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Plants of Malaysia

P. F. Stevens et al. 257.

Sarawak, 1st Division, Matang Ridge, 18.xii.1975, 290 m.

Mixed forest on ridge.

Tree 28 m. tall, d.b.h. 55 cm., no spurs, but roots exposed on the slope; outer bark brown, slightly hoop-marked, no scales, the inner surface brownish; under bark dark red; inner bark meat red, laminated; latex very sparse, yellow, slightly opaque?, very sticky; lamina more or less V-shaped, dark shiny green above, the midrib slightly paler, rounded, below slightly paler, very fine veins, the midrib yellowish green, rounded; inflorescence white; fruit green, acute at the apex. Spirit material.

Guttiferae - *Calophyllum canum* Hooker f. (*C. borneense* Vesque s. str.)

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Plants of Malaysia

P. F. Stevens et al. 273.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 580 m.

Mixed forest on ridge.

Tree 30 m. tall, d.b.h. 55 cm., stilt roots to 80 cm. tall, the trunk fluted for 2 m.; outer bark brown, flaky, pustular, hardly cracked, the inner surface yellowish brown, finely striate; under bark somewhat orange reddish; inner bark pale meat red, strongly laminated; latex yellow, almost clear, very sticky; lamina mid-dark green above, the midrib paler, slightly raised, below pale green, the veins very clear, the midrib pale (yellowish) green, rounded; terminal bud not enclosed by the petiole bases; fruit green. Spirit material.

Guttiferae - *Calophyllum teysmannii* Miq. var. *inophylloide* (King) P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 282.

Sarawak, 1st Division, Semengoh F.R., 19.xii.1975, 30 m.

Tree 24 m. tall, d.b.h. 35 cm., no spurs, etc.; outer bark mid brown, slightly hoop-marked, with close rows of lenticels, the inner surface mid brown and dull orange brown mottled; under bark dark red; inner bark pale pink; latex pale yellow, opaque, not very sticky; branches spreading, tending to be pendulous; twigs with copious white latex; leaves dark shiny green above, the midrib pale, prominent, below considerably paler, the veins clear, the midrib brownish, rounded; young leaves pinkish; seedlings collected from under the tree.

Guttiferae - *Calophyllum incrassatum* Hend. & Wvatt-Smith

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Plants of Malaysia

P. F. Stevens et al. 296.

Sarawak, 1st Division, Gunong Santubong, 20.xii.1975, 60 m.

Mixed dipterocarp forest on ridge.

Small tree ca. 8 m. tall, d.b.h. 8 cm., no spurs, etc.; outer bark yellowish, smooth, no lenticels, hoop-marked, the inner surface straw yellow; under bark palish red; inner bark pale red; latex sparse straw yellow, very sticky; branches spreading; twigs notably pale; leaves dark shiny green above, the midrib paler, sharply raised, below paler, the venation very fine, the midrib yellowish green rounded, the margin undulate, whole inflorescence white; fruit green, with small whitish markings. Spirit material.

Guttiferae - *Calophyllum banyengii* P. F. Stevens ISOTYPE

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Plants of Malaysia

P. F. Stevens et al. 308.

Sarawak, 1st Division, Gunong Santubong, 21.xii.1975, 75 m.

Mixed dipterocarp forest on ridge.

Tree 22 m. tall, d.b.h. 35 cm., no spurs, etc.; outer bark yellowish brown, the inner surface brownish (separating with difficulty); under bark deep red; inner bark pale red; latex clear yellow, very sticky; branches spreading; lamina dark shiny green above, the midrib paler, raised, rounded, prominent, paler below, the venation clear, also the latex canals towards the margin, the midrib yellow green, almost flat; young leaves red with a median green stripe; inflorescence white; submature fruit (one seen) green. Spirit material.

Guttiferae - *Calophyllum pulcherrimum* Wall. ex Choisy

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Plants of Malaysia

P. F. Stevens et al. 250.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 305 m.

Growing in rather open subkerangas vegetation.

Tree ca. 27 m. tall, d.b.h. 30 cm., no spurs, etc. outer bark brown, rather strongly fissured, not scaling, more or less hoop-marked, the inner surface blackish; under bark dark red; inner bark pale red, laminated; latex clear yellow, sticky; lamina V-shaped, dark shiny green above with very fine venation, the midrib paler, slightly raised, below with clear venation, the midrib yellowish, raised.

Guttiferae - *Calophyllum rigidum* Miq.

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Plants of Malesia

P. F. Stevens et al. 483.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i.
1976, 810 m.
Ridge forest.

Treelet 3 m. tall, branches spreading; leaves dark
shiny green above, paler below; fruit green.

Alangiaceae - Alangium

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Plants of Malesia

P. F. Stevens et al. 492.

Sabah, Lahad Datu, Ulu Sungei Segamat, 16.i.1976,
500 m.
Riverside vegetation.

Caespitose herb growing on rocks by river.

Gramineae

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Plants of Malesia

P. F. Stevens et al. 537.

Sabah, Tawau, 10 miles along Tawau road from
Brantian, 17.i.1976

Herb to 40 cm. tall, locally common in marshy spot
by road; leaves mid dull green above, paler below;
corolla whitish; stigma purplish.

Compositae

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Plants of Malesia

P. F. Stevens et al. 541.

Sabah, Labuk & Sugat, Telupid, 19.i.1976, 75 m.

Shrub by roadside about 1 km. beyond airstrip, to
2 m. tall; leaves rather pale green above, whitish
green below; involucre bracts yellow; petals and
stigma yellow.

Compositae - Blumea

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P. F. Stevens et al. 543.

Sabah, Labuk & Sugat, Telupid, 19.i.1976, 75 m.
by Telupid airstrip; forest on sand

Shrub 3.5 m. tall growing in the forest by the
edge of the road; leaves dark shiny green above,
paler and shiny below; flowers whitish apart from
yellowish anthers and disc.

Myrtaceae - Syzygium

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Plants of Malesia

P. F. Stevens et al. 941.

Papua New Guinea, Morobe Province, near Lae, 2 km. beyond Sankwep turnoff, 23.iv.1976
Well-drained forest, rather rocky.

Arching tree 3 m. tall; leaves dark shiny green above, paler below; calyx purplish green; corolla white; anthers yellow; ovary orange, faintly scented. Spirit material.

Loganiaceae - *Geniostoma Weinlandii* K. Schum.

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Plants of Malesia

P. F. Stevens et al. 947.

Papua New Guinea, Morobe Province, near Lae, 2 km. beyond Sankwep turnoff, 23.iv.1976
Well-drained forest, rather rocky

Unbranched tree 7 m. tall; bark grayish green; flowers white, scented, attracting beetles and flies.

Anacardiaceae - *Semecarpus*

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Plants of Malesia

P. F. Stevens et al. 484.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i.1976, 810 m.
Ridge forest.

Shrub 2 m. tall; leaves dark shiny green above, paler below; fruit green.

Alangiaceae - *Alangium*

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Plants of Malesia

P. F. Stevens et al. 948.

Papua New Guinea, Morobe Province, near Lae, 2 km. beyond Sankwep turnoff, 23.iv.1976
Well-drained forest, rather rocky

Tree 3 m. tall; leaves mid shiny green above, the veins impressed, paler and shiny below; fruit green

Ebenaceae - *Disopyros*

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Plants of Malesia

P. F. Stevens et al. 493.

Sabah, Lahad Datu, Ulu Sungei Segamat, 16.i.1976, 500 m.
Riverside vegetation.

Locally common herb growing on rocks; leaves dark green above, paler below; calyx green; corolla blue

Acanthaceae

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Plants of Malesia

P. F. Stevens et al. 507.

Sabah, Lahad Datu, Ulu Sungei Segamat, 16.i.1976, 500 m.

Damp forest near river.

Shrub 2 m. tall; leaves dark dull green above, paler below; flowers whitish; fruit green.

Icacinaceae - *Gonocaryum cognatum* Elm.

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Plants of Malesia

P. F. Stevens et al. 710.

Sabah, Sandakan, Forest Research Centre, road to Orang Hutan Centre, 29.i.1976

Rope up very large tree; leaves dark shiny green above, paler below, the venation very clear; fruit orange.

Moraceae - *Ficus*

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Plants of Malesia

P. F. Stevens et al. 719.

Singapore, Mandai Forest (by Zoo), 10.ii.1976, 30 r
Well-drained forest.

Tree c. 2.5 m. tall; leaves dark shiny green above, paler below, lateral veins very clear; calyx whitish green; corolla purplish pink.

Myrsinaceae - *Ardisia*

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Plants of Malesia

P. F. Stevens et al. 750.

Papua New Guinea, Morobe Province, Markham Point, 3.iii.1976, 120 m.

Colline Forest.

Tree c. 16 m. tall, d.b.h. 15 cm.; leaves dark shiny green above, paler below; fruit green.

Euphorbiaceae - *Aporosa*

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Plants of Malesia

P. F. Stevens et al. 758.

Papua New Guinea, Morobe Province, Markham Point, 3.iii.1976, 518 m.

Colline forest.

Shrub 2.5 m. tall; leaves rather bright green above, paler and dull below; calyx reddish; corolla white tinged pink; anthers and style more or less orange

Rubiaceae

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Plants of Malesia

P. F. Stevens et al. 491.

Sabah, Lahad Datu, Ulu Sungei Segamat, 16.i.1976, 500 m.

Riverside vegetation.

Common rheophytic tree or bush to 5 m. tall; outer bark brown, smooth; the inner surface brown; under bark reddish; inner bark reddish; leaves dark shiny green above, paler below; flowers whitish; fruit brownish.

Meliaceae - *Aglaia*

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Plants of Malesia

P. F. Stevens et al. 662.

Sabah, Ranau, Kinabalu National Park, Silam-Silam trail, 23.i.1976, 1630 m.

Montane forest.

Damp places, local; herb c. 25 cm. tall, the stem prostrate at the base; leaves mid green above, paler below; calyx, ovary and pedicels reddish; corolla purple.

Rubiaceae - *Acranthera atropella* Stapf

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Plants of Malesia

P. F. Stevens et al. 665.

Sabah, Ranau, Kinabalu National Park, Silam-Silam trail 23.i.1976, 1630 m.

Montane forest.

Local; leaves mid shiny green above with purple-red spots, paler below, unmarked; stems reddish; tepals white tinged pink; anthers yellow; fruit green.

Begoniaceae - *Begonia*

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Plants of Malesia

P. F. Stevens et al. 686.

Sabah, between Tuaran and Tamparuli, near Tuaran river, 25.i.1976, 10 m.

Shrub 2 m. tall, with erect branches; leaves dark shiny green above, pale green below; calyx green; corolla white; anthers yellow; fruit green. Flowers sweetly scented.

Rutaceae

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Plants of Malesia

P. F. Stevens et al. 759.

Papua New Guinea, Morobe Province, Markham Point, 3.iii.1976, 518 m.

Colline forest.

Locally common, all individuals in flower; leaves mid shiny green above, paler below; calyx pale green; corolla pink at base, white at tips, anther whitish, the processes bright yellow.

Melastomataceae - *Medinilla*

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Plants of Malesia

P. F. Stevens et al. 761.

Papua New Guinea, Morobe Province, Markham Point, 3.iii.1976, 518 m.

Colline forest.

Locally common pendulous epiphytic herb; stems yellowish; leaves bright shiny green; flowers yellow. Spirit material.

Orchidaceae - *Dendrobium*

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Plants of Malesia

P. F. Stevens et al. 844.

Papua New Guinea, Western Province, Rumginae Road 8 km. from Kiunga, 12.iii.1976, 40 m.

Forest on undulating ground.

Tree c. 5 m. tall, the branches pendulous; leaves dark shiny green above, slightly paler below; inflorescence yellow, scented.

Euphorbiaceae - *Aporosa*

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Plants of Malesia

P. F. Stevens et al. 765.

Papua New Guinea, Morobe Province, Markham Point, 3.iii.1976, 518 m.

Colline forest.

Tree c. 6 m. tall; leaves bright shiny green above, paler and shiny below; flowers white, apart from yellow stigma. Spirit material.

Guttiferae - *Garcinia*

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Plants of Malesia

P. F. Stevens et al. 945.

Papua New Guinea, Morobe Province, near Lae, 2 km. beyond Sankwep turnoff, 23.iv.1976

Well-drained forest, rather rocky

Tree 5 m. tall; outer bark grayish brown; leaves mid shiny green above, paler below, fleshy; fruit green.

Nyctaginaceae - *Pisonia*

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Plants of Malesia

P. F. Stevens et al. 768.

Papua New Guinea, Morobe Province, Lae Botanic Garden, 6.iii.1976

Seed from Abunaka Plantation. Tree c. 8 m. tall, d.b.h. 10 cm.; outer bark yellowish brown, with very close lenticels, the inner surface dull orangy under bark greenish; inner bark pale brown; latex white just under the bark, otherwise yellow, clear and sticky; leaves dark shiny green above, the midrib brownish white, flat, paler and dull below, the venation fine, the midrib brownish, angled.

Guttiferae - *Calophyllum robustum* P. F. Stevens

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Plants of Malesia

P. F. Stevens et al. 721.

Singapore, Mandai Forest (by Zoo), 10.ii.1976, 30 m.

Well-drained forest.

Tree c. 10 m. tall, d.b.h. 12 cm., no spurs, etc.; outer bark pale brown, flaking, longitudinally cracked, the inner bark straw, soft; leaves very dark shiny green above, paler and more or less dull below; calyx brownish green; corolla white, the three lower petals with yellow tips, the two upper petals reflexed, yellow at the base. Very fragrant.

Polygalaceae - *Xanthophyllum*

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Plants of Malesia

P. F. Stevens et al. 701.

Sabah, Sandakan, Leila Forest Reserve, 29.i.1976 Forest on rather dry ridge.

Tree 10 m. tall, d.b.h. 13 cm.; no buttresses, etc. outer bark brown, scaling, cracked, the inner surface grayish-dirty brown; under bark dark red; inner bark paler red; latex clear yellow, very sticky; leaves mid green above, the midrib paler, rounded, going to 7 mm. short of the apex, paler below, veins and latex canals visible, the midrib not very prominent.

Guttiferae - *Calophyllum obliquinervium* Merr.

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Plants of Malesia

P. F. Stevens et al. 704.

Sabah, Sandakan, Leila Forest Reserve, 29.i.1976 Forest on rather dry ridge.

Tree 6 m. tall, branches strongly ascending, d.b.h. 12 cm.; outer bark grayish, deeply cracked, the inner bark rather pale orange straw; leaves rather bronzy green above, the venation paler, paler green below, the venation darker; calyx green; corolla white just under the bark, otherwise yellow, clear and sticky; leaves dark shiny green above, the midrib brownish white, flat, paler and dull below, the venation fine, the midrib brownish, angled.

Symplocaceae - *Symplocos*

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Plants of Malesia

P. F. Stevens et al. 610.

Sabah, Ranau, Kinabalu National Park, Boundary Rentis, 22.i.1976, 1554 m. Montane forest.

Arching herb to 40 cm. tall; leaves dark shiny green above, pale green below; calyx pale green; corolla white, the lower lip yellow inside.

Gesneriaceae - *Cyrtandra*

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Plants of Malesia

P. F. Stevens et al. 612.

Sabah, Ranau, Kinabalu National Park, Boundary Rentis, 22.i.1976, 1554 m. Montane forest.

Erect herb to 40 cm. tall, quite common; leaves shiny green above, paler below; calyx green; corolla pink; anthers yellow; in fruit calyx dull red; fruit bright red.

Myrsinaceae - *Ardisia*

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Plants of Malesia

P. F. Stevens et al. 635.

Sabah, Ranau, Kinabalu National Park, Boundary Rentis, 22.i.1976, 1463 m. Damp, steeply sloping forest.

Abundant herb to 40 cm. tall; leaves mid dull green above, pale green below; bracts whitish; corolla pale sulphur yellow.

Gesneriaceae

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Plants of Malesia

P. F. Stevens et al. 806.

Papua New Guinea, Western Province, Rumginae Road, c. 8 km. from Kiunga, 11.iii.1976, 45 m. Forest on undulating ground.

Tree c. 20 m. tall; d.b.h. 16 cm., no spurs, etc.; outer bark rather pale brown, subobscurely fissured and scaling, the inner surface straw; under bark dull reddish; inner bark paler reddish; latex white not really sticky; leaves dark shiny green above, the midrib pale, rather sharply raised, paler below finely striate, the midrib pale green, with brownish indumentum. Used for building canoes; wood supposed to last for 3 years or so.

Guttiferae - Calophyllum

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Plants of Malesia

P. F. Stevens et al. 910.

Papua New Guinea, Western Province, c. 24 km. from Kiunga, 15.iii.1976, 45 m. Forest on undulating ground.

Tree c. 20 m. tall, d.b.h. 28 cm., no spurs, etc.; outer bark straw brown, the inner surface orange and greasy straw mottled; under bark deep red; inner bark red; latex white, not sticky, coming from the inner part of the bark; branches pendulous; hairs rufous; leaves dark shiny green above, the midrib with brown indumentum, sharply raised, below paler, the venation clear, the midrib rounded.

Guttiferae - Calophyllum trachycaule Laut.

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Plants of Malesia

P. F. Stevens et al. 596.

Sabah, Tawau, Kinabalu National Park, Bukit Burong and Liwago Cave track junction, 21.i.1976, 1646 m. Montane forest.

Locally common herb; stems and petioles reddish; leaves dark shiny green above, paler below; pedicel pinkish; calyx greenish; corolla basically white, inside the tube with two raised, reddish hairy lines, with yellow prolongations reaching the indentations of the lower lobes, lower lobes pressed close to the upper lobes.

Gesneriaceae

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Plants of Malesia

P. F. Stevens et al. 542.

Sabah, Labuk & Sugat, Telupid, 19.i.1976, 75 m. by Telupid airstrip; forest on sand

Treelet 2 m. tall, growing on forest edge; latex white; leaves dark green above, venation invisible paler below, the venation clear; fruit green, apart from the reddish top.

Moraceae - Ficus

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Plants of Malesia

P. F. Stevens et al. 550.

Sabah, Labuk & Sugat, Telupid, 19.i.1976, 75 m. by Telupid airstrip; forest on sand.

Erect fleshy herb to 40 cm. tall; leaves mid/dark shiny green above, the lateral veins slightly impressed, paler below, very shiny, the laterals raised; spathe green; spadix white; fruit bright red.

Araceae - Aglaonema

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Plants of Malesia

P. F. Stevens et al. 647.

Sabah, Ranau, Kinabalu National Park, Boundary Rentis, 22.i.1976, 1463 m. Montane forest.

Treelet with spreading branches; leaves dull green above, pale dull green below; calyx pink; corolla bright pink; anthers yellow.

Myrsinaceae - Ardisia

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Plants of Malesia

P. F. Stevens et al. 907.

Papua New Guinea, Western Province, c. 24 km. from Kiunga, 15.iii.1976, 45 m.

Epiphytic shrub; leaves mid shiny green above, paler below; calyx green; corolla pink; style swollen, white.

Ericaceae - Vaccinium c.f. lageniforme

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Plants of Malesia

P. F. Stevens et al. 655.

Sabah, Ranau, Kinabalu National Park, Silam-Silam trail, 23.i.1976, 1630 m. Montane forest.

Tree c. 1 m. tall, with spreading branches; leaves dark shiny green above, paler below; fruit white.

Rubiaceae - Lasianthus

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Plants of Malesia

P. F. Stevens et al. 475.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i.1976, 770 m.
Ridge forest.

Tree 13 m. tall, d.b.h. 16 cm.; outer bark brown, lenticel cracked, the inner surface brown; under bark reddish; inner bark red; latex clear yellow, fluid, becoming curd-like on rubbing; leaves dark green above, the midrib paler, slightly but sharply raised, below paler, the venation clear, the midrib yellowish, rounded; terminal bud protected by pink young leaves.

Guttiferae - *Calophyllum teysmannii* Miq. var. *inophylloide* (King) P. F. Stevens

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Plants of Malesia

P. F. Stevens et al. 558.

Sabah, Ranau, road to Ranau at the Poring turn-off, 20.i.1976, 640 m.
Colline forest.

Tree ca. 15 m. tall, d.b.h. 12 cm.; outer bark yellowish brown, not hoop-marked, with rows of lenticels, the inner surface dull brown; under bark reddish; inner bark pale red; latex white, not sticky; leaves dark shiny green above, the midrib paler, slightly raised, below pale green, the venation twice its real density, the midrib rounded.

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith

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Plants of Malesia

P. F. Stevens et al. 587.

Sabah, Tawau, Kinabalu National Park, Bukit Burong and Liwago Cave track junctions, 21.i.1976, 1646 m.
Montane forest.

Tree 18 m. tall, d.b.h. 13.5 cm., no hoops, etc.; outer bark brown, with long and thin cracks, the inner surface brownish; under bark red; inner bark pale red; latex cloudy yellow, fluid, not sticky; leaves dark shiny green above, the midrib slightly paler, flat, below paler green, the venation clear, anastomosing, the midrib rounded, brownish.

Guttiferae - *Calophyllum teysmannii* Miq. var. *inophylloide* (King) P. F. Stevens vel aff.

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Plants of Malesia

P. F. Stevens et al. 631.

Sabah, Ranau, Kinabalu National Park, Boundary Rentis, 22.i.1976, 1372 m.
Montane forest.

Rather clumped herb, the whole plant on stilt roots c. 20 cm. tall (pattern of development: aerial shoot, bud produces horizontal stem with ca. 2 infl. ca. 2 stilt roots, aerial shoot (sometimes branching here), etc.); fronds to 2.5 m. tall; leaves dark green above, paler below; flowers red; fruit apparently edible when ripe. Inflorescences with much mucilage between the

bracts. Spirit material.

Zingiberaceae -

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Plants of Malesia

P. F. Stevens et al. 681.

Sabah, Ranau, Mile 5 1/2 Mamut road, 24.i.1976, c. 760 m.
Montane forest.

Tree 10 m. tall, d.b.h. 12 cm. (to 30 cm. seen); outer bark yellowish brown, with lines of lenticels the inner surface orange; under bark mid reddish; inner bark reddish; latex yellow, clear, not sticky; terminal bud brown; leaves dark shiny green above, the midrib paler green, rather inconspicuous, raised, rounded, below paler below, the veins rather inconspicuous, the midrib paler, rounded.

Guttiferae - *Calophyllum*

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Plants of Malesia

P. F. Stevens et al. 760.

Papua New Guinea, Morobe Province, Markham Point, 3.iii.1976, 518 m.
Colline forest.

Tree c. 6 m. tall, d.b.h. 10 cm.; outer bark yellowish, flaky, the inner surface straw; under bark deep red; inner bark paler; latex white, not very sticky; leaves dark shiny green above, the midrib even darker towards the apex, paler towards the base, sharply raised, below paler, the venation very fine, the midrib yellowish green, rounded; flowers white, apart from the greenish ovary; fruit blackish purple.

Guttiferae - *Calophyllum soulattri* Burm. f.

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Plants of Malesia

P. F. Stevens et al. 577.

Sabah, Tawau, Kinabalu National Park, Bukit Burong Trail, 21.i.1976, 1646 m.

Montane forest.

Common shrub c. 1 m. tall (flowers and fruit from different, but adjacent, bushes at the lookout in the Bukit Burong trail); leaves mid/dark green above, paler below; calyx green; corolla and stamens slightly off white; ovary yellowish; fruit green.

Rutaceae - Melicope

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Plants of Malesia

P. F. Stevens et al. 588.

Sabah, Tawau, Kinabalu National Park, Bukit Burong and Liwago Cave track junctions, 21.i.1976, 1646 m. Montane forest.

Herb climbing up trees to 6 m.; leaves fleshy, mid shiny green above, pale green below, petiole purplish; calyx and corolla bright red; filaments and style purplish, the former becoming curved back over the upper lip in old flower.

Gesneriaceae - Dichrotrichum

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Plants of Malesia

P. F. Stevens et al. 679.

Sabah, Ranau, Kinabalu National Park, Silam-Silam trail, 23.i.1976, 1830 m.

Sprawling herb growing in damper places by the road; stems purplish; leaves mid/pale green above, the margin and midrib purple, below pale green, tinged purple; calyx green, tinged purple, corolla basically purplish, lower parts of lateral lobes and the base of the lowest lobe darker, upper lobes tipped whitish, throat yellow; fruit green.

Campanulaceae - *Lobelia borneensis* (Hemsl.) Moel.

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Plants of Malesia

P. F. Stevens et al. 951.

Papua New Guinea, Morobe Province, near Lae, 2 km. beyond Sankwep turnoff, 23.iv.1976
Well-drained forest, rather rocky

Climbing up tree; leaves mid green, very brittle; flowers greenish yellow, labellum rugose, the rugae yellow orange towards the margin, apricot towards the middle, down the middle a raised yellow line which is white towards the margins.

Orchidaceae - *Vanilla*

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Plants of Malesia

P. F. Stevens et al. 722.

Singapore, Botanic Gardens, edge of Garden Jungle, 10.ii.1976

Tree c. 6 m. tall, no hoop marks, etc.; outer bark yellowish, d.b.h. 11 cm., with good long cracks, the inner surface blackish brown; under bark dull red; inner bark pale reddish; latex yellow, not very sticky; leaves dark shiny green above, the midrib yellowish green, raised, below paler, the venation paler, the midrib rounded.

Guttiferae - *Calophyllum tetrapterum* Miq. var. *tetrapterum*

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Plants of Malesia

P. F. Stevens et al. 775.

Papua New Guinea, Western Province, Kiunga, 10.iii.1976, c. 30 m.

Herb pendulous on road cuttings; leaves mid green above, paler below; calyx pale green, with a reddish median strip (poorly developed on lowest lobe); corolla pale purple outside, slightly darker inside, the upper petal darker mauve towards the base at the sides, the lateral petals edges dark mauve.

Leguminosae - *Desmodium*

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Plants of Malesia

P. F. Stevens et al. 477.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i.1976, 770 m.

Ridge forest.

Young tree ca. 15 m. tall, d.b.h. 12 cm., no spurs etc.; outer bark yellowish brown, with small lenticles, the inner surface brown; under bark reddish; inner bark pale red; latex white, not sticky; leaves dark shiny green above, the midrib paler, sharply raised, below pale the veins very fine (almost double the density as the dried leaf) the midrib yellowish green, rounded.

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith

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Plants of Malesia

P. F. Stevens et al. 838.

Papua New Guinea, Western Province, Rumginae Road, 8 km. from Kiunga, 12.iii.1976, 40 m.
Forest on undulating ground.

Tree c. 30 m. tall, d.b.h. 68 cm., no spurs, etc.; outer bark yellowish brown, obscurely fissured, the inner surface more or less orange; under bark brown red and dark red mottled; inner bark slightly paler; latex white, rather curdy; leaves mid green above, shiny, the midrib pale green, very slightly raised, paler below, the venation very fine and clear, the midrib brownish, rounded; flowers white apart from yellow anthers and pale green ovary (tepals 4, reflexed). Fruit few, blackish. Spirit material

Guttiferae - *Calophyllum brassii* A. C. Smith

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Plants of Malesia

P. F. Stevens et al. 559.

Sabah, Ranau, road to Ranau at the Poring turnoff, 20.i.1976, 640 m.

Colline

Tree 20 m. tall, d.b.h. 24 cm., not hoop-marked, etc.; outer bark yellowish, with shallow, diamond-type lenticels, the inner surface orange; under bark deep red; inner bark med red; latex clear yellow, becoming pale lemon curd color; leaves dark shiny green above, the midrib whitish, flat, paler below, the venation invisible, the midrib pale green, with brown hairs, rounded.

Guttiferae - *Calophyllum exiticostatum* P. F. Stevens

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Plants of Malesia

P. F. Stevens et al. 676.

Sabah, Ranau, Kinabalu National Park, Silam-Silam trail, 23.i.1976, 1830 m.

Montane forest.

Common herb especially on rocky places by track to power station; more or less arched herb with a woody base to 1 m. tall; leaves appearing distichous when plant growing on rock, erect, more branched and with closely decussate leaves in those few specimens growing on flat land; leaves dark dull green above, whitish lanate below; corolla with whitish hairs outside, the lower lobes dull purplish, with darker stripes inside (two on lateral lobes, three on central), towards the inside of the corolla and the upper lobes in toto whitish; fruit green.

Gesneriaceae

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Plants of Malesia

P. F. Stevens et al. 646.

Sabah, Ranau, Kinabalu National Park, Boundary Rentis, 22.i.1976, 1463 m.
Montane forest.

Much branched shrub to 1.2 m. tall; leaves mid green above, paler below; fruit turning red.

Chloranthaceae - *Chloranthus*

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Plants of Malesia

P. F. Stevens et al. 516.

Sabah, Lahad Datu, Ulu Sungei Segamat, 16.i.1976, 500 m.

Damp forest near river.

Herb 30 cm. tall; leaves mid green above, paler below; calyx reddish; corolla white; anthers yellow.

Gesneriaceae - *Loxonia* c.f. *hirsuta* Jack

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Plants of Malesia

P. F. Stevens et al. 566.

Sabah, Tawau, Kinabalu National Park, Bukit Burong Trail, 21.i.1976, 1646 m.

Montane forest.

Climbing up trees to 5 m.; leaves dark shiny green above, the venation impressed, paler below, the venation raised; tufts of roots in the axils of the leaves; flowering branches more or less pendulous; pedicels and ovary orange; petals white, reddish at the base; filaments white; anthers with yellow lower part and purplish upper part.

Melastomataceae - *Medinilla*

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Plants of Malesia

P. F. Stevens et al. 585.

Sabah, Tawau, Kinabalu National Park, Bukit Burong and Liwago Cave track junctions, 21.i.1976, 1646 m.
Montane forest.

Tree c. 19 m. tall, d.b.h. 25 cm.; outer bark yellow, fissured, the inner surface orange; under bark dark reddish; inner bark red; latex opaque yellow, not sticky; leaves dark shiny green above, the midrib paler, raised, below paler, the venation not clearly visible; the midrib rounded; no innovations with basal scars.

Guttiferae - *Calophyllum*

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Plants of Malaya

P. F. Stevens et al. 60.

Johore, Lenggong F.R., compartment 105, 17.xi.1975, ca. 35 m.

Undulating lowland rainforest.

Tree ca. 20 m. tall, d.b.h. 25 cm., no buttresses, etc.; outer bark yellowish, with shallow cracks, the inner surface orange; under bark reddish orange; inner bark pale meat red; latex sparse, not sticky; bark-sapwood interface striate; leaves dark shiny green above, V-shaped, the apex slightly decurved, the midrib raised, more or less green below paler, the veins clear, the midrib rounded.

Guttiferae - *Calophyllum* sp. aff. *C. gracillimum* Hend. & Wyatt-Smith

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Plants of Malaya

P. F. Stevens et al. 61.

Johore, Lenggong F.R., compartment 105, 17.xi.1975, ca. 35 m.

Undulating lowland rainforest.

Tree ca. 15 m. tall, d.b.h. 9.5 cm., hooped, no buttresses; outer bark pale brown, with distant fissures, the inner surface orange; under bark dark brown; inner bark dark brown; latex sparse, clear yellow, not sticky; leaves dark shiny green above, the midrib almost flat, brownish because of hairs, below paler, the venation rather clear, the midrib rounded, brown (hairs). Branches spreading.

Guttiferae - *Calophyllum molle* King

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Plants of Malaya

P. F. Stevens et al. 79.

Johore, 4 miles from Mersing on the Kluang Road

Little-branched tree ca. 6.5 m. tall, d.b.h. 6 cm. Leaves dark green above, the fruits greenish.

Araliaceae

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Plants of Malaya

P. F. Stevens et al. 78.

Jemaluang F. R., Johore, 18.xi.1975, ca. 50 m.

Tree ca. 6 m. tall; outer bark rich brown; branches arching and spreading. Leaves dark shiny green above, whitish below; outer tepals green, inner dull orange. In full flower, very sweetly scented

Annonaceae

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Plants of Malaya

P. F. Stevens et al. 77.

Jemaluang F. R., Johore, 18.xi.1975, ca. 50 m.

Gregarious in a shallow swamp; ca. 40 cm. tall. Leaves rather pale green; fruit green.

Pandanaceae - *Pandanus*

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Plants of Malaya

P. F. Stevens et al. 76.

Jemaluang F. R., Johore, 18.xi.1975, ca. 50 m.

Arching shrub, ca. 7 m. tall. Leaves dark shining green above, paler below; inflorescences (abnormal) whitish.

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Plants of Malaya

P. F. Stevens et al. 70.

Johore, Mersing, near the sea, 18.xi.1975, 15 m.

Shrub 3 m. tall; compact growth; leaves dark shiny green above, paler below, with faint longitudinal lines; calyx green; corolla white; anthers orange; stigma-style green, exserted.

Theaceae.

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Plants of Malaya

P. F. Stevens et al. 69.

Johore, Mersing, near the sea, 18.xi.1975, 15 m.

Tree ca. 4 m. tall; leaves mid green on both surfaces, held vertically; flowers pale yellow; fruit brown. Naturalized.

Leguminosae - *Acacia*

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Plants of Malaya

P. F. Stevens et al. 88.

Johore, Gunung Arong F.R., 19.xi.1975, 15 m. Well drained gently sloping forest.

Tree ca. 6 m. tall, d.b.h. 5 cm. Outer bark brown smooth; inner bark pinkish; wood yellow. Leaves dark shiny green above, paler and dull below, with brown hairs; young leaves red; fruit green, borne on the stem.

Lauraceae

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Plants of Malaya

P. F. Stevens et al. 13.

Pahang, near turn-off to Fraser's Hill, the Gap,
11.xi.1975, 915 m.
Forest on gently sloping ground.

Tree ca. 24 m. tall, d.b.h. ca. 60 cm.; trunk
with dark brown resin; outer bark pale brown,
longitudinally cracked and slightly scaling;
inner bark pink outside and yellowish inside,
mottled; leaves dark shiny green above, paler
below, fruit dull purplish pinkish. Seedling
collected from under the tree.

Burseraceae - Canarium

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Plants of Malaya

P. F. Stevens et al. 14.

Pahang, near turn-off to Fraser's Hill, the Gap,
11.xi.1975, 915 m.

Gently sloping ground, common by roadside.

Shrub, ca. 3 m. tall; branches arching; leaves
dark shiny green above, paler below, scaberulous;
fruit orange.

Moraceae - Ficus

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Plants of Malaya

P. F. Stevens et al. 15.

Pahang, near turn-off to Fraser's Hill, the Gap,
11.xi.1975, 915 m.

Steeply sloping ground.

Tree ca. 8 m. tall; leaves mid shiny green
above, paler below, glands pinkish; calyx
purple, with numerous ants; corolla white,
tinged purplish.

Bignoniaceae

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Plants of Malaya

P. F. Stevens et al. 16.

Pahang, near turn-off to Fraser's Hill, the Gap,
11.xi.1975, 915 m.

Steeply sloping forest.

Tree ca. 15 m. tall, d.b.h. 20 cm.; outer bark
brown, smooth, with prominent patches of pale
scales; inner bark orange, with darker mottling,
aromatic; wood yellow; leaves shiny green above,
midrib pale, grayish green below; fruit pale green

Lauraceae

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Plants of Malaya

P. F. Stevens et al. 17.

Pahang, near Jeriau waterfall. 11.xi.1975, 975 m.
Forest by side of small stream.

Tree ca. 20 m. tall, d.b.h. ca. 45 cm., no but-
tresses; outer bark yellowish, smooth apart from
longitudinal fissures; inner bark pinkish, lam-
inated; latex white, opaque, rather fluid; leaves
dark shiny green above, midrib paler, not raised,
below paler, midrib very prominent, rounded.

Guttiferae - Calophyllum coriaceum Hend. & Wyatt-
Smith

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Plants of Malaya

P. F. Stevens et al. 21.

Pahang, near Jeriau waterfall. 11.xi.1975, 975 m.
Rocky slope above stream, shaded.

Herb, locally common; leaves dark green above,
with a white stripe down the middle, red purple
below, with a pale green stripe down the middle;
corolla pink-blue outside, blue inside at mouth,
paler at throat, two yellow lines down the throat
becoming white lines on either side of the lower
patch.

Gesneriaceae - Didymocarpus

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Plants of Malaya

P. F. Stevens et al. 22.

Pahang, ridge above Jeriau waterfall, 11.xi.1975,
1000 m.

Montane forest.

Tree ca. 22 m. tall, d.b.h. 40 cm., no spurs or
stilt roots; outer bark brown with rather straight
long fissures, more or less scaling, the inner
surface suborange; under bark reddish; inner bark
pink, ca. 1 cm. thick; latex clear yellow, in dis-
crete drops, bark-wood surface wavy; terminal bud:
brown; leaves shiny green above, the midrib whit-
ish, flat, below pale shiny green, the midrib
slightly raised, rounded; young leaves green.

Guttiferae - Calophyllum teysmannii Miq. c.f.
var. inophylloide (King) P. F. Stevens

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Plants of Malesia: Malaya

P. F. Stevens et al. 24.

Pahang, ridge above Jeriau waterfall, 11.xi.1975,
1000 m.
Montane forest.

Tree ca. 18 m. tall, d.b.h. 17 cm.; outer bark brown, more or less flaking, with long fissures developing, the inner surface orange; under bark more or less orange; inner bark pinkish; latex yellow, sticky, translucent, in discrete drops; leaves shiny green above, the midrib flat, paler below, the midrib prominent, rounded.

Guttiferae - *Calophyllum teysmannii* Miq. c.f. var.
inophylloide (King) P. F. Stevens

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Plants of Malaya

P. F. Stevens et al. 29.

Pahang, ridge above Jeriau waterfall, 11.xi.1975,
1000 m.
Montane forest.

Slender tree ca. 3.5 m. tall, locally common.
Leaves dark shiny green above, paler, more or less
pruinose below; fruit green.

Lauraceae

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Plants of Malaya

P. F. Stevens et al. 36.

Selangor, Kepong, Forest Reserve behind F.R.I.,
11.xi.1975, 90 m.
Sloping^{ground,} rainforest.

Tree ca. 30 m. tall, d.b.h. 45 cm; slightly spurr-
ed at base, but erosion?; outer bark brown,
slightly flakey, fissures ca. 30 cm. long, closely
set, the inner surface brown; under bark reddish;
inner bark meat red; latex in discrete drops,
yellow, initially clear but becoming cloudy; bark
wood surface wavy; leaves rather dull dark green
above, the midrib raised, slightly paler, below
paler, the midrib raised, obscurely angled, the
venation clear.

Guttiferae - *Calophyllum teysmannii* Miq. var.
inophylloide (King) P. F. Stevens

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Plants of Malaya

P. F. Stevens et al. 41.

Selangor, Selatan, 12.xi.1975, ca. 5 m.
Peat swamp forest.

Seedlings with two pairs of leaves close together
growing where old tree had fallen, not in the
general forest; ferruginous terminal bud (Bark
characters of another tree - tree ca. 18 m. tall,
d.b.h. 18 cm., no buttresses etc.; outer bark
brown, with boat-shaped fissures, the inner sur-
face dark dirty brown; under bark reddish brown;
inner bark reddish, lamellated, darkening on
exposure; latex clear, honey-colored, sticky).

Guttiferae - *Calophyllum sundaicum* P. F. Stevens

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Plants of Malaya

P. F. Stevens et al. 45.

Johore, Renggam F.R., radio station ridge, 240 m.,
16.xi.1975.
Ridge forest.

Tree ca. 15 m. tall, d.b.h. 17 cm.; outer bark
brown, smooth; branches spreading; leaves dark
dull green above, paler below, the latex canals
visible; flowers yellowish, ?faintly scented.

Guttiferae - *Garcinia*.

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Plants of Malaya

P. F. Stevens et al. 46.

Johore, Renggam F.R., radio station ridge, 240 m.
16.xi.1975
Ridge forest.

Tree ca. 15 m. tall, d.b.h. ca. 20 cm., no
buttresses, etc.; outer bark brownish yellow, wit
close almost diamond-shaped rather small lenti-
cels, the inner surface orange; under bark red-
dish orange; inner bark rather dark, dull meat
red, finely lamellated (ca. 1.5 cm. thick); latex
little, not sticky, ?fluid; bark/sapwood inter-
face finely striate; leaves held almost erect,
dark dull green above, the venation obscure, the
midrib paler green, slightly raised, paler below,
the latex canals visible, the midrib rounded;
twigs with yellowish bark.

Guttiferae - *Calophyllum* sp. aff. *C. gracillimum*
Hend. & Wyatt-Smith

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Plants of Malaya

P. F. Stevens et al. 48.

Johore, Renggam F.R., radio station ridge, 240 m.
16.xi.1975
Ridge forest.

Tree ca. 18 m. tall, d.b.h. 30 cm. no buttresses, etc.; outer bark grayish and orangey mottled, the inner surface dirty dark orange brown; under bark reddish; inner bark pale red; latex yellow, in discrete drops, slightly opaque; bark-sapwood interface smooth. Leaves V-shaped, dark dull green above, the margins and midrib paler, the midrib flat, below paler, the venation clear, the indumentum reddish-brown, grayish when older, the midrib rounded; flowers white but indumentum makes them yellowish; old fruit picked off the ground, 3.25 X 2.2 cm., the walls ca. 2 mm. thick. Spirit material.

Guttiferae - *Calophyllum* sp. (perhaps hybrid?).

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Plants of Malaya

P. F. Stevens et al. 49.

Johore, Renggam F.R., radio station ridge, 240 m.
16.xi.1975
Ridge forest.

Tree 18 m. tall, d.b.h. 35 cm. no buttresses, etc. outer bark dull brown, with rather long fissures, hoop-marked, the inner surface blackish; under bark red; inner bark dark red; laminated; latex clear yellow, free-flowing, not very sticky, bark-sapwood interface striate; branches drooping. Leaves dark green above, the venation very close, almost invisible, the midrib pale, flat, below paler, venation clearer, the midrib prominent, rounded; terminal buds very prominent, with dark brown indumentum; axillary buds also prominent. Young plants not erect; terminal bud functional, white when young, soon becoming blackish-brown, the young leaves white, drooping.

Guttiferae - *Calophyllum rigidum* Miq.

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Plants of Malaya

P. F. Stevens et al. 56.

Johore, Lenggong F.R., compartment 105, 17.xi.1975, ca. 35 m.
Undulating lowland rainforest.

Treelet 2 m. tall, with spreading branches; leaves dull green above, paler below, with white hairs; flowers white; fruit green.

Rubiaceae

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Plants of Malaya

P. F. Stevens et al. 51.

Johore, Renggam F.R., radio station ridge, 240 m.
16.xi.1975
Ridge forest.

Tree ca. 15 m. tall, d.b.h. 14 cm., no buttresses, etc.; outer bark smooth, almost orange, hoop-marked, with lines of lenticels but otherwise smooth, the inner surface orange brown; under bark reddish; inner bark reddish, laminated, darkening rapidly on exposure; latex white, not very sticky, in discrete drops; leaves mid shiny green above, the venation obscure, the midrib pale, slightly raised, below paler green, the venation clear, the midrib raised, prominent, rounded; fallen leaves orange brown, very conspicuous.

Guttiferae - *Calophyllum incrassatum* Hend. & Wyatt Smith

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Plants of Malaya

P. F. Stevens et al. 52.

Johore, Renggam F.R., radio station ridge, 240 m.
16.xi.1975
Ridge forest.

Tree ca. 20 m. tall, d.b.h. to 35 cm., not very well grown, no buttresses, etc.; outer bark yellowish, with rather distant boat-shaped fissures, the inner surface orange-dirty brown; under bark reddish; inner bark meat red, laminated, darkening on exposure; latex white, sticky drying yellowish on exposure; leaves flat, mid shiny green above, the midrib whitish, veins somewhat raised, below paler, latex canals and veins more or less visible, the midrib rounded, brownish; immature fruit pale green.

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith

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Plants of Malaya

P. F. Stevens et al. 53.

Johore, Renggam F.R., radio station ridge, 240 m.
16.xi.1975.
Ridge forest.

Outer bark yellow brown-gray mottled, with a few long cracks, the inner surface orange; under bark orange green; under bark pale reddish; latex sparse, yellow, opaque; leaves dark more or less shiny green above, the venation obscure, the midrib raised, pale, below paler, the venation visible, the midrib rounded; tip of the lamina recurved; flowers whitish, scented, ants on the buds. Spirit material.

Guttiferae - *Calophyllum* sp. aff. *C. gracillimum* Hend. & Wyatt-Smith

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Plants of Malaya

P. F. Stevens et al. 80.

Johore, Gunong Arong F.R., 19.xi.1975, 15 m.
Slightly sloping rainforest.

Tree 36 m. tall, d.b.h. 63 cm., no buttresses, etc.; outer bark brown, deeply fissured, 1.5 cm. thick, the inner surface blackish; under bark reddish; inner bark meat red, laminated; latex clear yellow; bark-sapwood interface smooth; leaves V-shaped, more or less decurved at the apex, dark green above, the margins paler, the midrib pale, flat, below paler, the venation obscure, the midrib raised, rounded. flowers whitish, sweetly scented.

Guttiferae - *Calophyllum wallichianum* Pl. & Tr.

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Plants of Malaya

P. F. Stevens et al. 81.

Johore, Gunong Arong F.R., 19.xi.1975, 15 m.
Slightly sloping rainforest.

Tree 23 m. tall, d.b.h. 30 cm., without buttresses, etc.; outer bark yellowish, finely cracked, hoop marked, the inner surface orange; under bark greenish; inner bark pale meat red; latex opaque yellow, becoming sticky; bark-sapwood interface smooth. Leaf dark shiny green above, the veins almost visible, the margins pale, the midrib pale, raised slightly below paler, the veins clear, the midrib yellowish brown, rounded. Terminal bud brownish; twigs yellowish. "Bintangor puteh"

Guttiferae - *Calophyllum alboramulum* P. F. Stevens

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Plants of Malaya

P. F. Stevens et al. 89.

Johore, Gunong Arong F.R., 19.xi.1975, 15 m.
Gently sloping forest.

Clumped; stem ca. 2.5 cm. tall. Leaves dark green; young infructescences and fruit green. (Spirit material).

Palmae

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Plants of Malaya

P. F. Stevens et al. 90.

Johore, Gunong Pulai, 20.xi.1975, 60 m.

Tree ca. 10 m. tall, d.b.h. 18 cm.; outer bark light brown, ± smooth, slightly hoop-marked; inner bark straw aromatic; leaves dark shiny green above, paler below; fruit green. Bark on twigs very fibrous.

Myristicaceae

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Plants of Malaya

P. F. Stevens et al. 91.

Johore, Gunong Pulai, 20.xi.1975, 60 m.

Shrub ca. 1.5 m. tall with spreading/subpendulous branches; leaves dark shiny green above, paler below; calyx green; corolla white; fruit orange.

Rubiaceae

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Plants of Malaya

P. F. Stevens et al. 92.

Johore, Gunong Pulai, 20.xi.1975, 60 m.

Tree 8 m. tall, d.b.h. ca. 9 cm.; outer bark brown. leaves mid dull green above, paler below; calyx green; corolla blue-purple; sterile part of anther gold, the fertile part brown; style purplish towards the base, greenish towards the tip.

Melastomaceae - *Pternandra*

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Plants of Malaya

P. F. Stevens et al. 93.

Johore, Gunong Pulai, 20.xi.1975, 60 m.

Treelet ca. 3 m. tall; leaves dark green above, paler below; calyx green; corolla orange red.

Rubiaceae

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Plants of Malaya

P. F. Stevens et al. 96.

Johore, Gunong Pulai, 20.xi.1975, 60 m.

Rope in small tree; stem very brittle; bark pale brown; leaves dark shiny green above, paler below; calyx reddish; corolla yellow(-green).

Verbenaceae - *Clerodendrum*

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Plants of Malaya

P. F. Stevens et al. 97.

Johore, Gunong Pulai, 20.xi.1975, 60 m.

Tree ca. 6 m. tall, the branches rather pendulous leaves mid shiny green above, paler below; outer bark mottled brown and grayish, finely cracked; flowers greenish; fruit pale pink; seeds orange.

Euphorbiaceae - *Glochidion superbum* Baill.

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Plants of Malaya

P. F. Stevens et al. 98.

Johore, Gunong Pulai, 20.xi.1975, 60 m.
Steeply sloping hillside.

Tree ca. 15 m. tall, d.b.h. ca. 17 cm., no spurs, etc. outer bark greenish and yellowish brown; mottled, a few lenticels and incipient shallow fissures, the inner surface orange, under bark brownish red; inner bark pale meat red, darkening much on exposure; latex sparse, clear sticky; bark sapwood interface almost smooth. Leaves dark shiny green above the apex decurved, the midrib slightly paler, raised, paler below, the veins clear. Flowers just over and a few buds.

Guttiferae - *Calophyllum* sp. aff. *gracillimum*
Hend. & Wyatt-Smith

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Plants of Malaya

P. F. Stevens et al. 100.

Johore, Gunong Pulai, 20.xi.1975, 60 m.
Ridge forest.

Tree ca. 18 m. tall, d.b.h. 15 cm., no buttresses, etc.; outer bark grayish, yellowish and brownish mottled, hoop-marked, with incipient lenticel lines, the inner surface reddish; under bark reddish; inner bark reddish, laminated; latex yellow, sticky; bark-sapwood interface striate; leaves dark shiny green above, with a very pale green prominent and slightly raised midrib, below paler, the midrib ferruginous, very finely striate on both surfaces.

Guttiferae - *Calophyllum ferrugineum* Ridley var. *ferrugineum*

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Plants of Malaya

P. F. Stevens et al. 108.

Johore, Panti F.R., compartment 16, 22.xi.1975, ca. 8 m.

Tree to 20 m. tall, d.b.h. 30 cm., stilt roots to 50 cm.; outer bark brown, furrowed scaly, not hoop-marked, the inner surface blackish; under bark reddish; inner bark meat red, not very laminate; latex clear yellow, fluid, becoming opaque when rubbed. Fallen leaves picked up. Seedlings with pinkish flush, notably erect. Radical apparently breaking stone wall about one third the way up from the base. Seedlings usually with two pairs pseudoverticillate leaves, rarely the pairs separated by well-developed internodes.

Guttiferae - *Calophyllum teysmannii* Miq. var. *teysmannii*

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Plants of Malaya

P. F. Stevens et al. 111.

Johore, Panti F.R., compartment 16, 22.xi.1975, ca. 8 m.

Tree ca. 18 m. tall, d.b.h. 32 cm., no buttresses, etc.; outer bark brownish, more or less mottled, hoop-marked, with lines of lenticels; the inner surface yellowish brown; under bark mottled red; inner bark reddish, laminated; latex pale yellow, clear and very sticky. Leaves dark shiny green above, the midrib pale green, slightly raised, below paler, the midrib prominent, rounded, yellowish green. Fruit dull green, rounded, shortly ellipsoid.

Guttiferae - *Calophyllum ferrugineum* Ridley var. *ferrugineum*

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Plants of Malaya

P. F. Stevens et al. 112.

Johore, Panti F.R., compartment 16, 22.xi.1975, ca. 8 m.

Tree ca. 15 m. tall, d.b.h. ca. 17 cm., no buttresses, etc.; outer bark yellowish and bright yellow mottled, slightly hoop-marked, finely pustular, the inner surface orangey; under bark green; inner bark very pale pink, darkening noticeably on cutting; latex none. Leaves shiny green above, the apex decurved, the midrib green, raised, below paler, the midrib rounded. The veins clear. Flowers whitish, scented. (Smaller-leaved shoots taken from ascending branches with a lichen on the twigs.) Spirit material.

Guttiferae - *Calophyllum* sp. aff. *C. gracillimum*
Hend. & Wyatt-Smith.

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Plants of Malaya

P. F. Stevens et al. 113.

Johore, Panti F.R., compartment 16, 22.xi.1975, ca. 8 m.

Tree ca. 15 m. tall, d.b.h. 30 cm. no buttresses, etc.; outer bark brownish, hoop-marked, with small lenticels close together, the inner surface dark reddish brown and yellowish mottled; under bark reddish and yellowish, mottled; inner bark meat red, laminated; latex pale yellow, clear, very sticky; outer bark-wood interface smooth. Leaves dark shiny green above, the midrib raised, paler green, below paler, the midrib prominent, rounded. Fruit pointed ellipsoid, green with paler spots. Spirit material.

Guttiferae - *Calophyllum ferrugineum* Ridley var. *ferrugineum*

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Plants of Malesia: *Malaya*

P. F. Stevens et al. 115.

Johore, Panti F.R., compartment 16, 22.xi.1975, ca. 8 m.

Periodically inundated forest.

Tree ca. 20 m. tall, d.b.h. 30 cm., no buttresses etc.; outer bark rather pale brown, thin scales, the inner surface whitish and buff mottled; under bark reddish and paler red mottled; inner bark pale meat red, laminated; latex clear yellow, sticky, bark-wood interface striate. Leaves shiny green above, the midrib raised, paler green, below rather pale green, the veins very clear, distant, the midrib rounded. Fallen leaves a rather conspicuous light brown-orange color.

Guttiferae - *Calophyllum venulosum* Miq. var. *tenuivenium* (Hend. & Wyatt-Smith) Stevens

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Plants of Malaya

P. F. Stevens et al. 10.

Pahang, near turn-off to Fraser's Hill, the Gap, 11.xi.1975, 915 m.

Forest on moderately sloping ground.

Tree, ca. 8 m. tall; d.b.h. 20 cm.; outer bark pale brown, thin, finely cracked; under bark greenish; inner bark dull orange; sapwood white; branches spreading, leaves rather bright shiny green above, slightly lightly below; fruit light green.

Celastraceae - *Bhesa paniculata*

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Plants of Malaya

P. F. Stevens et al. 117.

Johore, ca. 1/2 way between Kota Tinggi and Johore Bahru, 1975.

Edge of Imperata-Theaceae-Melastome scrub.

Tree ca. 4 m. tall; latex white; leaves dark shiny green above, paler below; fruit orange.

Moraceae - *Ficus*.

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Plants of Malaya

P. F. Stevens et al. 2.

Pahang, near turn-off to Fraser's Hill, the Gap, 11.xi.1975, 915 m.

Forest on moderately sloping ground.

Tree, ca. 20 m. tall; leaves shiny green; flower buds green.

Elaeocarpaceae - *Elaeocarpus*

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Plants of Malaya

P. F. Stevens et al. 6.

Selangor, Bukit Lagong F. R., 8.xi.1975, ca. 510 m.

Valley side, steeply sloping.

Rope in small *Calophyllum incrassatum*, ca. 4 m. tall; leaves mid shiny green above, grayish green below, flowers green, although purplish brown towards the tips of the inner tepals; fruit green.

Annonaceae - *Desmos*

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Plants of Malaya

P. F. Stevens et al. 4.

Selangor, Bukit Lagong F. R., 8.xi.1975, ca. 510 m.

Valley side, steeply sloping.

Treelet ca. 3 m. tall; d.b.h. ca. 2 cm.; branches spreading; leaves mid shiny green above, paler and dull below; flowers greenish white.

Rubiaceae

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Plants of Malaya

Stevens et al. 102.

Johore, Gunong Pulai, 20.xi.1975, 60 m.

Vigorous vine. Leaves dark shiny green above, paler below; calyx green; corolla when young orange-yellow, when older bright orange-red; filaments and style reddish purple, anthers and stigma purplish black.

Leguminosae

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Plants of Malesia: *Malaya*

P. F. Stevens et al. 120.

Selangor, Kepong, Forest Reserve behind F. R. I., 25.xi.1975.

Tree ca. 20 m. tall, d.b.h. 30 cm., no buttresses etc.; outer bark brown, slightly hoop-marked, densely and shallowly cracked, the inner surface brown; under bark red, mottled; inner bark reddish latex more or less clear, yellow, very sticky, appearing as threads. Leaves mid shiny green above, the midrib slightly raised, paler green, below paler, finely striate, the midrib rounded, yellowish. Fruit almost spherical, pale green. Germination by beaking the stone to one side of the base; pairs of leaves separated by less than 5 mm. Spirit material.

Guttiferae - *Calophyllum ferrugineum* Ridley var. *oblongifolium* (T. Anders.) Stevens

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Plants of Malaysia

P. F. Stevens et al. 137. (Tree 4267).

Sarawak, 1st Division, Semengoh Arboretum, 4.xii. 1975, ca. 60 m.

Undulating mixed dipterocarp rainforest.

Seedlings definitely of tree. Tree ca. 20 m. tall, d.b.h. 30 cm., spurred; outer bark brown, rather shallowly fissured, not scaling, the inner surface blackish; under bark mid brown-red; inner bark mid red; latex clear yellow, fluid, on rubbing turning curdy.

Guttiferae - *Calophyllum teysmannii* Miq. var. *inophylloide* (King) Stevens

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Plants of Malaysia

P. F. Stevens et al. 136.

Sarawak, 1st Division, Semengoh Arboretum, 4.xii. 1975, ca. 60 m.

Undulating mixed dipterocarp rainforest.

Tree ca. 30 m. tall, d.b.h. 70 cm., no spurs, etc. outer bark brownish yellow, with moderately deep and rather distant fissures, not scaling, the inner surface chestnut brown; under bark chestnut brown; inner bark chestnut brown outside, paler inside; latex lemon curd yellow, not very sticky. Leaves dark shiny green above, the midrib paler, quite prominent, hardly raised, the venation fine, below mid green, the venation fine, the midrib yellowish green, rounded.

Guttiferae - *Calophyllum roseocostatum* Stevens

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Plants of Malaysia

P. F. Stevens et al. 134. (Tree 4544)

Sarawak, 1st Division, Semengoh Arboretum, 4.xii. 1975, 60 m.

Undulating mixed dipterocarp lowland rainforest.

Tree 18 m. tall, d.b.h. 22 cm., no spurs, etc.; outer bark brown, strongly hoop-marked, with very shallow lines of lenticels and broad cracks, the inner surface brown; under bark reddish and paler mottled; inner bark mid pink; latex clear yellow, very sticky. Leaves mid shiny green above, the midrib slightly paler, slightly raised, below paler, with fine venation, the midrib rounded.

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith

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Plants of Malaysia

P. F. Stevens et al. 133 (Tree 4671)

Sarawak, 1st Division, Semengoh Arboretum, 4.xii. 1975, 60 m.

Undulating mixed dipterocarp lowland rainforest.

Tree ca. 27 m. tall, d.b.h. 50 cm., no spurs, etc. outer bark scaling, the scales light brown, underneath darker brown, moderately fissured, the inner surface dirty orange brown; under bark reddish; inner bark mid red; latex opaque yellow, very sticky. Leaves slightly V-shaped, dark shiny green above, the midrib paler, almost flat, with ferruginous indumentum, paler below, the margin and midrib ferruginous. Young plant erect, with well-developed internodes.

Guttiferae - *Calophyllum castaneum* Stevens

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Plants of Malaysia

P. F. Stevens et al. 130.

Sarawak, 1st Division, Semengoh Arboretum, 3.xii. 1975 ca. 60 m.

Growing by stream.

Tree ca. 30 m. tall, d.b.h. 30 cm., with obscure spurs; outer bark flakey, the flakes light brown, under the flakes dark brown, the inner surface bright orange; under bark bright orange; inner bark brownish red; latex sparse, very sticky, yellow, ?clear. Leaves dark rather dull green above, the midrib paler, sharply raised, below pale green, the veins very clear, the midrib rounded. Saplings with erect growth, the bark yellowish white, with long internodes.

Guttiferae - *Calophyllum venulosum* Miq. var. *venulosum*

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Plants of Malaysia

P. F. Stevens et al. 129. (Tree 3469).

Sarawak, 1st Division, Semengoh Arboretum, 3.xii. 1975, ca. 60 m.

Undulating mixed dipterocarp forest.

Tree ca. 25 m. tall, d.b.h. 47 cm., no spurs, etc. outer bark dull yellow, gray and brown mottled, the inner surface mid brown; under bark reddish; inner bark reddish; latex clear yellow, sticky, turning opaque. Leaves dark shiny green above, the midrib concolorous, raised, below paler, the midrib brown (indumentum), the margin slightly recurved.

Guttiferae - *Calophyllum* sp. aff. *C. woodii* Steven

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Plants of Malaysia

P. F. Stevens et al. 126. (Tree 6746)

Sarawak, 1st Division, Semengoh Arboretum, 3.xii. 1975, ca. 60 m.

Undulating mixed dipterocarp forest.

Tree 18 m. tall, d.b.h. 20 cm., no spurs, etc.; outer bark yellowish and brown mottled, smooth, more or less hoop-marked, with lenticel cracks; inner bark pinkish; latex yellow, clear, sticky. Branches pendulous. Leaves deep shiny green above, the midrib paler, raised, broadly rounded, below paler, the veins very clear, the midrib paler, almost flat. Fruit green, beaked.

Guttiferae - *Calophyllum pulcherrimum* Wall. ex Choisy

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Plants of Malaysia

P. F. Stevens et al. 125 (Tree 1800)

Sarawak, 1st Division, Semengoh Arboretum, 3.xii. 1975, ca. 60 m.

Undulating mixed dipterocarp forest.

Tree, d.b.h. 25 cm., stilt roots; outer bark rich brown, with long, more or less crack-like scaling, fissures, the inner surface brownish; under bark reddish; inner bark pale red; latex clear yellowish green, not sticky. Leaves mid dull green above the midrib raised, paler, below pale green, the veins clear. the midrib rounded.

Guttiferae - *Calophyllum teysmannii* Miq. var. *inophylloide* (King) Stevens

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Plants of Malaysia

P. F. Stevens et al. 148.

Sarawak, 1st Division, Stapok F.R., 5.xii.1975. Peat swamp.

Sprawling, rather herbaceous, to 50 cm., tall. Leaves dark shiny green above, paler and dull below, very hairy; young flowers whitish; fruiting axis orange; fruits green, turning red.

Piperaceae - *Piper*.

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Plants of Malaya

P. F. Stevens et al. 122.

Selangor, Kepong, Forest Reserve behind F. R. I., 25.xi.1975.

Sprawling shrub ca. 4 m. tall. Leaves mid shiny green above, dull below; calyx dull reddish green corolla yellow; fruit black.

Verbenaceae - *Clerodendrum*

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Plants of Malaysia

P. F. Stevens et al. 139.

Sarawak, 1st Division, Semengoh Arboretum, 4.xii. 1975, ca. 60 m.

Undulating mixed dipterocarp rainforest.

Tree, d.b.h. 16 cm., no spurs, etc.; outer bark brownish, lenticels beginning to form confluent lines, the inner surface blackish; under bark dark reddish; inner bark mid red; latex not seen (tree too young?). Branches subpendulous. Terminal bud blackish brown; leaves dark shiny green above, the midrib paler, slightly raised, below paler, shiny, the veins fine, the midrib prominent, slightly brownish, rounded, the base subcucullate.

Guttiferae - *Calophyllum rigidum* Miq.

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Plants of Malaysia

P. F. Stevens et al. 145.

Sarawak, 1st Division, Semengoh Arboretum, 4.xii. 1975, ca. 60 m.

Undulating mixed dipterocarp forest.

Tree ca. 20 m. tall, d.b.h. 35 cm., no spurs, etc.; outer bark grayish and brownish mottled, finely cracked, slightly hoop-marked, the inner surface blackish brown; under bark dark reddish; inner bark mid red; latex opaque, more or less honey colored. very sticky. Leaves dark shiny green above, the midrib flat, paler, below paler, the venation very fine, the midrib rounded, yellowish. Fruit green. Spirit material.

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith

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Plants of Malaysia

P. F. Stevens et al. 147.

Sarawak, 1st Division, Stapok F.R., 5.xii.1975. Peat swamp.

Tree ca. 30 m. tall, d.b.h. 65 cm., no spurs, etc., but knee roots to 35 cm. tall; outer bark brown, soft, flaking, fissured, to 1 cm. thick, the inner surface brown; under bark dull orangey-brown; inner bark red, laminated; latex white, hardly sticky. Leaves dark rather dull green above, the midrib whitish, flat, below pale green, the venation clear and fine, the midrib rounded, brownish, the edges recurved (Rotting fruit 2 1/4 X 7/8", the outer layer 7/8" thick).

Guttiferae - *Calophyllum scriblitiifolium* Hend. & Wyatt-Smith

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Plants of Malaysia

P. F. Stevens et al. 183.

Sarawak, 1st Division, Sabal Tapang, 9.xii.1975., 190 m.

Kerangas vegetation.

Tree ca. 6 m. tall, d.b.h. 11 cm., no spurs, etc.; outer bark orange brown, cracking and with boat-shaped fissures, the inner surface dull orange; under bark meat red; inner bark pale meat red, laminated; latex clear yellow, sticky; lamina mid shiny green above, the midrib gradually raised, below paler, the midrib flat, the venation very fine (veins plus latex canals visible); whole inflorescence whitish, no basal internode. Spirit material.

Guttiferae - *Calophyllum nodosum* Vesque

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Plants of Malaysia

P. F. Stevens et al. 177.

Sarawak, 1st Division, Sabal Tapang, 9.xii.1975., 130 m.

Well-drained mixed dipterocarp forest.

Tree 26 m. tall, d.b.h. 41 cm., no spurs, etc.; outer bark brown, slightly flaky, with narrow fissures, the inner surface dark brown, with small light dirty orange-brown spots; under bark dirty orange brown; inner bark red, laminated; latex white, opaque, sticky, turning slightly yellowish. Leaves dark shiny green above, the midrib yellowish, flat, the margin slightly recurved, below paler, shiny, the venation fine, the midrib yellowish, prominent, rounded.

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith (variant, = Stevens et al. 234).

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Plants of Malaysia

P. F. Stevens et al. 176.

Sarawak, 1st Division, Sabal Tapang, 9.xii.1975., 130 m.

Well-drained mixed dipterocarp forest.

Tree ca. 18 m. tall, d.b.h. 30 cm.; outer bark grayish, slightly hoop-marked, also pocked; inner bark orangish; leaves mid-dark green above, the midrib brown, paler and dull below, the veins somewhat brownish; fruit orange green brown; seeds three, immature, the outer layer pale yellowish green, rather fleshy, next layer blackish, hard, next layer brownish, rather fleshy, inner layer more or less gelatinous.

Euphorbiaceae - *Ptychopyxis*

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Plants of Malaysia

P. F. Stevens et al. 172.

Sarawak, 1st Division, Sabal Tapang, 9.xii.1975., 130 m.

Tree ca. 23 m. tall, d.b.h. 30 cm., no spurs, etc.; outer bark hard, orange-brown, slightly scaly, slightly hoop-marked, with vertically elongated lenticels, the inner surface not separating cleanly from the under bark; inner bark pinkish; latex clear, pale yellow, sticky. Young leaves pale green; lamina mid shiny green above, the midrib paler green, raised, paler green below, the veins clear. Fruit dirty green. New innovations all axillary; branches more or less spreading. Spirit material.

Guttiferae - *Calophyllum pulcherrimum* Wall. ex Choisy

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Plants of Malaysia

P. F. Stevens et al. 160.

Sarawak, 1st Division, Sabal Tapang, 6.xii.1975., 120 m.

Well-drained mixed dipterocarp forest.

Tree ca. 25 m. tall, d.b.h. 60 cm., no spurs, etc.; outer bark brown, strongly fissured, not hoop-marked, not separating easily from the under bark; inner bark reddish, laminated; latex clear yellow, sticky. Leaves dark dull green above, the midrib brownish (indumentum), raised, paler below, the venation clear, the midrib brown, rounded. Flush pink, the midrib and adjacent areas green. Fruit green. Young plants erect, terminal bud functional. Spirit material.

Guttiferae - *Calophyllum woodii* Stevens

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Plants of Malaysia

P. F. Stevens et al. 158.

Sarawak, 1st Division, Sabal Tapang, 6.xii.1975., 120 m.

Well-drained mixed dipterocarp forest.

Tree ca. 18 m. tall, d.b.h. 33 cm., no buttresses, etc.; outer bark brown, rather strongly fissured, not hoop-marked, the inner surface blackish; under bark deep red-brown; inner bark mid red, laminated latex clear yellow, sticky, becoming almost opaque. Branches spreading to somewhat pendulous. Leaves dark shiny green above, the midrib pale, slightly raised, below paler green, shiny, veins invisible, midrib flat.

Guttiferae - *Calophyllum depressinervosum* Hend. & Wyatt-Smith

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Plants of Malaysia

P. F. Stevens et al. 153.

Sarawak, 1st Division, Stapok F.R., 5.xii.1975.
Peat swamp.

Tree ca. 17 m. tall, d.b.h. to 17 cm., no spurs, etc.; outer bark brown and light brown mottled, not hoop-marked, with broad, shallow fissures to 12 cm. long and 2 cm. across, the inner surface reddish brown; under bark reddish and orange brown mottled; inner bark pale red; latex opaque yellow. Branches and leaves ascending. Axillary and terminal innovations with basal scales. Leaves V-shaped, rather light, shiny green above, the midrib pale, slightly raised, below light shiny green, the veins clear, the midrib somewhat yellowish, hardly raised, rounded.

Guttiferae - *Calophyllum elegans* Ridley

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Plants of Malaysia

P. F. Stevens et al. 179.

Sarawak, 1st Division, Sabal Tapang, 9.xii.1975., 175 m.

Well-drained mixed dipterocarp forest.

Tree, d.b.h. 40 cm., not spurred, etc.; outer bark orange brown, finely scaly, cracked, the inner surface dirty brown; under bark red; inner bark red, rather brittle; latex clear yellow, sticky; leaves rather bright green above, the veins visible, the midrib rather sharply raised, below paler the veins invisible, the midrib slightly paler, flat. Fruit greenish. Spirit material.

Guttiferae - *Calophyllum gracilipes* Merrill.

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Plants of Malaysia

P. F. Stevens et al. 194.

Sarawak, 1st Division, Bukit Tai Ton, 12.xii.1975, 105 m.

Limestone hill.

Small tree ca. 4 m. tall; leaves mid shiny green above, punctate, bright light shiny green below, the midrib flat; inflorescence greenish.

Myrtaceae - *Syzygium*.

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Plants of Malaysia

P. F. Stevens et al. 156.

Sarawak, 1st Division, Stapok F.R., 5.xii.1975.
Peat swamp.

Herb to 50 cm. tall. Leaves mid shiny green above, the veins impressed, paler below, the veins raised; spathe shiny purple red; spadix white.

Araceae - *Cyrtosperma lasioides*.

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Plants of Malaysia

P. F. Stevens et al. 159.

Sarawak, 1st Division, Sabal Tapang, 6.xii.1975., 120 m.

Well-drained mixed dipterocarp forest.

Seedlings arching; terminal bud functional. Treelet 3 m. tall, d.b.h. 3 cm.; outer bark red brown, smooth, the inner surface brown orange; under bark red; inner bark pale red; latex dirty whitish brown slightly sticky. Leaves dark shiny green above, the midrib concolorous, sharply raised, below paler, shiny, the midrib yellowish green, slightly raised.

Guttiferae - *Calophyllum gracilipes* Merrill

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Plants of Malaysia

P. F. Stevens et al. 152.

Sarawak, 1st Division, Stapok F.R., 5.xii.1975.
Peat swamp.

Tree, no buttresses, etc.; outer bark brown and grayish mottled, more or less hoop-marked, with lines of lenticels, the inner surface dark brown; under bark rather orangey brown; inner bark laminated, red; latex yellow, clear, very sticky. Leaves mid shiny green above, the midrib almost flat, concolorous, below pale green, finely striate; the midrib rounded. Sapling leaves up to 16 X 7 cm ovate-acuminate.

Guttiferae - *Calophyllum hosei* Ridley

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Plants of Malaysia

P. F. Stevens et al. 186.

Sarawak, 1st Division, Sabal Tapang, 9.xii.1975., 190 m.

Kerangas vegetation.

Tree with horizontal branches, also prostrate shrub; leaves mid dull green above, the midrib sharply raised, the veins almost invisible, below paler, the midrib almost flat, invisible, whitish, the venation finely reticulate; flowers white; fruit brown. Spirit material.

Guttiferae - *Mesua*

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Plants of Malaysia

P. F. Stevens et al. 199.

Sarawak, 1st Division, Bukit Tai Ton, 12.xii.1975, 105 m.

Limestone hill.

Shrub 2 m. tall, with spreading branches; leaves mid shiny green above, lighter bright shiny green below; fruit green.

Euphorbiaceae - *Suregada*.

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Plants of Malaysia

P. F. Stevens et al. 233.

Sarawak, 1st Division, Matang Ridge, 16.xii.1975, 305 m.

Mixed dipterocarp forest.

Tree 20 m. tall, d.b.h. 23 cm., no spurs, etc.; outer bark yellowish and brown mottled, slightly hoop-marked, cracked, separating with difficulty from the inner bark; under bark orange; inner bark reddish; latex yellow, very sticky; leaves dark green above, the midrib concolorous, rounded, raised, below paler, the veins visible, the midrib yellowish, flat; fruit green. Flush reddish, with a greenish midrib. Seedlings with ca. 4 prs. of scale leaves and 2 pairs of expanded leaves.

Guttiferae - *Calophyllum pulcherrimum* Wall. ex Choisy

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Plants of Malaysia

P. F. Stevens et al. 219.

Sarawak, 1st Division, Bukit Jebong, Bau, 13.xii.1975, 150 m.

Forest over limestone.

Tree 15 m. tall, d.b.h. 20 cm., no spurs, etc.; outer bark yellow brown, hoop-marked, the inner surface orange; under bark reddish and yellowish mottled; latex clear yellow, fluid, turning cloudy on rubbing; leaves dark green above, the midrib paler, slightly raised, the margins paler, below paler, the midrib slightly yellowish, slightly raised.

Guttiferae - *Calophyllum tetrapterum* Miquel var. *obovale* (Miquel) P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 195.

Sarawak, 1st Division, Bukit Tai Ton, 12.xii.1975, 105 m.

Limestone hill.

Sprawling shrub to 4 m. long, to 2.5 cm. d.b.h.; outer bark yellowish brown, the inner surface bright orange; under bark bright orange; inner bark dirty reddish; latex none. Leaves rather dark shiny green above, the veins almost visible, the midrib quite flat, slightly paler, below yellowish green, venation, etc., invisible, the midrib rounded, yellowish green; fruit brownish green. Spirit material.

Guttiferae - *Calophyllum aurantiacum* P. F. Stevens - Isotype.

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Plants of Malaysia

P. F. Stevens et al. 231.

Sarawak, 1st Division, Matang Ridge, 16.xii.1975, 305 m.

Mixed dipterocarp forest.

Tree ca. 25 m. tall, d.b.h. to 45 cm., with spurs to 35 cm.; outer bark brown, finely fissured, scaling, the inner surface brownish; under bark reddish; inner bark mid red; latex yellow, runny, turning opaque. Leaves picked up off ground. Seedlings with erect terminal leaves, when young pinkish, with a median green stripe.

Guttiferae - *Calophyllum teysmannii* Miq. var. *inophylloide* (King) P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 212.

Sarawak, 1st Division, Bukit Jebong, Bau, 13.xii.1975, 20 m.

Tree ca. 15 m. tall, d.b.h. 32 cm., not spurred, etc.; outer bark yellowish brown, not hoop-marked, with vertical rows of prominent lenticels, the inner surface orange brown; under bark dark red; inner bark rather dark (red) brown, fibrous; exudate sparse, brownish yellow, ?clear, not sticky; leaves dark green above, the midrib slightly paler, sharply raised, below paler, veins, etc., unclear, the midrib concolorous, raised.

Guttiferae - *Calophyllum recurvatum* P. F. Stevens

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Sarawak, 1st Division, Bukit Jebong, Bau, 13.xii.1975, 20 m.

Tree 20 m. tall, d.b.h. 23 cm., no spurs, etc.; outer bark yellow brown, hoop-marked, with lines of lenticels, the inner surface orange; under bark reddish; inner bark red-pink, fibrous; latex clear pale yellow brown, not sticky; branches spreading; leaves dark dull green above, the midrib raised, below paler, no veins, etc., visible, the midrib yellowish; fruit brown-green. Spirit material.

Guttiferae - *Calophyllum recurvatum* P. F. Stevens

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Plants of Malesia

P. F. Stevens et al. 465.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i. 1976, 610 m., rather steeply sloping forest. Forest on hillside.

Tree ca. 27 m. tall, d.b.h. 32 cm.; outer bark yellowish brown, with lines of lenticels, the inner surface blackish; under bark reddish; inner bark mid meat red; latex opaque yellow, rather sticky; leaves dark shiny green above, the midrib (and margin) pale green, prominent, below paler, the midrib yellowish green, rounded, the venation fine.

Guttiferae - *Calophyllum blancoi* Pl. & Tr.

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Plants of Malesia

P. F. Stevens et al. 463.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i. 1976, 610 m., rather steeply sloping forest. Logged over area.

Tree ca. 25 m. tall, d.b.h. 32 cm., no spurs, etc. outer bark rather pale grayish (exposed to sun), flaking, not fissured, the inner surface pale yellowish straw; under bark reddish; inner bark meat red; latex opaque yellow, not very sticky, but more so towards the outside; leaves dark shiny green, the midrib yellowish green, slightly raised; below paler, the venation not very clear, distant, the midrib brownish.

Guttiferae - *Calophyllum venulosum* Zoll. var. *venulosum*

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Plants of Malaysia

P. F. Stevens et al. 413.

Sabah, Labuk & Sugat, Bukit Tangkunan, Mile 86, Labuk road, 11.i.1976, 305 m. Forest on ultramafic rock.

Shrub 2.5 m. tall; leaves mid shiny green above, paler shiny below; calyx greenish; corolla whitish; filaments purple red; anthers yellow.

Myrtaceae - *Decaspermum*

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Plants of Malesia

P. F. Stevens et al. 469.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i. 1976, 610 m., rather steeply sloping forest. Forest on hillside.

Treelet 3 m. tall; leaflets rather dark shiny green above, slightly paler and shiny below; inflorescence whitish.

Leguminosae - *Pithecellobium*

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Plants of Malaysia

P. F. Stevens et al. 240.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 305 m.

Mixed dipterocarp forest.

Slender tree ca. 12 m. tall, d.b.h. 15 cm., no spurs, etc.; outer bark brown, with lenticellary cracks, slightly hoop-marked, the inner surface blackish; under bark deep red; inner bark red; latex yellow, clear, somewhat sticky; leaves dark shiny green above, with very fine venation, the midrib pale, slightly but sharply raised, below paler, the venation visible, less dense, the midrib yellowish, rounded, prominent, contrasting strongly with the dirty green petiole; terminal bud muddy brown.

Guttiferae - *Calophyllum rigidum* Miq.

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Plants of Malaysia

P. F. Stevens et al. 234.

Sarawak, 1st Division, Matang Ridge, 16.xii.1975, 305 m.

Mixed dipterocarp forest.

Tree 25 m. tall, d.b.h. 42 cm., no spurs, etc.; outer bark yellowish brown, hoop-marked, finely cracked, the inner surface dark brown-reddish (yellowish under the cracks); under bark dark red, fibrous; latex white, not sticky, turning dirty brownish yellow and sticky with age; leaves dark shiny green above, the midrib yellowish, flat, below paler, the venation fine, the midrib yellowish, rounded, prominent. The whole leaf rather rigid.

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith (variant, equals S et al. 177).

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Plants of Malaysia

P. F. Stevens et al. 237.

Sarawak, 1st Division, Matang Ridge, 16.xii.1975, 305 m.

Mixed dipterocarp forest.

Tree ca. 22 m. tall, d.b.h. 33 cm., no spurs, etc. outer bark rather finely cracked; brownish and yellowish mottled; inner bark reddish, laminated, fibrous; latex white, not very sticky; lamina and mid green above, the midrib yellowish, slightly raised, yellowish, below slightly paler, the venation very fine the midrib yellowish, rounded; fruit (and pedicel) whitish (truncate at apex when dry). Seedlings with specimens: two pairs of leaves, growth initially rather slow for 2 or 3 nodes, then faster. Spirit material.

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith

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Plants of Malaysia

P. F. Stevens et al. 375.

Sabah, Sandakan, Mile 32 Labuk road, Sungei Mayan, Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 9.i.1976, 30 m.

Sandstone escarpment.

Tree ca. 20 m. tall, d.b.h. 25 cm., no spurs, etc. outer bark brownish, not hoop-marked, rather closely lenticel cracked, the inner surface orange greenish, etc. mottled; under bark reddish and orange mottled; inner bark mid red; latex opaque yellow, not very sticky; leaves V-shaped, rather dark green above, the midrib paler, almost flat, below paler, the midrib pale green-brownish.

raised, rounded, the venation fine; whole inflorescence white apart from brownish red indumentum on axis and the orange-yellow anthers; fruit pale green, ovoid and pointed at the apex. Spirit material.

Guttiferae - Calophyllum canum Hook. f.

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Plants of Malaysia

P. F. Stevens et al. 241.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 305 m.

Mixed dipterocarp forest.

Tree 26 m. tall, d.b.h. 42 cm., no spurs, etc., but the trunk slightly fluted at the base; outer bark brown, scaling, strongly fissured, the inner surface shiny grayish black; under bark reddish; inner bark pale reddish, laminated, soft; latex rather slow to appear, very pale yellow, clear, runny, turning more or less pale curdy on rubbing; lamina shiny green above, the midrib brownish, flat, below pale green, the venation very clear, the midrib brown (because of indumentum), prominent the whole lamina tends to be broadly recurved, and the uppermost pair of leaves tend to be erect.

Guttiferae - Calophyllum teysmannii Miq. var. inophylloide (King) P. F. Stevens - variant

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Plants of Malaysia

P. F. Stevens et al. 270.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 610 m.

Mixed forest on ridge.

Ill-grown tree 12 m. tall, d.b.h. 18 cm.; outer bark orange, hoop-marked, finely cracked, also with a few vertical lines of lenticels, the inner surface dull orange brown; under bark dark red; inner bark dark red; latex lemon yellow, opaque, not sticky; leaves rather rigid, shiny green above, the midrib paler raised, below pale green, veins hardly visible, the midrib flat; foliage dense; twigs almost erect.

Guttiferae - Calophyllum gracilipes Merrill.

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Plants of Malaysia

P. F. Stevens et al. 271.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 620 m.

Mixed forest on ridge.

Tree 7 m. tall, d.b.h. 8 cm., no spurs, etc.; outer bark brown, hoop-marked, the inner surface dark brown; under bark reddish; inner bark pale red; latex clear yellow, sticky; lamina dark green above the midrib paler, slightly and sharply raised, below paler, the venation visible, the midrib pale green-brown, rounded; terminal bud brick red. The tree had lost its leaves recently.

Guttiferae - Calophyllum lanigerum Miq. var. austrocoriaceum (Whitmore) P. F. Stevens.

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Plants of Malaysia

P. F. Stevens et al. 301.

Sarawak, 1st Division, Gunong Santubong, 20.xii.1975, 60 m.

Mixed dipterocarp forest on ridge.

Tree 22 m. tall, d.b.h. 27 cm., no spurs, etc.; outer bark brown, very finely cracked, hoop-marked the inner surface brown and orange mottled; under bark yellowish and reddish mottled; inner bark dull dirty straw; leaves dark shiny green above, paler below, the venation more or less visible.

Dipterocarpaceae - Shorea

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Plants of Malaysia

P. F. Stevens et al. 302.

Sarawak, 1st Division, Gunong Santubong, 20.xii.1975, 60 m.

Tree 27 m. tall, no spurs, etc.; outer bark yellowish brown, deeply fissured, scaly, not hoop-marked the inner surface orange; under bark dull rather dark meat red; inner bark dark red; latex clear yellow; leaves dark green above, the midrib yellowish green, rounded; fruit rather grayish green. Spirit material.

Guttiferae - Calophyllum griseum P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 402.

Sabah, Sandakan, mile 32 Labuk road, 10.i.1976

Tree ca. 12 m. tall, d.b.h. 17 cm.; outer bark mid brown; leaves dark shiny green above, paler below; fruit green.

Tiliaceae

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Plants of Malaysia

P. F. Stevens et al. 285.

Sarawak, 1st Division, Semengoh F.R., 19.xii.1975, 30 m.

Mixed dipterocarp forest on undulating ground.

Tree ca. 20 m. tall, d.b.h. 30 cm., no spurs, etc. outer bark yellowish brown, with rather distant and shallow-boat-shaped fissures, the inner surface sulphur yellow; under bark reddish; inner bark pale red, laminated; latex copious, white, runny, not sticky; lamina V-shaped, shiny green above, the midrib paler, slightly raised, below rather shiny green, the venation fine, the midrib rounded, pale green; fruit green.

Guttiferae - *Calophyllum soulattri* Burm. f.

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Plants of Malaysia

P. F. Stevens et al. 242.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 305 m.

Mixed dipterocarp forest.

Tree ca. 23 m., d.b.h. 20 cm.; outer bark yellowish brown, easily detaching, thin, the inner surface orange brown and dark purplish reddish mottled; under bark dull reddish brown; inner bark orangey; leaves dull mid green above, the midrib pale, below more or less grayish green; fruit green.

Theaceae - *Gordonia*

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Plants of Malaysia

P. F. Stevens et al. 245.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 305 m.

Tree 17 m. tall, d.b.h. 26 m., stilt roots to 1.6 m.; outer bark brown, with rather fine long fissures, scaly, the inner surface orange brown; under bark reddish; inner bark pale red; latex clear yellow, rather sticky; lamina dark shiny green above, the midrib slightly paler and slightly raised, below almost yellow green, the venation rather clear, the midrib yellowish, rounded.

Guttiferae - *Calophyllum teysmannii*. Miq. var. *obovale* (King) P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 288.

Sarawak, 1st Division, Semengoh F.R., 19.xii.1975, 30 m.

Mixed dipterocarp forest on undulating ground.

Tree 20 m. tall, no spurs, etc.; outer bark brown, hoop-marked, with rather close rows of lenticels, the inner surface blackish; under bark deep red; inner bark meat red; latex opaque yellow, not sticky; lamina V-shaped, slightly twisted at the apex and slightly cucullate at the base, shiny green above, the midrib brownish, inconspicuous, flat, the venation very fine, below paler green, the midrib brown, rounded.

Guttiferae - *Calophyllum rigidum* Miq. (possibly).

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P. F. Stevens et al. 289.

Sarawak, 1st Division, Semengoh F.R., 19.xii.1975, 30 m.

Mixed dipterocarp forest on undulating ground.

Tree, 23 m. tall, d.b.h. 35 cm., no spurs, etc.; outer bark yellowish, very slightly hoop-marked, with prominent rows of dark lenticels, the inner surface greenish slate and dull orange brown mottled; under bark dark meat red; inner bark dark red; latex none; leaves dark shiny green above, very fine venation, the midrib yellowish, sharply and prominently raised, below paler, the veins very clear, the midrib yellow (hairs dark brown), rounded, prominent, the margin recurved.

Guttiferae - *Calophyllum* sp. aff. *C. woodii* Stevens

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Plants of Malaysia

P. F. Stevens et al. 295.

Sarawak, 1st Division, Gunong Santubong, 20.xii.1975, 60 m.

Mixed dipterocarp forest on ridge.

Tree ca. 34 cm. d.b.h., no spurred, etc.; outer bark brownish, hoop-marked, almost smooth although rather finely cracked, the inner surface orange brown; under bark reddish; inner bark pale meat red; latex sparse, clear yellow, sticky; lamina V-shaped, mid shiny green above, the midrib slightly paler, flat, below with fine venation, the midrib pale brownish, rounded.

Guttiferae - *Calophyllum canum* Hooker f. (*C. borneense* Vesque s. str.)

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Plants of Malaysia

P. F. Stevens et al. 275.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 580 m.

Mixed forest on ridge.

Tree 30 m. tall, d.b.h. 65 cm., spurred; outer bark brown, scaling and flaking, the inner surface brown finely striate; under bark pale meat red; inner bark meat red, laminated; latex yellow, clear, sticky; leaves dark green above, the midrib yellowish, slightly raised, below paler, the venation clear, the midrib yellowish; fruit green.

Guttiferae - *Calophyllum teysmannii* Miquel var. *inophylloide* (King) P. F. Stevens.

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P. F. Stevens et al. 287.

Sarawak, 1st Division, Semengoh F.R., 19.xii.1975, 30 m.

Mixed dipterocarp forest on undulating ground.

Tree 15 m. tall, d.b.h. 17 cm.; outer bark grayish, finely flaky; inner bark whitish speckled orange; branches spreading; leaves dark shiny green above, the midrib whitish, below paler; fruit born on the stem, pale green, edible if one is hungry (skin tasteless, flesh rather acid), seed apparently also edible.

Euphorbiaceae - *Baccaurea lanceolata* (Miq.) Muell.-Arg.

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Plants of Malaysia

P. F. Stevens et al. 321.

Sarawak, 1st Division, Gunong Santubong, 21.xii.1975, 150 m.

Mixed dipterocarp forest on ridge.

Tree 15 m. tall, d.b.h. ca. 22 cm., the trunk more or less fluted; outer bark brown, flaky; the inner bark brown, but bark-wood surface black; sapwood straw; leaves dark dull green above, the venation obscure, below slightly paler, the venation rather clear; fruit brownish; seed black; aril orange.

Gonostylaceae - *Gonostylus*

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Plants of Malaysia

P. F. Stevens et al. 401.

Sabah, Sandakan, mile 32 Lobak road, 10.i.1976

Shrublet to 1.5 m. tall; leaves mid green above, paler below; tepals pale green, androecium yellowish.

Euphorbiaceae - *Mallotus miquelianum* (Scheff.) Boerl.

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Sarawak, 1st Division, Semengoh F.R., 19.xii.1975, 30 m.

Mixed dipterocarp forest on undulating ground.

Tree ca. 20 m. tall, d.b.h. 25 cm., no spurs, etc. outer bark brown, slightly hoop-marked, with fair close lines of lenticels, the inner surface dark brown; under bark meat red; inner bark paler red; latex quite copious white, not sticky; lamina dark shiny green above, the midrib pale green, raised, below paler, the venation very fine, the midrib brown, rounded.

Guttiferae - *Calophyllum* prob. *canum* Hooker. f.

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Sarawak, 1st Division, Semengoh F.R., 19.xii.1975, 30 m.

Mixed dipterocarp forest on undulating ground.

Tree, d.b.h. 22 cm., no spurs, etc.; outer bark grayish brown, the inner surface almost orange brown; under bark dull orange brown; inner bark very pale pink, hardly layered; latex lemon curd color, hardly sticky; lamina slightly cucullate at the base, dark shiny green above, the midrib brown, flat, below paler, the venation clear, the midrib margin, twig and terminal bud brown.

Guttiferae - *Calophyllum castaneum* P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 355.

Sabah, Sandakan, Ulu Dusun, 7.i.1976, 2 m.

Tree 27 m. tall, with very small knee roots ca. 5 mm. tall; outer bark yellowish brown, with close, short fissures, the inner surface bright yellow; under bark mid meat red; inner bark similar, laminated; latex white (brownish towards the outside), not sticky; leaves dark shiny green above, the midrib pale green, raised, below paler, the venation very fine, the midrib yellowish green, with brown indumentum.

Guttiferae - *Calophyllum soulattri* Burm. f.

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P. F. Stevens et al. 349.

Sabah, Sandakan, Leila F.R., 2.i.1976, 40 m.

Tree, d.b.h. 10 cm., sprawling and with stilt roots; outer bark rather pale brown, with horizontally extended lenticels; leaves mid green above, paler below, with very clear venation, figs reddish green.

Moraceae - *Ficus*

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Plants of Malaysia

P. F. Stevens et al. 297.

Sarawak, 1st Division, Gunong Santubong. 20.xii. 1975, 60 m.

Mixed dipterocarp forest on ridge.

Tree 25 m. tall, d.b.h. 50 cm., no spurs, etc.; outer bark yellowish, strongly fissured, the inner surface dirty greenish; under bark reddish; inner bark pale red, laminated; latex clear yellow, sticky; leaves rather rigid, erect, dark green above, the midrib slightly paler, raised, below pale green, the venation very clear, the midrib brownish, raised.

Guttiferae - *Calophyllum burmannii* Wight var. *bracteatum* (Wight) P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 322.

Sarawak, 1st Division, Gunong Santubong, 21.xii. 1975, 105 m.

Mixed dipterocarp forest on ridge.

Tree 10 m. tall, d.b.h. 16 cm.; outer bark brown, with almost square cracks and flakes, the inner surface blackish brown; under bark orange brown; inner bark dull orange brown and paler mottled, the mottlings in rings; leaves mid shiny green above, paler green below.

Theaceae - *Schima wallichii*.

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Plants of Malaysia

P. F. Stevens et al. 222.

Sarawak, 1st Division, Bukit Jebong, Bau, 13.xii. 1975, 150 m.

Forest over limestone.

Tree ca. 12 m. tall, d.b.h. 12 cm.; latex white; leaves dark shiny green above, the midrib whitish, below pale brown green when young, becoming rather light green with brownish farinose covering when older; fruit pale green.

Sapotaceae - *Pouteria*.

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Plants of Malesia

P. F. Stevens et al. 431.

Sabah, Tawau, Brantian, Kalabakan, 3 miles Tawau Road, Phenological trail, 13.i.1976, 45 m.

Mixed dipterocarp forest on undulating ground.

Tree 13 m. tall, d.b.h. 15 cm.; outer bark brownish, almost smooth; inner bark pale straw; leaves dark shiny green above, paler below; fruit yellowish green, dehiscent; seeds with whitish fleshy outer part. Spirit material.

Meliaceae - *Aglaia*

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Plants of Malaysia

P. F. Stevens et al. 300.

Sarawak, 1st Division, Gunong Santubong. 20.xii. 1975, 60 m.

Mixed dipterocarp forest on ridge.

Tree 19 m. tall, d.b.h. 22 cm., no spurs, etc.; outer bark yellowish and brownish mottled, hoop-marked, with shallow boat-shaped fissures, the inner surface brownish; under bark dark reddish; inner bark pale red, laminated; latex clear yellow very sticky; lamina dark shiny green above, the midrib paler, gradually raised, below paler, very shiny, latex canals and veins more or less visible. midrib rather yellowish, flat; fruit green.

Guttiferae - *Calophyllum pulcherrimum* Wall. ex Choisy

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Plants of Malay

P. F. Stevens et al. 265.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 305 m.

Mixed forest on ridge.

Tree, d.b.h. 23 cm., no spurs, etc.; outer bark brownish, slightly hoop-marked, with few cracks, the inner surface rich brown; under bark reddish; inner bark reddish; latex white, not sticky; lamina rather dark green above, the midrib yellowish, slightly raised, below paler, the venation very fine, the midrib yellowish, rounded; fruits whitish

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith.

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Plants of Malaysia

P. F. Stevens et al. 391.

Sabah, Sandakan, Mile 32 Labuk road, Sungei Mayan, 9.i.1976, 30 m.

Sandstone escarpment.

Epiphytic ca. 24 m. up large tree, on branches; leaves mid shiny green above, paler below; flower bright red orange, shading to almost orange at the very base, curvature adaxial; anthers purple-red, declinate, becoming exserted and decurved, style then becoming exserted, adaxially curved.

Ericaceae - *Rhododendron longiflorum*

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Plants of Malesia

P. F. Stevens et al. 454.

Sabah, Kinabatangan, Sungei Kuamut, c. 5° 05' S, 14.i.1976, 250 m.

Severely logged mixed dipterocarp forest.

Epiphytic on branches of 456 (annonaceae); pendulous, dark green.

Hepatic

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Plants of Malaysia

P. F. Stevens et al. 332.

Sabah, Sandakan, Sepilok F.R., 30.xii.1975, 19 m.

Numbered tree 1130; tree ca. 20 m. tall, d.b.h. 25 cm., no spurs, etc.; outer bark pale brown, with more or less horizontal markings, with prominent lenticels, the inner surface dark brownish and orange mottled; under bark red; inner bark reddish; latex clear, fluid, not sticky; leaves dark shiny green above, the midrib yellowish, prominent, rounded, below pale green, the venation very clear, the midrib yellowish; twigs flattened, the edges rounded, axillary innovations lacking basal scars; black petioles of fallen leaves noteworthy.

Guttiferae - *Calophyllum macrocarpum* Hook. f.

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Plants of Malaysia

P. F. Stevens et al. 406.

Sabah, Labuk & Sugat, Bukit Tangkunan, Mile 86, Labuk road, 11.i.1976, 426 m.
Forest on ultramafic rock.

Tree 20 m. tall, d.b.h. 15 cm., no spurs, etc.; outer bark yellowish brown, with lines of lenticels, not hoop-marked; the inner surface dull orange brown; under bark deep meat red; inner bark dark red; latex white, copious, not sticky; leaves mid green above, the midrib yellowish, raised, below rather paler, the midrib yellowish, rounded, the veins tending to be twice as dense. (Seedlings with more or less whorled leaves).

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith

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Plants of Malaysia

P. F. Stevens et al. 259.

Sarawak, 1st Division, Matang Ridge, 18.xii.1975, 290 m.

Mixed forest on ridge.

Tree, c. 15 m. tall, d.b.h. 16 cm., no spurs, etc.; outer bark orange, with lenticellary lines, hoop-marked, not separating easily; latex clear yellow, very sticky; lamina dark shiny green above, the midrib paler, rounded, raised, below paler, the veins visible, the midrib palish green, slightly raised; fruit green. Spirit material.

Guttiferae - *Calophyllum pulcherrimum* Wall. ex Choisy.

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Plants of Malaysia

P. F. Stevens et al. 365.

Sabah, Sandakan, Sungei Manjang, 8.i.1976, 20 m.
Forest on white sand.

Tree ca. 33 m. tall, d.b.h. 45 cm., no spurs, etc.; outer bark yellowish brown, with prominent boat-shaped fissures ca. 15 cm. long and 5 mm. across, the inner surface blackish brown; under bark dark reddish; inner bark ca. 1 cm. thick, meat red, laminated; latex sparse, clear yellow, very sticky; leaves mid green above, the midrib paler green, very slightly raised, below paler, the venation fine, the midrib prominent, rounded, with brown indumentum. Rotting fruit on the ground ca. 5 X 4 mm., the stone less than 0.2 mm. thick.

Guttiferae - *Calophyllum burmannii* Wight. var. *bracteatum* (Wight) P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 414.

Sabah, Labuk & Sugat, Bukit Tangkunan, Mile 86, Labuk road, 11.i.1976, 75 m.
Forest on ultramafic rock.

Tree, d.b.h. 17 cm., with small spurs and stilt roots; outer bark brown, with shallow, elongated lenticels, the inner surface brown; under bark deep brownish red; inner bark mid red; latex clear yellow, fluid, on rubbing opaque, curd-like; leaves dark shiny green above, the midrib paler, sharply and prominently raised, paler below, the veins clear, the midrib yellowish, rounded.

Guttiferae - *Calophyllum teysmannii* Miq. var. *inophylloide* (King) P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 274.

Sarawak, 1st Division, Matang Ridge, 17.xii.1975, 580 m.

Mixed forest on ridge.

Tree 22 m. tall, d.b.h. 30 cm., no spurs, etc.; outer bark yellowish brown, with distinct boat-shaped fissures, the inner surface rich brown; under bark reddish; inner bark meat red; latex clear yellow, sticky; lamina dark green above, the midrib pale, slightly raised, below pale green, the venation clear, the midrib yellowish, rounded; leaves held erect, the apex slightly recurved.

Guttiferae - *Calophyllum elegans* Ridley

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Plants of Malaysia

P. F. Stevens et al. 331.

Sabah, Sandakan, Sepilok F.R., 30.xii.1975, 19 m.

Tree, d.b.h. 42 cm., no spurs, etc.; outer bark yellowish brown, slightly hoop-marked, with prominent lenticels in lines, the inner surface orange red; under bark dull meat red; inner bark rather brown red; latex sparse, clear, brownish, not sticky; leaves dark green above, the midrib yellowish green, sharply raised, below paler, the midrib brownish yellow (indumentum) the base slightly cucullate, the margin recurved; twigs notably flattened.

Guttiferae - *Calophyllum woodii* P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 337.

Sabah, Sandakan, Sepilok F.R., 31.xii.1975, 19 m.

Tree, d.b.h. 43 cm., no spurs, etc.; outer bark brown, rather closely set with and cracked by lenticels, the inner surface dirty brown; under bark somewhat orange and dark red mottled; inner bark meat red and fibrous; latex little, almost clear, not sticky at first, becoming sticky; leaves V-shaped, dark green above, the midrib yellowish brown, hardly raised, below paler and shiny, the venation very close, the midrib brownish, rounded; fruits picked off the ground, ca. 2.6 cm. long and 1.7 cm. across, sharply apiculate.

Guttiferae - *Calophyllum canum* Hook. f.

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Plants of Malaysia

P. F. Stevens et al. 344.

Sabah, Sandakan, Leila F.R., 2.i.1976, 105 m.

Tree ca. 16 m. tall, d.b.h. 18 cm., no spurs, etc. outer bark (yellowish) brown, with deep boat-shaped fissures, the inner surface blackish brown; under bark dark red; inner bark meat red; latex clear yellow, sticky; leaves mid green above, the midrib yellowish green, raised, below bright green, the venation very clear, the midrib yellowish green rounded.

Guttiferae - *Calophyllum tetrapterum* Miq. var. *tetrapterum*

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Plants of Malesia

P. F. Stevens et al. 472.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i.1976, 610 m., rather steeply sloping forest. Forest on hillside.

Tree 4 m. tall; leaves mid/dark shiny green above, pale green below; calyx brownish green; fruit green.

Lauraceae

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Plants of Malaysia

P. F. Stevens et al. 417.

Sabah, Tawau, Brantian, Kalabakan, 3 miles Tawau Road, Phenological trail, 13.i.1976, 45 m.

Mixed dipterocarp forest on undulating ground.

Tree ca. 18 m. tall, d.b.h. 30 cm.; outer bark brown with orangish and grayish mottling, with roughly hexangular cracks and impressions; inner bark dull straw; leaves dark shiny green above, paler shiny below; fruit pale green, with a reddish cast, ca. 10 X 7.5 cm., excellent eating, flesh red.

Lecythidiaceae - *Barringtonia*

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Plants of Malaysia

P. F. Stevens et al. 347.

Sabah, Sandakan, Leila F.R., 2.i.1976, 40 m.

Tree 20 m. tall, d.b.h. 30 cm., no spurs, etc.; outer bark rather pale yellowish brown, with strong discrete boat-shaped fissures, the inner surface dull yellowish brown; under bark deep red; inner bark mid red, laminated; latex rather sparse clear yellow, sticky; leaves dark shiny green above, the midrib slightly raised, paler, rather dark dull green below, the venation fine, the midrib brownish green (hairs).

Guttiferae - *Calophyllum burmannii* Wight var. *bracteatum* (Wight) P. F. Stevens

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Plants of Malaysia

P. F. Stevens et al. 350.

Sabah, Sandakan, Ulu Dusun F.R., 7.i.1976, 2 m. Swamp forest.

Tree 3.5 m. tall, d.b.h. 3 cm.; outer bark yellowish brown, slightly hoop-marked, the inner surface almost straw-colored; inner bark pinkish; latex lemon yellow, opaque, not sticky; terminal bud dark brown; leaves mid shiny green above, the midrib paler, sharply raised, below pale green, the veins very clear, the midrib almost concolorous, rounded.

Guttiferae - *Calophyllum pisiferum* Pl. & Tr.

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Plants of Malesia

P. F. Stevens et al. 457.

Sabah, Kinabatangan, Sungei Kuamut, c. 5° 05' S, 14.i.1976, 250 m.

Severely logged mixed dipterocarp forest.

Tree ca. 6 m. tall; branches widely ascending; leaves mid/dark shiny green above, almost whitish green below; flowers white, scented, the staminal tube yellowish tipped.

Meliaceae - *Trichilia connaroides* f. *glabra*

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Plants of Malaysia

P. F. Stevens et al. 354.

Sabah, Sandakan, Ulu Dusun F.R., 7.i.1976, 2 m.
Swamp forest

Tree 22 m. tall, d.b.h. 25 cm.; no spurs, etc.; knee roots to 10 cm. tall; outer bark yellowish and brown mottled, with slight horizontal markings, the inner surface dull greenish straw brown; under bark dark red; inner bark meat red, laminated; latex opaque yellow, sticky; leaves dark green above, the midrib yellowish green, rather sharply and prominently raised, below paler, the venation very clear, the midrib rounded, not very much raised, yellowish.

Guttiferae - *Calophyllum pisiferum* Pl. & Tr.

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Plants of Malaysia

P. F. Stevens et al. 360.

Sabah, Sandakan, Ulu Dusun, 7.i.1976, 8 m.
Mixed dipterocarp forest.

Tree ca. 14 m. tall, d.b.h. 12 cm., no spurs, etc. outer bark rather orange brown, hoop-marked, otherwise smooth, the inner surface brick red; under bark meat red; inner bark rather dark meat red; latex opaque, lemon yellow, not sticky; leaves dark green above, the midrib almost concolorous, sharply raised, below paler, the midrib slightly paler, raised, rounded, the venation not conspicuous. Seedlings very numerous under the tree.

Guttiferae - *Calophyllum gracilipes* Merrill.

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Plants of Malaysia

P. F. Stevens et al. 410.

Sabah, Labuk & Sugat, Bukit Tangkunan, Mile 86, Labuk road, 11.i.1976, 415 m.
Forest on ultramafic rock.

Tree 20 m. tall, d.b.h. 22 cm., slightly spurred; outer bark brown, more or less scaly, closely cracked, the inner surface brown; under bark dark red; inner bark mid red; layered; fibrous; latex like lemon curd, fluid; leaves dark shiny green above, the margins and midrib paler, the latter sharply raised, below paler, the venation clear, the midrib rounded.

Guttiferae - *Calophyllum teysmannii* Miq.

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Plants of Malaysia

P. F. Stevens et al. 381.

Sabah, Sandakan, Mile 32 Labuk road, Sungei Mayan, 9.i.1976, 30 m.
Sandstone escarpment.

Tree ca. 15 m. tall (but topped), d.b.h. 42 cm., no spurs, etc.; outer bark yellowish, strongly fissured, the inner surface black; under bark deep red; inner bark pale pink, layered; latex slightly opaque, yellow, sticky; terminal bud sometimes functional; leaves dark green above, the midrib yellowish green, broadly raised, below paler, rather fine venation, the midrib yellowish flat.

Guttiferae - *Calophyllum nodosum* Vesque.

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Plants of Malaysia

P. F. Stevens et al. 388.

Sabah, Sandakan, Mile 32 Labuk road, Sungei Mayan, 9.i.1976, 30 m.
Sandstone escarpment.

Tree ca. 20 m. tall, d.b.h. 17 cm.; outer bark grayish-brownish mottled, cracked, the inner surface blackish; under bark pale straw; inner bark pale straw mottled orangey; branches spreading to pendulous; leaves dark very shiny green above, paler and less shiny below; flowers red, sweetly scented; fruit green, aril entire except for the top third, orange (still immature).

Myristicaceae - *Horsfieldia*

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Plants of Malesia

P. F. Stevens et al. 460.

Sabah, Kinabatangan, Sungei Kuamut, c. 5° 05' S, 14.i.1976, 250 m.
Severely logged mixed dipterocarp forest.

Epiphytic; leaves dark shiny green above, the venation obscure, paler below, the venation clear; fruit orange.

Moraceae - *Ficus*

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Plants of Malesia

P. F. Stevens et al. 458.

Sabah, Kinabatangan, Sungei Kuamut, c. 5° 05' S, 14.i.1976, 250 m.
Severely logged mixed dipterocarp forest.

Tree ca. 6 m. tall; leaves mid shiny green above, paler below; inflorescence green.

Euphorbiaceae - *Mallotus*

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Plants of Malesia

P. F. Stevens et al. 435.

Sabah, Tawau, Brantian, Kalabakan, 3 miles Tawau Road, Phenological trail, 13.i.1976, 45 m.

Mixed dipterocarp forest on undulating ground.

Locally common, d.b.h. to 55 cm.; tree 22 m. tall, d.b.h. 27 cm., no spurs, etc.; outer bark yellow-brown, with strong boat-shaped fissures, the inner surface dark brown; under bark red brown; inner bark mid meat red; latex clear yellow, very sticky leaves dark shiny green above, the midrib paler, below paler, the midrib flat, the venation invisible.

Guttiferae - Calophyllum depressinervosum Hend. & Wvatt-Smith.

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Plants of Malesia

P. F. Stevens et al. 434.

Sabah, Tawau, Brantian, Kalabakan, 3 miles Tawau Road, Phenological trail, 13.i.1976, 45 m.

Mixed dipterocarp forest on undulating ground.

Tree 18 m. tall, d.b.h. 20 cm., no spurs, etc.; outer bark brown; with shallow lenticellary lines, the inner surface almost brick orange; under bark reddish; inner bark mid red; latex clear, fluid, going white on rubbing; leaves dark green above, the midrib paler, slightly raised, the base slightly cucullate, the margin slightly recurved, below somewhat paler, the midrib greenish yellow, rounded, the venation very clear.

Guttiferae - Calophyllum woodii P. F. Stevens.

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Plants of Malaysia

P. F. Stevens et al. 394.

Sabah, Sandakan, mile 32 Labuk road, 10.i.1976
Poor forest on white sand.

Epiphytic up large tree; leaves mid shiny green above, paler shiny below; calyx green, corolla whitish, very sweetly scented. Spirit material.

Ericaceae - Vaccinium.

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Plants of Malesia

P. F. Stevens et al. 468.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i. 1976, 610 m., rather steeply sloping forest. Forest on hillside.

Tree 3 m. tall; outer bark gray brown; leaves dark shiny green above, the veins impressed, paler shiny below, the veins raised; flowers whitish, all almost over, but some unopened buds.

Myrtaceae - Syzygium

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Plants of Malesia

P. F. Stevens et al. 437.

Sabah, Tawau, Brantian, Kalabakan, 3 miles Tawau Road, Phenological trail, 13.i.1976, 45 m.

Mixed dipterocarp forest on undulating ground.

Tree 6 m. tall, d.b.h. 7 cm.; outer bark grayish brown, with shallow lenticellary fissures, the inner surface mid brown; under bark red; inner bark meat red; latex clear yellow, not very sticky; leaves mid green above, the midrib brownish, hardly raised, below paler, the venation clear, the midrib brownish yellow, rounded.

Guttiferae - Calophyllum canum Hooker f.

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Plants of Malesia

P. F. Stevens et al. 464.

Sabah, Kinabatangan, Sungei Kuamut, c. 5° 05' S, 14.i.1976, 250 m.

Severely logged mixed dipterocarp forest.

Locally common herb to 4 m. tall; leaf sheaths purplish, stalk ca. 70 cm. long, blade to 2 X 0.45 m., dark green above, the midrib channelled, the laterals sunk, paler below, the laterals raised; one reduced leaf below the inflorescence; inflorescence with 5-8 hands, suberect, then pendulous; bracts reddish, not enclosing the apex of the inflorescence. ca. 25 X 7 cm.; flowers yellow. Spirit material.

Musaceae - Musa

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Plants of Malaysia

P. F. Stevens et al. 370.

Sabah, Sandakan, Sungei Manjang, 8.i.1976, 20 m. Forest on white sand.

Slender tree 2 m. tall, the branches spreading; leaves dark green above, paler below, the venation prominently raised; flower white, apart from pale pink corolla.

Rubiaceae

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Plants of Malaysia

P. F. Stevens et al. 380.

Sabah, Sandakan, Mile 32 Labuk road, Sungei Mayan 9.i.1976, 30 m. Sandstone escarpment.

Tree 6 m. tall; leaves mid green above, paler below; flowers pale yellow.

Leguminosae - Pithecellobium

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Plants of Malaya

P. F. Stevens et al. 82.

Johore, Gunong Arong F.R., 19.xi.1975, 15 m.
Slightly sloping rainforest.

Tree 25 m. tall, d.b.h. 28 cm., no buttresses, etc.; outer bark yellowish and brownish mottled, slightly cracked and hoop-marked, the inner surface brown; under bark deep meat red; inner bark pinkish, darkening markedly on exposure; latex opaque white, sticky; bark-sapwood interface almost smooth. Leaves mid shiny green above, the midrib slightly paler and slightly raised, paler below, the veins clear, the midrib raised, rounded; terminal bud ferruginous; fruit pale green.

Guttiferae - *Calophyllum biflorum* Hend. & Wyatt-Smith

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Plants of Malaya

P. F. Stevens et al. 114.

Johore, Panti F.R., compartment 16, 22.xi.1975, ca. 8 m.

Tree ca. 25 m. tall, d.b.h. 36 cm., stilt roots to 1.5 m. tall; outer bark brown, scaling, shallowly fissured, the inner surface blackish; under bark rather pale pink; inner bark reddish, laminated, turning brownish on exposure; latex pale yellow, clear, very sticky; bark-wood interface slightly striate. Leaves dark green above, the midrib conspicuous, flat, whitish, below paler green, the midrib rounded. Whole inflorescence (not quite in flower) white. Spirit material

Guttiferae - *Calophyllum sclerophyllum* Vesque

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Plants of Malaysia

P. F. Stevens et al. 379.

Sabah, Sandakan, Mile 32 Labuk road, Sungei Mayan, 9.i.1976, 30 m.

Sandstone escarpment.

Climber; leaves mid green above, the veins whitish, rusty brown below; flowers pale greenish yellow, apart from purplish filaments and whitish anthers.

Vitaceae - *Ampelocissus*

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Plants of Malesia

P. F. Stevens et al. 467.

Sabah, Tawau, Brassey Range, Ayan Antsaba, 15.i.1976, 610 m., rather steeply sloping forest. Forest on hillside.

Shrub 3 m. tall; young leaves pale green, older leaves mid shiny green, the veins impressed, below paler, very shiny, the veins raised; inflorescence yellowish green.

Leguminosae - *Crudia reticulata* Merr.