endemic in Cebu, while O. testaceum testaceum and C. lineata are endemic in Leyte. Trithemis aurora and T. festiva are more common in Cebu than in Bohol and Leyte. Diplacina bolivari, P. obscura, and C. servilia servilia are more common in Leyte than in Bohol and Cebu. The rest are very common in the three Visayan provinces. Of the crepuscular species (Z. obtusum and T. tillarga) only one male of T. tillarga has been collected in Bohol, since no collection has been made in this place at dusk.

This study may serve as the basis for other experimental researches on these insects.

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