## Recent Literature: Botany

#### Balakrisnan, N.P.

1970. Nomenclatural Notes on Some Flowering Plants-II.

J. Bomb. Nat. Hist. Soc. 67 (1): 57-66.

Dealing with 77 taxa in 15 families of flowering plants. Following are involving Thai species:—

Micropera rostratum (Roxb.) Balak. is accepted instead of Camarotis purpurea Lindl. (Orchidaceae);

Euaraliopsis polyacantha (Roxb.) Balak. is for Brassaiopsis palmata (Roxb.) Kurz (Araliaceae).

#### Balakrisnan, N.P.

1970. Studies in Indian Euphorbiaceae-IV.

J. Bomb. Nat. Hist. Soc. 67 (2): 299-306, 2 pls.

Dealing with 3 species of the genus Agrostistachys Dalzell.

## Banerji, M.L. and B.B. Thapa

1970. Orchids of Napal-3

J. Bomb. Nat. Hist. Soc. 67 (2): 138-152.

Dealing with *Dendrobium* (20), *Ephemerantha* (1), *Epigeneium* (2) and *Ēria* (10). Identification keys to species are provided. Orchid flora of Nepal is similar to that of Thailand, but poorer in number.

## Bennet, S.S.R.

- 1970. Miscellaneous Notes 21. The Taxonomic Status of the Section *Fissendocarpa* (Haines) Raven of the Onagraceous Genus *Ludwigia* Linn.
  - J. Bomb. Nat. Hist. Soc. 67 (1): 125-126.

The section Fissendocarpa (Haines) Raven is raised to a generic rank, Fissendocarpa (Haines) Bennet, being a monotypic one according to its peculiar fruits and dimorphous seeds. The only species is F. linifolia (Vahl) Bennet having Jussiaea linifolia Vahl as its basionym.

#### Dickison, William C.

1970. Comparative Morphological Studies in Dilleniaceae. VI. Stamens and Young Stem.

J. Arn. Arb. 51: 403-422, 4 plts.

The author has the opinion that the retention of the order Dilleniales is the most satisfactory treatment. The family appears to be an extremely old one. It has a close relationship of the Magnoliales from which it probably originated at an early stage of the evolution. It gave rise to the Guttiferale, and Theales.

#### Dransfield, J. & T.C. Whitmore

1970. A Podostemaceae new to Malaya. *Indotristicha malayana*. Blumea 18 (1): 153-155, with one figure.

The new plant is found in Pahang and Trengganu, the second species of the formerly monotypic genus.

### Dy Phon, Pauline

1970. La Végétation du Sud-Ést Cambodgien. Secteur Baie de Kompong Som, Chaine de l'Éléphant et Plateau de Kirirom. Ann. Fac. Sc. Phnom Penh 3: 1-138, 12 plates.

The author gives a thorough study of the vegetation of southeast Cambodia

In general the vegetation of southeast Cambodia is similar to southeast Thailand; the present of a peat swamp forest at Kompong Som is remarkable, this due to the heavier precipitation. Also the formation of dwarf lower montane forest on the Bokor is illustrating the extreme exposure to wind, rain and temperature.

## Fukuoka, Nobuyuki

1970. Contribution to the Flora of Southeast Asia. III. Hedyotis (Rubiaceae) of Thailand. Southeast Asia Studies, 8: 305-336, 8 figs.

Enumerating 56 species, an identification key is provided; 2 new species are described: *H. nalampooni* and *H. pahompokae*. The genus *Oldenlandia* is treated as a synonym of *Hedyotis*, thus new combinations are resulted.

Hartley, Thomas G.

1970. Additional notes on the Malesian Species of Zanthoxylum (Rataceae)

J. Arn. Arb. 51: 423-430.

Zanthoxylum acanthopodium DC. has been recorded in Pahang, and thus fills the gap between Sumatra and Thailand.

Z. rhetsa (Roxb.) DC. is accepted instead of Z. limonella (Dennst.) Alston and Z. budrunga (Roxb.) DC., the former being a nomina nuda, the latter was published on the same date; the choice of the name Z. rhetsa over Z. budrunga follows Hooker f., Fl. Brit. Ind. 1: 495, 1875.

Hartog, C. Den and F. van der Plas

1970. A synopsis of the Lemnaceae. Blumea **18**: 355-368, 1 fig.

The family is divided into 2 subfamilies, Lemnoideae and Wolffioideae, the former contains 2 genera, Spivodela and Lemna, whereas Wolffia, Wolffiella, Wolffiopsis and Pseudowolffia are to the latter.

Identification keys to subfamilies and genera are provided.

Hartog, C. Den

1970. The Sea-grasses of the World.

Verh. Konink. Nederl. Akad. Wet. Afd. Nals. 59: 1-275, 63 figs., 31 photos.

The sea-grasses belong to families Potamogetonaceae (9 genera) and Hydrocharitaceae (3 genera). The work is a world-wide monograph. An identification key to families and genera basing on sterile material is provided. Members of Potamogetonaceae are poorly represented in the Thai water, so far only Cymodocea rotundata Ehrenb. & Hempr. ex Aschers is recorded, but it is likely that members of Halodule and Syringo dium may turn up after a thorough investigation. Hydrocharitaceae is well represented by the genera Thalassia (one species) and Halophila (3 species), but Enhalus is also expected to occur as well.

### Hennipman, E.

1970. Some novelties in Bolbitis from Asia and the Pacific (Filices). Blumea 18 (1): 147-149.

Some new varieties are recognized with some new combinations.

#### Hirano, Minoru

1971. Fresh Water Algae of the Northwestern Himalayas. Contr. Biol. Lap. Tokyo Univ. 23: 81-116, 7 plts.

The study is based on the collection made by the Japanese Scientific Expedition to Nepal in 1958. One hundred and eighteen taxa are enumerated with one new variety, Cosmarium tumens Nordst. var. rotundatum.

### Holttum, R.E.

1970. The genus *Orchidantha* (Lowiaceae) Gard. Bull. Sing. 25: 239-246, 1 pl.

Six species are enumerated with an identification key. The plants are belonging to S.-E. Asia ranging from Laos through Thailand, Malay Peninsula to Borneo. O. siamensis Larsen is recorded from Thailand, but O. fimbriata Holtt., a new species described in this paper, should be located in Thailand as well.

#### Iwatsuki, Kunio

1970. Taxonomic Studies of Pteridophyta IX. Acta Phytotax. Geobot. 24 (4-5), 5 figs.

The systematic position of the genus *Microchlaena* Ching is being discussed. Only one species is presently known: *M. cuspidata* (Bedd.) Copel. In Thailand this species occurs in the altitude higher than 600 m. in the evergreen forest.

## Jain, S.K. & C.R. Tarafder

1970. Medicinal Plant-lore of the Santals. Econ. Bot. 24: 241-278.

The santals are one of the largest tribes of India, numbering about 3 millions inhabiting chiefly the Santal Pargana district of Bihar. A list

of 377 flowering plants and ferns is given with indication of usage. Classification of plants in different families is shown in Appendix I and selected Indian and English names are listed in Appendix II.

#### Kacheroo, P.

1970. History of the Genus *Cheilolejeunea*. Ceylon J. Sci. (Bio. Sci.) 8: 1-10.

The genus of 16 species is subdivided into 4 subgenera: Cheilolejeunea Spr., Euosmolejeunea Spruce, Xenolejeunea Kacheroo & Schuster and Strepsilejeunea Spr.; an identification key to subgenera is being given.

### Kazmi, S.M.A.

1970. A Revision of the Boraginaceae of West Pakistan and Kashmir.

J. Arn. Arb. 51: 133-184 & 367-402.

These installments deal with 37 species in 7 genera. A key to 36 genera is being given. Some species also occur in Thailand.

### Keng, Hsuan

1970. Further observations on Ancistrocladus tectorius (Ancistrocladaceae).

Gard. Bull. Sing. 25: 235-237., 1 plt., 1 fig.

"The sympodial arrhate branches represent the modified peduncles and pedicels of a partially developed inflorescence."

### Knaap-Van Meeuwen, M.S.

1970. A revision of four genera of the tribe Leguminosae—Caesalpinioideae—Cynometreae in Indomalesia and the Pacific.

Blumea 18 (1): 1-52, 7 figures.

Only 5 species of Cynometra are occurring in Thailand C. malaccensis v. Meeuwen (=C. inaequifolia Baker non Asa Gray); C. cauliflora Linn. (cultivated); C. iripa Kostel (=C. ramiflora var. mimosoides Prain); C. ramiflora Linné (=C. bijuga Span.) and C. craibii Gagnep. It is likely that Maniltoa polyandra (Roxb.) Hanns (=Cynometra polyandra Roxb.) will occur in Thailand.

Kostermans, A.J.G.H.

1970. A new species of *Cinnamomum* Sch. Reinwardtia 8: 13-15, 1 fig.

Cinnamomum tahijanum Kosterm. is described from Borneo.

1970. The genus *Jarandersonia* Kosterm. Reinwardtia 8: 17-20, 2 figs.

Two new species and one new combination are recorded from Sabah and Sarawak.

1970. Materials for a revision of Lauraceae III. Reinwardtia 8: 21-196, 68 figs.

A total of 153 species are discussed, of which 67 species are recognised as new to science. Following species are recorded from Thailand:— Cinnamomum kerrii Kosterm., C. porrectum (Roxb.) Kosterm. [Syn. C. parthenoxylon (Jack) Nees, and C. glanduliferum Nees], C. sintoc Bl. (Syn. C. cinereum Gamble), C. tenuipilis Kosterm., Phoebe dehaasiaefolia Kosterm., Ph. lanceolata (Wall. ex Nees) Nees, Ph. tavoyana (Meissn.) Hook. f.

## Long, Robert W.

1970. The genera of Acanthaceae in the Southeastern United States J. Arn. Arb. 51 (3): 257-309, 5 figs.

Thunbergia is kept under the Subfamily Thunbergioideae Lindau; a key to 13 genera is given.

# Majumdar, N.C.

1970. Notes on Stellaria saxatilis Buch.-Ham. ex D. Don, Stellaria vestita Kurz and Stellaria sikkimensis Hook. f.

J. Bomb. Nat. Hist. Soc. 67 (1): 26-29.

Stellaria saxatilis Buch.-Ham. ex D. Don and S. vestita Kurz are considered as conspecific. S. Vestita Kurz is accepted as the correct name for the resulting taxon. S. sikkimensis Hk.f. is re-established as a distinct species,

Stellaria saxatilis Buch.-Ham. ex D. Don has been recorded by Craib from Doi Inthanon in Chiang Mai at the elevation of 1800–2000 m, based on the plant collected by the late A.F.G. Kerr (No. 6297).

#### Murata, Gen

1970. Contribution to the Flora of Southeast Asia. IV. A list of Labiatae known from Thailand.

Southeast Asian Studies 8: 489-517. 1970.

An enumeration of 29 genera and 93 species is made on Thai plants, no novelty, many new records.

### Ohashi, H. and K. Sohma

1970. A Revision of the genus Eucresta (Leguminosae).

J. Fac. Sc. Univ. Tokyo. Sec. III. 10 (11-13): 207-231, 4 plates and 5 figs.

Dealing with 4 species, E. horsfieldii also occurs in Thailand.

# Prowse, G.A. & Ratnasabapathy, M.

1970. A species list of freshwater Algae from the Taiping lakes.

Gard. Bull. Sing. 25: 179-187.

Listing 94 species in 17 families, among these the desmids are prominent.

# Seidenfaden, Gunnar

1970. Contributions to the Orchid Flora of Thailand II. Bot. Tidsskr. 65: 313-370, 29 figs.

An additional records of 18 species are given including 10 new taxa: Malaxis concava, Dendrobium unicum, Plocoglotis mirabilis, Bulbophyllum kanburiense, B. sanitii, B. bisetoides, Arachnis limax, Ascocentrum semiteretifolia, Sarcanthus complicatus, and S. Tricornis.

#### Shimizu, Tatemi

1970. Contributions to the Flora of Southeast Asia. II.

Impatiens of Thailand and Malaya.

Southeast Asian Studies 8: 187-217.

Dealing with 47 species, 17 of which are limestone-loving plants; 4 species are recorded for the first time from Thailand.

Owing to the author's opinion, *Impatiens sarcantha* Hook. f. ex Ridley is reduced to *I. griffithii* Hk. f. & Th. var. sarcantha (Hk. f.) T. Schim., *I. be tongensis* Craib is a synonym of *I. exilipes* Hook. f. ex Ridl.

### Soepadmo, E.

1970. Florae Malesianae Praecursores XLIX. Malesian species of *Lithocarpus* Bl. (Fagaceae).

Reinwardtia 8: 197-308, one map, 13 figs.

Lithocarpus Bl. (1826) is considered to include Synaedrys Lindl. (1836), Cyclobalanus (Endl.) Oerstedt (1867, p.p.), and Pasania (Miq.) Oerstedt (1867, p.p.).

One hundred and four species are recorded from Malesia, of which 25 are new to science and 7 are new combinations.

A comparative table is given to differentiate *Lithocarpus* from *Castanopsis*. Detail studies on flowers both males and females are under taken and illustrated.

Following species are reported from Thailand:— L. curtisii (King ex Hook. f.) A. Camus, L. cyclophorus (Endl.) A. Camus, L. elegans (Bl.) Hatus. ex Soep. R. encleisocarpus (Korth.) A. Camus, L. falconeri (Kurz) Rehd., L. hendersonianus A. Camus, L. longispinus Barn., L. macphailii Hend.) Barn., L. neorobinsonii A. Camus, L. pattaniensis Barn., L. scortechinii (King ex Hook. f.) A. Camus, L. sundaicus (Bl.) Rehd., L. wallichianus (Lindl. ex Hance) Rehd., and L. wrayi (King) A. Camus.

#### Stevens, P.F.

1971. A Classification of the Ericaceae: Subfamilies and tribes. Bot. J. Linn. Soc. 64: 1-53, 7 figs.

The variation shown by 60 characters is tabulated for the whole of the Ericaceae. Six subfamilies are recognised. A key to subfamilies and to genera is given.

In this study the family Vacciniaceae is treated as one of the subfamilies including the following genera so far recorded from Thailand:—Vaccinium, Gaultheria, Lyonia and Diplycosia.

Stone, B.C.

1970. Malayan climbing pandans—the genus Freycinetia in Malaya. Mal. Nat. J. 23: 84-91, 3 plates.

Dealing with 8 species, a simplified key to Malayan Freycinetia is provided.

Species recorded from Thailand are: F. javanica Bl. from Khao Kalakiri in Pattani, Khao Nom Sao and Khao Luang in Nakhon Si Thammarat; F. sumatrana Hemsley from S. Thailand at Khao Kalakiri, Pattani.

1970. Materials for a monograph of Freycinetia Gaud. (Pandanaceae) V. Singapore, Malaya and Thailand.

Gard. Bull. Sing. 25: 189-207, 2 plts, 3 figs.

Eight species are enumerated; 2 species are recorded from Thailand, i.e. *F. javanica* Bl. and *F. sumatrana* Hemsl. from the peninsular region. One new species is recognised: *F. kamiana* Stone from Selangor, Malaysia. An identification key is provided.

1970. Materials for a monograph of Freycinetia Gaud. (Pandanaceae) VI. Species of Borneo.

Gard. Bull. Sing 25: 209-233, 6 figs.

Twenty-four species are enumerated including 4 new species. An identification key is provided.

1970. The Botanical Identity of "Mengkuang" a Common *Pandanus* in Cultivation in Malaya.

Mal. Agric. 9: 34-44, 5 plts.

A thorough study on Pandanus kaida Kurz.

#### Stone, B.C. & T.C. Whitmore

1970. Notes on the systematy of Solomon Islands' plants and some of their New Guinea relatives. XI.

Reinwardtia 8: 3-11, 5 figs. Djakarta.

Two undescribed species of the genus *Tapeinosperma* Hook. f. (Myrsinaceae) are named and validated.

### Tagawa, M. & Iwatsuki, K.

1970. New and interesting ferns from Thailand. 6.

Acta Phytotax. Geobot. 24 (4-6): 175-181.

Dealing with 13 species in 8 genera. Crypsinus hirsutus Tagawa & Iwatsuki is described as a new taxon; an identification key to 11 species of Araiostegia is given.

#### Tixier, Pierre

1970. Bryophytae indosinicae. Enumeratio muscorum lectorum in ditione laosensi

Ann. Fac. Sc. Phom Penh 3: 139-148.

An enumeration of 102 species of mosses mainly collected by the late Dr. A.F.G. Kerr. is given; many species are endemic to Laos.

1970. Bryophytae Indosinicae. Bryophytes du Laos méridional (Paksé et Bolovens)

Ann. Fac. Sc. Phnom Penh 3: 150-172, 5 figs.

The author gives a list of his collection in the region of Paksé and Paksong containing 100 species of mosses and liverworts, of which 3 species and one variety are described as new to science.

1970. Contribution à la connaissance du genre Cololejeunea en Asie du Sud-Est. II. la Section Radulae (nov.-sect.) du sous-genre Lasiolejeunea.

Ann. Fac. Sc. Phnom Penh 3: 175-190, 9 figs.

A new Section, Radulae is created to accommodate 9 species which are described as new to science, basing on his own collection from Vietnam,

Thailand, Cambodia and the Philippines. The species from Thailand is *Calolejeunea chamlongiana* Tix. in recognition of Mr. Chamlong Pengkhlai, Chief, Section of Botany and Zoology, Forest Products Research Division, Royal Forest Department, Bangkok, based on the collection from Surat Thani, Thanom Phrao.

1970. Notules sur l'écologie de la forêt de montagne en Asie du Sud-Ést. II. Évaporation en saison sèche.

Ann. Fac. Sc. Phnom Penh 3: 191-202, 7 tables.

It is apparent that in the higher altitude the wind current is strong during the dry season and effects a higher evaporation.

A comparative study between the coffee and tea plantations shows that evaporation in the latter is higher due to its more exposed condition.

#### Vidal, J.E. & J. Lemoine

1970. Contribution a l'éthnobotanique des Hmong du Laos.

J. Agric. Trop. Bot. Appl. 17: 1-59, 7 plates and one map.

The Hmong people are known to the Laotiand as Meos and to the Chinese as Miaos. They are believed to migrate from South China (Yunnan, Tse-Chuan, Kweichou and Kwangsi), eastwards into North Vietnam, westwards into Burma and southwards into Thailand through Laos and Shan States. The present population is approximately 1,129,000, speaking 7 dialects. The migration is due to the trouble caused by war.

The Hmongs in Laos are composed only of 2 dialects, the Green Hmong and the White Hmong; the transcription of the language is given. A short note on their habit and culture is also given. A list of 320 plants involved in their everyday lives are appended with some line drawings.

T. Smitinand