Research Report of the NIES/FRIM/UPM joint Research Project (1998)

CONTENTS

I DETERMINING INDICATORS FOR SUSTAINABLE MANAGEMENT OF TROPICAL FOREST

Comparison of tree species diversity, species composition and population structures between regenerating and primary forest plots in a hill dipterocarp forest.
 Abdul Rahman Kassim (FRIM)
 Azizi Ripin (FRIM)
 K. Niiyama (FFPRI, Kyushu)
 H. Tanouchi (FFPRI, Hokkaido)

 2. Gaseous exchange characteristics of tropical tree species.

 Lai Hoe Ang (FRIM)
 Yoosuke Matsumoto (FFPRI)

Yoosuke Matsumoto (FFPRI) Yutaka Maruyama (FFPRI) Atsushi Ishida (FFPRI) Akira Uemura (FFPRI)

S. Iida (FFPRI, Hokkaido)

Intra and inter-specific differences in growth and mortality of tropical seedlings grown under different light environment.
 Mohamad Awang (UPM)
 Ahmad Makmom Abdulah (UPM)
 Akio Furukawa (Nara Women's Univ.)
 Taketo Yokota (Nara Women's Univ.)

4. Leaf phenology, leaf dynamics and growth characteristics of saplings of a canopy species, *Elateriospermum tapos* (Euphorbiaceae) in a tropical rain forest in Peninsular Malaysia.

> Noriyuki Osada (Kyoto Univ.) Hiroshi Takeda (Kyoto Univ.) Akio Furukawa (Nara Women's Univ.)

5. Logging effect for genetic diversity of *Shorea curtisii* in hill Dipterocarps forest of Peninsular Malaysia.

Norwati Muhammad (FRIM) Chai-Ting Lee (FRIM)

Muhamad Awang (UPM)

S. Appanah (FRIM)

Yoshihiko Tsumura (FFPRI) Tokuko Ujino (FFPRI) Soon-Leon Lee (FRIM)

Teruyoshi Nagamitsu (FFPRI) Takayuki Kawahara (FFPRI) Hiroshi Yoshimaru (FFPRI)

A quantitative comparison of pteridophytes diversity in small scales among different climatic regions in eastern Asia.
 Saw Leng Guan (FRIM) Toshiyuki Sato (Shinshu Univ.)

IM) Iosh

Toshiyuki Sato (Shinshu Univ.) Akio Furukawa (Nara Women's Univ.)

7. Physiological responses of *Dipterocarpus sublamellatus* as correlate of the natural regeneration.

N. Manokaran (FRIM)

Naishen Liang (NIES) Toshinori Okuda (NIES) Yanhong Tang (NIES)

II ANIMAL-PLANT INTERACTIONS IN DISTURBED AND UNDISTURBED FORESTS

- Effect of deforestation, disturbance, and fragmentation on mammalian community in a tropical rain forest.
 Louis C. Ratnam (FRIM) Shingo Miura (FFPRI)
- Edge effects on the nest predation and avian community in Pasoh Nature Reserve. *Zubaid Akbar Mukht Ahmad (UKM) Azarae Haji Idris (UM)*
- Distribution of small mammals and their habitat preference in the Pasoh Forest Reserve. Nor Azman Hussein (FRIM)
 Masatoshi Yasuda (FFPRI) Nobuo Ishii (JWRC)
- 4. Understorey butterflies and soil micro-arthropoda as an indicator group.
 Laurence G. Kirton (FRIM) Kenji Fukuyama (FFPRI) Ahmad S. Sajap (UPM) Kaoru Maeto (FFPRI)
- 5. Comparative ecology of fruiting phenology, seed and seedling characteristics of Southeast Asian dipterocarp species in relation to their physiological and biological factors.

N. Manokaran (FRIM)

Shinya Numata (TMU) Naoki Kachi (TMU) Toshinori Okuda (NIES)

6. Local variation of canopy structure in relation to soils and topography and the implications for species diversity in a rain forest of Peninsular Malaysia.

N. Manokaran (FRIM)ToNor Azman Hussein (FRIM)NaLeng Guan Saw (FRIM)Amir Husni Mohd Shariff (FRIM)

Toshinori Okuda (NIES) Naoki Adachi (NIES)

7. Leaf developmental process and crown structure of a tropical pioneer tree, *Macaranga gigantea* in Peninsular Malaysia.

Makmon Abdullah (UPM)Toshihiro Yamada (NIES)Muhamad Awang (UPM)Toshinori Okuda (NIES)Akio Furukawa (Nara Women's Univ.)

 8. Dynamics of canopy gaps in lowland Dipterocarp forest – Fate and origin of individual gaps Nor Azman Hussein (FRIM) Naoki Adachi (NIES)
 N. Manokaran (FRIM) Toshinori Okuda (NIES)

III CHANGES IN PHYSICAL PROCESSES OF DISTURBED FORESTS

 Physical and chemical properties of Bukit Tarek watershed soil. *Wan Rashidah Wan Abdul Kadir (FRIM) Zulkifli Yusof (FRIM) Baharuddin Kasran (FRIM)* Effects of tree falls on diversity of wood decay fungi *S. S. Lee (FRIM) T. Hattori (FFPRI)* Ecology of termites subjected to forest disturbance *Laurence G. Kirton (FRIM) Kenji Takamura (NIES)* Runoff characteristics of tropical rain forest *Abdul Rahim Nik (FRIM) Shoji Noguchi (FFPRI)* Zulkifli Yusop (FRIM) Baharuddin Kasran (FRIM) Yoshio Tsuboyama (FFPRI) Makoto Tani (FFPRI)

5. On characteristics of evapotranspiration from tropical rain forests
 Abdul Rahim Nik (FRIM)
 Zulkifli Yusop (FRIM)
 Yoshikazu Ohtani (FRIM)

Baharuddin Kasran (FRIM)

Makoto Tani (FFPRI) Yoshikazu Ohtani (FFPRI) Tsutomu Watanabe (FFPRI) Michiaki Okada (FFPRI) Shoji Noguchi (FFPRI)