A SKETCH OF THE VEGETATION AND FLORA OF THE KAPPEL
SAVANNA NEAR TAFELBERG, SURINAME. II

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HUMIRIACEAE

ICACINACEAE
*Pleurisanthes parviflora (Ducke) Howard KH 2959, 3088. K: A shrub-like tree in small savanna thickets, a liana of several m in savanna wood. The genus is new to Guiana. Amazonian Brazil.

LAURACEAE
Cassytha filiformis L. KH 3015. K: In open savanna vegetation, on Tetracera asperula and Marliera montana. S: Tafelberg; savannas throughout the country.

LECYTHIDACEAE
Couratari spec. prob. nov. KH 2965. K: A small tree, 4½ m, in dense thickets; only fruiting. Dr. A. Mennega notes: “The fruits show affinity to C. multiflora (Smith) Eyma, but the shape and venation of the leaves are different. C. tenuicarpa A. C. Smith has similar foliage but much smaller fruits with considerably thinner pericarp. Such a low tree that is already fertile is unusual in the genus.” Described by airport personnel as flowering with showy pink flowers.

LENTIBULARIACEAE

Utricularia hispida Lam. (= U. angustifolia Benj.). KH 2942. K: Local but often plentiful on the open savanna, in a white- and a yellow-flowered form. R: Tafelberg, etc.; see TAYLOR, l.c.
**Liliaceae**


**Loranthaceae**

*Oryctanthus florulentus* (Rich.) Urb. KH 3311, on *Clusia*, is probably this species. S: Tafelberg; widespread, often on savannas.

*Phoradendron racemosum* (Aublet) Krug et Urban KH 3028. K: Savanna thickets, on *Euceraea nitida*, causing swellings on the host branches. S: Tafelberg; widespread, but not common, in various types of vegetation and on various hosts.

*Phthirusa savannarum* Maguire KH 2921, 3031. K: In savanna thickets on the Kappel and Lareco savannas, both collections on *Licania incana*. Described from Tafelberg, without indication of host; not otherwise known.


**Malpighiaceae**

*Byrsonima eugeniifolia* Sandwith KH 2902. K: Uncommon in savanna thickets. New to Suriname; known by several collections from British Guiana.


**Marantaceae**


**Melastomataceae**


Miconia diaphanea Gleason WB 1560. K: In forest on granite South of the savanna. S: Tafelberg, also known from a few other localities; otherwise Amapá.

Miconia holosericea (L.) DC. KH 3089. K; In forest on granite South of the savanna. S: Tafelberg, also known from a few other localities; otherwise Amapá.

*Miconia phaeophylla Triana KH 2960. K: In savanna scrub. Described from Peru; also reported from Cerro Duida. New to Suriname; also once found on the northern savannas (Brinckheuvel Nat. Res., Teunissen and Wildschut LBB 11395).


Musaceae

Heliconia psittacorum L.f. WB 1529. K: On the savanna. Not found by Kramer and Hekking; introduced?

Myrsinaceae


Myrtaceae


Plinia spec. KH 2888. K: In savanna wood east of the savanna. According to McVAUGH (pers. comm.) this is presumably an undescribed species.

Ochnaceae

*Elvasia essequibensis* Engler KH 3315. K: A tree in savanna wood North of the savanna. Sterile, but the determination is scarcely doubtful. New to Suriname; apparently only known from British Guiana; see DWYER (1943).


Sauvagesia erecta L. KH 3092. K: Disturbed wet savanna; only once found. S: Tafelberg; common throughout the savannas.


Orchidaceae

Several collections from this family are as yet undetermined. The taxonomy and distribution of the orchids of Suriname are still very imperfectly known, and some species may represent new records for the country.


Habenaria leprieurii Rchb.f. KH 2491. K: Terrestrial on open savanna, uncommon, with another, as yet unidentified Habenaria species (KH 2936). S: Also elsewhere on savannas. See SCHWEINFURTH (l.c., p. 72).

Liparis elata Lindley KH 3038. K: Terrestrial in very moist savanna wood by a creek. See SCHWEINFURTH (l.c., p. 129).


*Pleurothallis hexandra* Garay et Dunsterville KH 3329. K: A sterile epiphyte in savanna thicket; taken alive to the Botanical Garden at Baarn, Netherlands, where it survived for a number of years, flowered regularly, and was identified by Mr. L. Y. Th. Westra to whom we are indebted for the name. Apparently the second collection of this unusual species, described from Venezuela. See SCHWEINFURTH (l.c., p. 112).

Pogonia unifoliata C. Schweinf. KH 2946a. K: Terrestrial on moist, open savanna, uncommon, with an as yet undetermined species of Spiranthes (KH 2946). R: Recorded from Ptiari-tepui.

Palmae
The species of this family were extensively dealt with by Wessels Boer in his account for the Flora of Suriname (1965). For the Kappel savanna only the following needs to be mentioned:

Bactris campestris Mart. KH 3052. K: A common, shrubby treelet of savanna thickets, often by watercourses and sandstone outcroppings, soon sprouting from the base after a fire (fig. 4).

Papilionaceae

Cajanus cajan (L.) Millsp. KH 3049. K: Southern edge of the savanna; introduced.

Ormosia costulata (Miq.) Kleinh. KH 2899, 3306. K: Not rare in savanna thickets. S: Tafelberg; according to Rudd (1965) a sand savanna species of British Guiana, Suriname, and the Middle Amazon area.

Piperaceae

Peperomia rotundifolia (L.) Kunth KH 3048. K: Epiphytic in moist savanna wood. The specimen tends towards P. lanjouwii Yuncker, a species that cannot be maintained as distinct; see Kramer and Gorts (1968).


Polygalaceae

Polygala adenophora DC. KH 2950. K: Open savanna, remarkably rare. S: A common savanna plant in northern and southern Suriname. R: Mt. Roraima, Kaieteur savanna, etc.

Polygonaceae


Proteaceae


Rapateaceae

Cephalostemon affinis Koernicke Maas 3385. K: On the savanna; apparently rare, not found by Kramer and Hekking. R: Tafelberg, etc.; see Maguire (1958) and Lindeman and Gorts (1968).
**Rapatea paludosa** Aublet var. *sessiliflora* Maguire KH 3029. K: Common by watercourses on the savanna, among shrubs and palms (fig. 10). Described from Tafelberg and regarded as endemic (Maguire, l.c., Lindeman and Görts, l.c.), but recently collected on the Middle Amazon.

**Rhizophoraceae**

**Sterigmapetalum guianense** Steyermark KH 3301. K: A tree, 7 m tall, in savanna thicket, sterile. S: Described from Tafelberg and apparently endemic to the area.

**Sterigmapetalum** spec. KH 3274, 3300. K: Sterile shrubs in savanna thickets. Perhaps an undescribed species; apparently related to *St. columbianum* Monachino.

**Rubiaceae**


**Cephaelis silvatica** Brem. KH 2897, 3021. K: In savanna wood and *Bactris* thickets by watercourses on the savanna. S: Described from the nearby Wilhelmina Mountains and apparently not otherwise known.


**Duroia eriopila** L.f. var. *tafelbergensis* Steyermark KH 3066. K: In moist savanna wood. S: Known by three other collections from Tafelberg, among which the type; see Steyermark (1965, p. 203).

**Malanea macrophylla** Bartling ex Griseb. KH 3297. K: An uncommon shrub of savanna thickets around sandstone outcappings. S: Tafelberg; widespread in scrub, forest, etc.


*Palicourea corymbifera* (Müll. Arg.) Standley KH 2884. K: A shrub of 3–4 m in open savanna wood. Reported from southern Venezuela, Brazil, and Colombia by Standley (1930); apparently not previously found in Guiana.


**Perama kirsuta** Aublet KH 2939. K: Moist, open savanna; remarkably uncommon. S: Tafelberg; a common savanna plant throughout the country, on wet sand.


**Psychotria microcephala** Miq. KH 2885. K: In moist savanna wood. S: Widespread; a variable, possibly inclusive taxon.

Psychotria patens Swartz WB 1530, 1580. K: In savanna wood near the savanna and in rainforest on granite South of it. S: Uncommon in forests of the interior.


Ronacea latifolia Aublet KH 2952, WB 1534. K: A shrub in savanna wood. According to Bremekamp (pers. comm.) the KH collection represents an aberrant variety. S: Tafelberg (Maguire 24357, distributed as Psychotria erecta); widespread, mostly in forests.

Sipanea pratensis Aublet KH 3032. K: Lareco savanna. S: Widespread and often plentiful on savannas; surprisingly rare in the Kappel savanna area.

Sapindaceae

Matayba opaca Radlk. KH 3057. K: A small tree in savanna wood, locally very common North of the savanna, dominant with Dimorphandra hohenkerkii. S: Widespread and often common in savanna woods and bushes.

Theaceae


Ternstroemia spec. KH 3295. K: Savanna scrub. A sterile shrub, 3/4 m. Related to T. dentata, but differing, i.a., by its obtuse leaves.

Turneraceae

Turnera glaziovii Urb. KH 2912, WB 1541, Maas 3383. K: A common, low shrub with handsome yellow flowers of savanna thickets (fig. 8). S: Tafelberg, not otherwise found. Described from an unknown locality in Brazil; no further records could be found in the literature.

Urticaceae

Urera baccifera (L.) Gaud. WB 1573. K: In forest on granite South of the savanna. S: several collections from the mountains of the interior, usually on moist rocks.

Xyridaceae


Abolboda grandis Griseb. KH 3256, 3310. K: On wet, open savanna and by creek in savanna wood, much less common than the preceding. S: In northern Suriname on wet white-sand savannas. Tafelberg, Kayser savanna; see Maguire and Wurdack, l.c.
Xyris connosepala Lanjouw et Lindeman KH 2940 is probably this species. K: Open savanna. S: Tafelberg; endemic. See MAGUIRE and SMITH (1964) and MENNEGA, LINDEMAN and GÖRTS (1968).


Xyris malmeana L. B. Smith KH 3275. K: In savanna scrub, rare. S: Northern and southern savannas, Tafelberg. See MAGUIRE and SMITH, l.c.

Xyris spathacea Lanjouw KH 3308 is probably this species. K: Uncommon on moist, open savanna.

ZINGIBERACEAE

Costus claviger R. Ben. WB 1576. K: Moist place in granitic area South of the savanna. S: Throughout the country, but nowhere common, except on granitic outcroppings in the mountains.

Pteridophyta

This group is dealt with somewhat more extensively, partly because of the senior author's taxonomic specialization, partly because of the absence of a modern treatment, POSTHUMUS's work (1928) being antiquated.1)


*Anemia buniiifolia (Gardner) Moore KH 2967. K: In cracks of sandstone rocks in the shade of savanna thicket; very local. Not reported from Guiana by Mickel (1962), but collected before on savannas (A. C. SMITH, 1931).

Asplenium auritum Swartz KH 3074. K: Epiphytic in moist savanna wood. S: Tafelberg; widespread in the mountains of the interior. Called A. sulcatum Lam. by POSTHUMUS, a species described from the Mascarenes (type P!) that is certainly distinct.

Asplenium hostmannii Hieron. WB 1571. K: In forest South of the savanna. S: Not uncommon in the interior of Suriname. Placed in the synonymy of A. laetum Swartz by POSTHUMUS (1928) and by MORTON and LELLINGER (1966); but in the two last-named authors' key A. laetum is found under the heading "stipe and base of rhachis dark or atropurpureous and shining", which is not true for the cited specimen, nor for the isotype of A. hostmannii in herb. U. The matter requires further study.

Asplenium salicifolium L. KH 3047. K: Epiphytic in very moist savanna wood. With MORTON and LELLINGER's key (l.c.) this runs to A. auriculatum Swartz, but a series of specimens from Suriname suggests that that is only a form of A. salicifolium.

1) In the absence of critical treatments for most genera, little is said here about the distribution of most species outside Suriname.
Cochlidium linearifolium (Desv.) Maxon KH 3073. K: Epiphytic in moist savanna wood. S: Uncommon, almost confined to the interior.

Cyathea (C nemidaria, "Hemitelia") macrocarpa (Presl) Domin KH 2881, 2892. K: A small, slender-stemmed species, scarcely to 2 m tall; frequent in moist places on the savanna and by creeks in savanna wood. R: Tafelberg, Kaieteur savanna, etc. S: very local, but not confined to the interior.

Dicranoglossum desvauxii (Kl.) Proctor KH 3077. K: Epiphytic in moist savanna wood. S: Widespread and not rare throughout the country. This is Eschatogramme furcata of Posthumus (1928); the true Dicranoglossum furcatum (L.) J. Smith is now also known from Suriname.


Elaphoglossum luridum (Fée) Christ KH 3243. K: Epiphytic in savanna wood. Incorrectly referred to E. schomburgkii by Christensen (Index Filicium, 1906). The dark, stellate foliar scales and the subsessile or very short-stalked sterile leaves are distinctive. Described from French and British Guiana. S: Not rare in some parts of the country, mostly in savanna woods. Also seen from Amapá; not included in Alston’s account of the Brazilian species (1958).


Elaphoglossum pteropus C. Chr. KH 2880, 3017. K: Epiphytic in savanna wood. Described from French and British Guiana. S: Reported from Suriname by Posthumus (l.c.), but the two collections in herb. U cited by him are E. luridum. The true E. pteropus is known from the country by three collections.


Elaphoglossum spathulatum (Bory) Moore WB 1561. K: Epiphytic in forest on granitic substrate South of the savanna. S: Tafelberg; rare and local in the mountains.

Gleichenia flexuosa (Schrader) Mott. = Dicranopteris flexuosa (Schrader) Underwood KH 3083, WB 1522. K: In savanna thickets, among sandstone rocks. R: Mt. Roraima, etc. S: Widespread, but uncommon, on sand.


Hymenophyllum polyanthos (Swartz) Swartz KH 2924, 3023, 3082, WB 1562. K: Epiphytic in savanna wood, common, extending to savanna scrub. S: Tafelberg; widespread and often common throughout the country.


Lindsaea dubia Sprengel KH 3095. K: On sandstone rocks by creek in wood. S: Tafelberg; frequent in forests outside the coastal plain.
Lindsaea guinanensis (Aublet) Dryander ssp. guianensis KH 2879, 3067.
K: In moist savanna woods. S: Infrequent in forests of the interior.
Lindsaea lancea (L.) Bedd. var. elatior (Kunze) Kramer KH 3054. K: In
swampy forest. Almost matches this variety, but the terminal segment
is acute. In drier savanna woods it is replaced by the next.
Lindsaea lancea (L.) Bedd. var. falcata (Dryander) Ros. KH 2874.
K: Not rare in savanna wood, mostly along creeks but on dry ground.
S: Tafelberg; frequent in forests almost throughout the country.
Lindsaea lancea (L.) Bedd. var. lancea KH 3019, WB 1505. K: In
savanna woods, much less common. S: Tafelberg; frequent in forests almost
throughout the country.

*Lindsaea pendula* Kl. KH 2891. K: In Bactris thickets, in moist places,
locally plentiful (fig. 5). R: A Roraima sandstone species, so far not
found on Tafelberg; new to Suriname.
Lindsaea stricta (Swartz) Dryander var. jamesoniiformis Kramer KH 2930,
3084. K: Savanna thickets, mostly among sandstone rocks. R: Described
from Tafelberg; almost confined to the Roraima sandstone substrate.
Lindsaea stricta (Swartz) Dryander var. parvula (Fée) Kramer KH 2934,
WB 1521. K: Frequent in moist places on the savanna, notably in
Mauritia lanes, where it also often grows elsewhere in the country.
Lindsaea surinamensis Posthumus KH 3247. K: By ravine in savanna
wood. Extending from French Guiana to Colombia and now known
from several collections from Suriname.

*Lycopodium carolinianum* L. var. meridionale (Underwood et Lloyd)
plant of sand savannas.
Lycopodium cernuum L. KH 3244. K: Moist place on the airstrip; rare.

*Lycopodium duidae* A. C. Smith var. guianense Kramer, var. nov. Differ-
a var. *duidae* caule repente praeципue dorsaliter distincte planato;
strobilis magis tenuibus, ad 1½ cm latis (cum sporophyllis); sporophyllis
minoribus, hau ultra 6 mm longis et 1½ mm latis, plus sensim apicem
versus angustatis, margine non membranaceo et non vel vix eroso-
ciliato. Typus: Kramer and Hekking 3030, Kappel savanna near Tafel-
berg, Suriname (U). Paratypus: Kramer and Hekking 2778, white sand
savanna between the Cola creek and Zanderij, Suriname (U) (this has
most sporophylls to only 5 mm long).

This was at first taken for *L. juliforme* Underwood and Lloyd, described
from Mt. Roraima and reported from Cerro Duida by A. C. Smith (1931),
because of its almost to quite entire sporophylls, but that species, and
have more abruptly acuminete sporophylls, with ± distinct laminal
part and acumen, whereas the almost evenly tapering sporophylls of
the Suriname collections, and also the characters of the vegetative parts,
agree very well with *L. duidae*. The differences noted above seem to
warrant varietal recognition. I am much indebted to Mr. C. V. Morton,
Washington, for drawing my attention to the similarity with L. duida, and for loan of material of the three above-named species.

K: Common in moist parts of the Kappel savanna; the collection from the vicinity of Zanderij is geographically interesting.

*Metaxya* *rostrata* (H.B.K.) Presl. K: On sandstone rocks by a creek in wood, frequent; not collected. S: Not rare South of the coastal plain, in forests, often on local accumulations of ferritic material.


*Polytaenium guayanense* (Hieron.) Alston KH 3078, 3255. K: Epiphytic in moist savanna wood. S: Widespread but not common; yet less rare than the three other species known from Suriname. The taxonomy follows Tryon (1964).


*Schizaea elegans* (Vahl) Swartz KH 3028, 3096. K: In thickets by creek on the savanna and on sandstone in savanna wood. S: Tafelberg; widespread, but generally uncommon in various types of vegetation, often on sand. The variety *flabellum* (Mart.) Prantl passes into typical *Sch. elegans* and would not seem to merit recognition.

*Schizaea pennula* Swartz KH 2929. K: Poorly developed plants from savanna thickets; surprisingly rare. S: Very common elsewhere on sand savannas, with *Sch. incurvata* Schkuhr which was not found on the Kappel savanna. Tafelberg.

*Selaginella parkeri* (Hooker and Grev.) Spring KH 3428. K: In savanna wood at edge of ravine. S: Tafelberg; not rare in forests of the interior, but surprisingly not yet found when the family treatment for the Flora of Suriname was published (Alston, 1938).

*Selaginella pedata* Kl. KH 2882, 3022, 3070. K: In savanna wood, on sand and sandstone. S: Quite common in forests South of the coastal plain.

*Stigmatopteris meniscioides* (Willd.) Kramer, comb. nov. Basionym: *Aspidium meniscioides* Willdenow, Spec. Pl. 5: 218, 1810. Referred to the monotypic genus *Cyclodium* by Posthumus (1928) and to *Dryopteris* by Maxon and Morton (1948). The affinity is with *Stigmatopteris*, rather than with *Dryopteris* in its modern, restricted sense. The pellucid-
punctate lamina and the serrate pinna-apices (not in all specimens) agree very well with *Stigmatopteris* as originally defined by Christensen, and the peltate, fugacious indusia with Christensen's group *Peltochaena*. The almost wholly anastomosing veins are peculiar, but only gradually different from and in pattern similar to the venation of *St. varians* (Fée) Alston, which also shares the laminal dimorphism with *St. meniscioides*. The less pronouncedly dimorphic and free-veined *St. guianensis* (Kl.) C. Chr. is more distantly related. – The type of *Aspidium meniscioides*, from Brazil, was seen in herb. B-Willd. KH 3075, 3254. K: By creek in moist savanna wood. S: Not rare in moist, shaded places. *Trichomanes ankersii* Hooker and Grev. KH 2875, 2956, 3055. K: Epiphytic in savanna wood on *Astrocaryum sciophilum*, and on sandstone rocks. S: A widespread epiphyte, mostly scandent on tree trunks in forest shade.


*Trichomanes botryoides* Kaulf. KH 3250. K: On sandstone rocks by creek in savanna wood. S: Tafelberg; infrequent, often collected on rocks.

*Trichomanes cellulosum* K. KH 3253. K: On sandstone rocks of dry creek beds. The second record for the country, the first being from Tafelberg.

*Trichomanes cristatum* Kaulf. KH 2895, 2957. K: Terrestrial in savanna wood, also on sandstone rocks. S: Tafelberg; widespread, usually epiphytic. Perhaps an aggregate, as already noted by Maxon and Morton (1948).


*Trichomanes macilentum* van den Bosch KH 2878. K: On sandstone rocks of dry creek bed. S: Not previously recorded, but collected on Tafelberg (Geijskes 1013) and in the Wilhelmina Mts. (Schulz 10312).

*Trichomanes pilosum* Raddi KH 2876. K: On sandstone rocks by creek in wood. S: Widespread and often common, terrestrial or occasionally epiphytic.


*Trichomanes trollii* Bergdolt KH 3249. K: On sandstone by creek bed in savanna wood. S: Tafelberg; terrestrial or epilithic, uncommon in the interior of the country.

*Vittaria lineata* (L.) J. E. Smith KH 3009. K: Epiphytic in savanna thicket, on arboreal ants' nest (prob. *Anochetus*). S: Widespread, but very rarely found on savannas.

*Xiphopteris nana* (Fée) Copeland KH 2931. K: Epiphytic in savanna scrub, rare. S: Tafelberg, apparently not rare in the interior of Suriname, but probably often overlooked through its small size. Usually a forest epiphyte. The genus is united with *Grammitis* by Morton (1967) and other modern authors, but the name is there preoccupied by *G. nana* Brack.
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1. The Vegetation of Suriname VI, 2.