

LAPORAN AKHIR
PENYELIDIKAN FUNDAMENTAL

**INVENTORY OF LEPIDOPTERA :
RHOPALOCERA IN LOWLAND RAIN
FORESTS OF SABAH : A QUANTATIVE
ASSESSMENT OF BETA-DIVERSITY
(B-0804-11-ER/U006)**

MARYATI MOHAMED
MOHD. FAIRUS JALIL

Institute Biologi Tropika dan Pemuliharaan
Universiti Malaysia Sabah

Oktober 2003



UMS
UNIVERSITI MALAYSIA SABAH

1.0 INTRODUCTION

Butterflies are an abundant and diverse group of animals and a conspicuous part of virtually all of the world's terrestrial ecosystems (New, 1997). They appeal to people in a unique way, and in the popular mind, people often separate "butterflies" from "insects," as if these are different groups of animals. Studying and watching butterflies perhaps ranks second only to ornithology as a pastime for naturalists interested in animal life (Pyle, 1992). Unlike most other insects, even their closest relatives the moths, butterflies are accepted readily as aesthetically and culturally desirable (New, 1997). They are seen as being intrinsically worthy of protection. Conservation of butterflies is also a field of increasing interest in many parts of the world. It is important to communicate the need for invertebrate conservation to people who might not otherwise be sympathetic to it. Butterflies are an important flagship group for advocacy of invertebrates - a bridge between the publicly acceptable world of conserving mammals and birds, and the widespread antagonism toward the mass of less conspicuous animals that dominate our natural world (New, 1997). Recently, many species have declined markedly in abundance, or become extinct due to environmental pollution, habitat disturbance, and loss of vegetation as a consequence of human activities.

Many species of butterfly are now far less abundant or widely distributed than they used to be, and declines of some have been precisely documented. An investigation in The Netherlands showed that the distribution and abundance of many Dutch species of butterflies has decreased sharply (Geraedts, 1986); of 71 native species, 15 have become extinct. Other investigations in some nations also show several species populations have declined already (Pollard & Yates, 1992). As with other groups of animals, many of these declines can be attributed directly to human influences.

The butterfly fauna of the Orient has been relatively well-studied, with major

