EXPLANATION OF PLATES

Plate 1. Research were carried out mainly around Gunung (Mount) Gadut, 1855 m above the sea level, about 20 km east from Padang, West Sumatra.

Above: Gunung Gadut viewed from the Ulu Gadut campus of Department of Botany, Andalas University. (photo. by M. Hotta) **Below:** Canopy of Pinang Pinang Plot in Ulu Gadut Valley, viewed from Mr. Satar's house, the research base. The emergent crown is *Swintonia schwenckii*, tree no. 69, 58.6 meters high in September 1981. (photo by M. Hotta)

Plate 2. *Impatiens* species (Balsaminaceae) distributed in West Sumatra. The analysis of speciation mechanisms and interrelationships between *Impatiens* species and insects were one of the scientific targets of the present research.

Above: *Impatiens albo-flava* Miq. An understory herb distributed from lowland to hill forests. Airsirah pass, ca. 800 m alt. (photo. by M. Hotta) **Middle:** A rheophyte plant, *I. diepenhorstii* Miq. Beside rapid stream at Bukit Gadang, ca. 1200 m alt., Talang Babungo, Alahanpanjang. (photo. by H. Okada) **Below:** *I. 'gadutensis'* M. Hotta, nom. nud. An endemic species to the summit area of Gunung Gadut. Near camp site of G. Gadut Plot, ca. 1500 m alt. (photo. by M. Hotta)

Plate 3. *Impatiens* species (Balsaminaceae) distributed in West Sumatra.

Above: *Impatiens pyrrhotricha* Miq. Large yellow flowered *Impatiens* with ca. 30-70 cm tall. Beside Danau Talang Lake, ca. 1700 m alt., Alahanpanjang. (photo. by M. Hotta) **Middle:** *I. eubotrya* Miq. Batang Barus, ca. 1300 m alt., Alahanpanjang. (photo. M. Hotta) **Below:** *I. junghuhnii* Miq. Muko Muko station, ca. 800 m alt., Maninjau. (photo. by M. Hotta)

Plate 4. Interrelationships between plants and animals at tropical wet forests were analyzed.

Above: *Impatiens platypetala*, widely distributed in Malesia region with pretty pink or white flower, Airsirah pass, ca. 1000 m alt. (photo. by M. Hotta) **Middle left:** A hawkmoth, *Macroglossum corythus*, visited and foraged the flowers of *Impatiens platypetala*. Airsirah pass, ca. 1000 m alt. (photo. by T. Ichino) **Middle right:** A big bumblebee, *Bombus senex*, with silver hairs was collected at the camp site of G. Gadut Plot, ca. 1500 m alt., where is the location of *Impatiens 'gadutensis'*. (photo. by T. Ichino) **Below:** cf. *Polyalthia* sp. (Annonaceae). Some flowers were bagged for the study of pollination biology. Near Pinang Pinang Atas Transect, ca. 500 m alt., Ulu Gadut. (photo. by M. Hotta)

Plate 5. Analysis of pollination biology of *Musa* (Musaceae) was a main activity of this research.

Above: A gigantic herb, *Musa acuminata* Coll. subsp. *halabanensis* (Meijer) M. Hotta was distributed at wastelands near stream or gap of forests. Ulu Gadut Valley, ca. 400 m alt. **Middle left:** A collection of *M. acuminata* subsp. *halabanensis* near Kelok Sembilan, Payakunbuh, ca. 1000 m alt. (photo. by T. Ichino) **Middle right:** a big herb, *M. salaccensis* Zoll. Ulu Gadut Valley, ca. 400 m alt. (photo. by M. Hotta) **Below:** A worker of vespid, *Polybioides raphigastra* (Vespidae), foraged flowers of *M. salaccensis*. (photo. by T. Ichino)

Plate 6. Diversity in size and shape of pitchers within the genus *Nepenthes* (Nepenthaceae).

Above: *Nepenthes bongso* Korth. with peculiar pitchers. Near summit of Gunung Gadut, ca. 1500 m alt. (photo. by M. Hotta) **Middle:** Natural hybrids of *Nepenthes* occurred at the places where multiple species were distributed sympatrically. From left to right: *N. alata* Blanco, two types of natural hybrid *N. alata* x *ampullaria*, and *N. ampullaria* Jack. Note the shape and position of lid of pitchers. Near Bonjor. **Below:** Variations of pitchers within *N. singalana* Becc. from juvenile stage (right) to mature (left). Near summit of Gn. Gadut, ca. 1500 m alt. (photo. by M. Hotta)

Plate 7. **Upper left:** *Monophyllaea hirtella* Miq. (Gesneriaceae). A unique plant having only one cotyledonous leaf throughout perennial life. Ladang, Padi, ca. 500 m alt. (photo. by M. Hotta) **Upper right:** A hybrid individual of *Monophyllaea hirtella* x *M. horsfieldii* (Gesneriaceae) with many inflorescences occurring from the base of leaf. Ladang Padi, ca. 500 m alt. (photo. by H. Okada) **Lower left:** *Pentastemona egregia* (Stemonaceae). Ladang Padi, ca. 500 m alt. (photo. by M. Hotta) **Lower right:** A montane annonaceous species, *Disepalum platypetalus* Merr. (Annonaceae). A plot tree no. 174 of G. Gadut Plot. ca. 1550 m alt. (photo. by H. Okada)

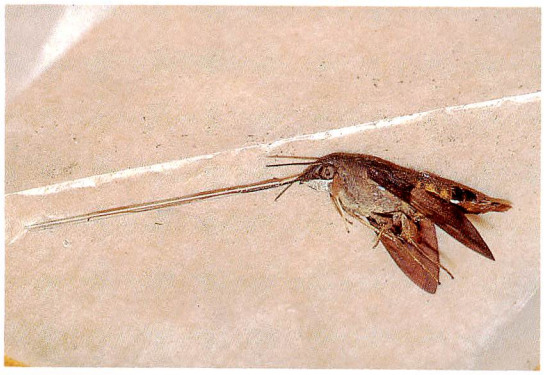
Plate 8. Misterious and attractive plants distributed in Gunung Gadut.

Above: One of the biggest flowers in the world, *Rafflesia* sp. (Rafflesiaceae), which is not rare in foothill forests of Ulu Gadut Valley. Bukit Gajabuih, ca. 600 m alt., Ulu Gadut. (photo. by H. Okada) **Middle left:** *Achasma macrocheilos* Griff. (Zingiberaceae). Ulu Gadut, ca. 500 m alt. (photo. by M. Hotta) **Middle right:** *Rhizanthes zippelii* (Bl.) Spach. (Rafflesiaceae), a parasite plant of ca. 15 cm in diameter. Foothill of Bukit Gambir, ca. 600 m alt., Ulu Gadut. (photo by H. Okada) **Below** Liliaceous forest floor herb, *Disporum cantoniense*, near Airsirah, ca. 800 m alt. (photo. by M. Hotta)

PLATE 1

PLATE 2

PLATE 4



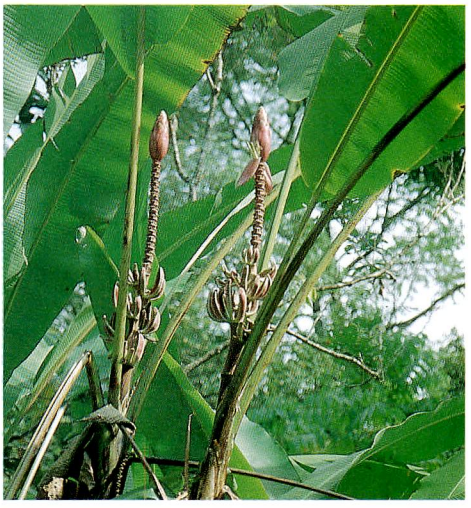


PLATE 6

PLATE 8