Acta Botanica Neerlandica **8** (1959) 139–155

Mededelingen van het Botanisch Museum en Herbarium van de Rijksuniversiteit te Utrecht No. 154 (1959)

NOTES ON THE ARACEAE OF SURINAME II[1])

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(received February 11th, 1959)

After the publication of the *Araceae* in the Flora of Suriname I.2 (1953), p. 1–80, a number of rare and new species have been collected. Some of these were collected by Dr. J. Lindeman between 1953 and 1955, the remaining by the present authors, who visited Suriname from November, 1955, to March, 1956. Field observations by the authors clearly indicated the fragmentary status of our knowledge of Suriname Aroids. The reasons for this are to be sought in the difficulties involved in collecting and preserving. Also, a number of species may not flower over a period of several years. The inflorescences of many lianas are often almost inaccessible. A source of confusion is the variability in the leaves of a species.

The following is an enumeration of species collected for the first time in Suriname, in addition to records of re-collections of rare species.

Anthurium Schott

1. *Anthurium crassinervium* (Jacq.) Schott, a species already listed in Fl. of Sur. and known only from the interior, was collected for the third time:

Marowijne Riv., Nassau Mts., frequent in forest on bauxite, alt. 550 m (Cowan & Lindeman 39100, fl. Jan. 1955 [NY, U]).

In Fl. of Sur. we described this species as a terrestrial, rosulate herb. It is recorded by Cowan and Lindeman as epiphytic. According to their field notes the spathe is dark red; the spadix is purple black.

2. *Anthurium andersonii* Schott. The species is new for Suriname. The specimens were collected as long ago as 1926. The material had been mislaid in the Utrecht herbarium and, for that reason, was not listed in Fl. of Sur.

Anthurium andersonii Schott in Oest. Bot. Wochenbl. (1857), p. 325; Schott, Prod. Syst. Aroid. (1860), p. 547; Griseb., Fl. Br. W. Ind. Isl. (1864), p. 509; Engler in DC., Mon. Phan. Prod. II (1879), p. 207; Engler in Das Pflanzenreich IV 23B (1905), p. 286; — *A. digitatum* (Jacq.) G. Don var. *connatum* Engl. in Engl., Bot. Jahrb. XXV (1898), p. 457.

Climber; internodes up to 2 cm long. Petiole sulcate, ca. 63 cm long and 0.5 cm in diameter; sheath ca. 8 cm long; joint ca. 3 cm long,

[1]) Part I appeared in Acta Botanica Neerlandica Vol. 2(3), Oct. 1953, p. 349–362, and was also published as Mededelingen van het Botanisch Museum en Herbarium van de Rijksuniversiteit te Utrecht, no. 118.

forking in the pedate leaf base. Leaf blade subdigitately pedate, 7– to 11–foliolate; the two outer leaflets connate with the neighbouring ones in the basal 7 cm. Leaflets pergameneous, sessile, entire, oblanceolate, cuspidate, cuneate at the base, 29–46 cm long and 3–10 cm wide. Outer leaflets shorter than the others; their midribs, on the outer side, denudate in the basal 3–4 cm; the 8 cm long part of the blade above the denudate part broadened in its exterior half. Peduncle slender, ca. 22 cm long. Spathe lanceolate, ca. 2.5 cm wide. Spadix sessile, dark red-brown, cylindrical, ca. 9 cm long and up to 1 cm in diameter. Tepals cucullate, ca. 3 mm long, width of the outer ones ca. 2 mm; of the narrower inner ones ca. 1.5 mm. Stamens ca. 1.6 mm long and 0.7 mm wide. Ovary cylindrical, 2-locular, ca. 2 mm long and 1 mm in diameter, crowned by a rounded stigma; each locule containing a single ovule.

Distribution: West-Indian Islands (Sta. Lucia, Guadeloupe, Martinique,? Tobago).

Upper Gran Rio, common (Stahel 241, fl. March 1926 [U]).

Heteropsis Kunth

Heteropsis longispathacea Engl. was collected for the second time. The plants were climbing against tree trunks and rooting at the nodes.

Upper Nickerie Riv., right bank, camp Powiesi Boutoe (Jonker 404, ster. Jan. 1956 [U]).

Another species, probably belonging to this genus, has now been collected four times in Suriname, but never in fertile state. It is not impossible, however, that the material represents *H. longispathacea* Engl. in a juvenile state. It differs by its much longer leaf sheath (1.5–2.5 cm) and its much finer venation.

Marowijne Riv., Wane creek (Lanjouw & Lindeman 538, ster. Sept. 1948 [U]); Suriname Riv., between Joden Savanne and Mapane creek (Lindeman 5198*a*, ster. Dec. 1953 [U]); Upper Nickerie Riv., camp Powiesi Boutoe (Jonker 406, ster. Jan. 1956 [U]); id., Anjoemara creek (Jonker 435, ster. Jan. 1956 [U]).

Dieffenbachia Schott

Dieffenbachia paludicola N.E.Br. ex Gleas. was known from British Guiana and twice collected in Suriname. According to our observations the species is not very rare. It occurs along springs on peaty soil.

Zanderij, forest near Matta (Lindeman 6516, fl. Aug. 1954 [U]); id., Pontji creek, path to Matta (Jonker 137, fr. Dec. 1955 [U]).

Vernacular names, added to those mentioned in Fl. of Sur.: pingotajer, watra-donké, water-dontje. —

Xanthosoma Schott

1. *Xanthosoma conspurcatum* Schott. This species had been collected only once, near Paramaribo, by Wullschlaegel (type collection). We discovered a rich locality near Albina. Our description in Fl. of Sur. has to be altered in the following way.

Terrestrial, rosulate plants, up to 1 m high, containing a milky uice; underground part not tuberous. Cataphylls linear-lanceolate,

membranous, 12–17 cm long and 1–1.5 cm wide. Petiole vaginate in the basal part, 39–75 cm long, provided with scattered, indistinct, white stripes; sheath 11–33 cm long and 2–3 cm wide. Leaf blade ovate, cordate to hastate at the base, acuminate at the apex, 19–45 cm long and 7.5–35 cm wide between the basal lobes, dark green above, light green beneath, white-spotted on both sides. Apical lobe 6.5–26 cm wide; basal lobes obtuse, up to 24 cm long and 13 cm wide; sinus rounded, penetrating to the main ribs of the basal lobes; denudate part of the mains ribs 0.5–2 cm long. Peduncle terete, 13–36 cm long. Spathe 15–17 cm long, basal tubular part 4–7 cm long, green outside; limb broadly elliptical, acute, 6–9 cm long and up to 4 cm wide, white to cream-coloured on both sides. Spadix shortly stipitate; stipe adnate to the spathe. Basal, female part ca. 1.5 mm long, its basal part adnate to the spathe; ovaries shortly ovoid, ca. 1 mm high, 3– to 4–locular, crowned by a broad, discoid style and a semi-globose stigma. Basal half of the 3.5 cm long sterile part provided with rather large, 4 mm high, 6-angular, prominent synandrodia, 2–3 mm in diameter; apical half of the sterile part provided with elongate, 6-angular, appressed synandrodia, 0.5 mm high, 5 mm long and 1 mm wide. Male part clavate, ca. 5 cm long; synandria 1.5 mm high and 1.5–2 mm in diameter.

Distribution: Endemic.

Near Paramaribo (Wullschlaegel 501 [BR], type); Lower Marowijne Riv., N of Albina, Pierre Kondre (Jonker 377, fl. Jan. 1956 [U]).

2. *Xanthosoma hoffmannii* (Schott) Schott was collected by us for the first time in Suriname. It differs from the related *X. helleborifolium* (Jacq.) Schott chiefly in the leaves which are not compound and pedate but pedatifid and consisting of 5–9 divisions. The latter are much broader than the, usually 11, leaflets of *X. helleborifolium*.

Xanthosoma hoffmannii (Schott) Schott in Oest. Bot. Ztschr. XV (1865), p. 33; Engler in Mart., Fl. Bras. III. 2 (1878), p. 191; id., in DC., Mon. Phan. Prod. II (1879), p. 485; Hemsley, Biol. Centr. Am. Bot. III (1885), p. 418; Engler u. Krause in Das Pflanzenreich IV 23E (1920), p. 60; — *Acontias hoffmannii* Schott, Prod. Syst. Aroid. (1860), p. 196; Ørst., Praecurs. Fl. Centroam. (1873), p. 55.

Terrestrial herb. Petiole vaginate, pubescent in the basal part, up to 45 cm long, flattened towards the apex; sheath gradually narrowed in the petiole, up to 12 cm long and 2 cm wide. Leaf blade herbaceous, reniform in outline, 17 cm long and 26–29 cm wide, pubescent above, along the margin and on the veins beneath, pedatifid into 5–9 divisions. Rachis not naked between the "leaflets"; the latter obovate to oblong, entire, apiculate, mucronate, 6.5–16 cm long and 2.5–7.5 cm wide. Peduncle terete, slightly pubescent, 26–27 cm long. Basal, tubular part of the spathe coriaceous, green, 6–7 cm long and up to 3.5 cm in diameter; limb herbaceous, lanceolate, acuminate, 9–10 cm long and up to 2.5 cm wide, yellow with pink margin outside, yellowish-white inside. Spadix narrowly cylindrical, stipitate; stipe ca. 0.5 cm long. Female part ca. 2 cm long and 1 cm in diameter, covered with yellow slime; ovaries 3-locular, 1.5 mm high and 1.2 mm

in diameter; placentas axile with 4 ovules above each other. Style discoid, 0.5 mm high and 1.5 mm in diameter; stigma semiglobose, 1.2 mm in diameter. Sterile part narrowed towards its apex, 4 cm long and 7.5–10 mm in diameter, cream-coloured at the base, white towards the apex; synandrodia oblong, 10–15 mm long and 2–3 mm wide. Male part clavate, cream-coloured, 6 cm long and 7.5 mm in diameter; synandria 4 mm long, 1.5 mm wide and 2.5 mm high, consisting of ca. 13 anthers.

Distribution: Mexico, Costa Rica, Guatemala.

var. *wendlandii* (Schott) Engl. in Mart., Fl. Bras. III. 2 (1878), p. 191; id. in DC., Mon. Phan. Prod. II (1879), p. 485; Hemsley, Biol. Centr. Am. Bot. III (1885), p. 418; Engler u. Krause in Das Pflanzenr. IV 23E (1920), p. 60; — *Acontias wendlandii* Schott in Oest. Bot. Ztschr. VIII (1858), p. 178; id., Prod. Syst. Aroid. (1860), p. 195; Ørst., Praecurs. Fl. Centroam. (1873), p. 54; — *Xanthosoma wendlandii* (Schott) Standl., Fl. Costa Rica in Field Mus. Nat. Bot. Ser. XVIII (1937), p. 145.

Basal part of the petioles and sheaths provided with red stripes. Leaves dark green above, variegated with light green, light green beneath.

Distribution: Costa Rica.

Paramaribo, road to Leonsberg (Jonker 520, fl. Feb. 1956 [U]).

It is rather difficult to identify the cultivated Xanthosomas, generally known as "tajer", especially as they flower rarely. Engler, in "Das Pflanzenreich", mentions for Guiana: *X. sagittifolium* (L.) Schott, *X. caracu* C. Koch et Bouché and *X. belophyllum* (Willd.) Kunth, all three cited by us in Fl. of Sur. In our opinion, after study of the fresh material, the "tajers" sold on the markets as leafy vegetables or edible tubers are cultivars of *X. sagittifolium* (L.) Schott. We think it highly probable that both *X. belophyllum* (Willd.) Kunth and *X. caracu* C. Koch et Bouché belong to *X. sagittifolium*. The flowers of *X. caracu* have never been described. The differences between the three species are based on the leaf shapes which fall within the width of variation of *X. sagittifolium*.

3. *Xanthosoma sagittifolium* (L.) Schott; vid. Fl. of Sur. I. 2, p. 53. Plants up to 3 m high, often with milky juice; large specimens sometimes provided with a short, thick, aerial stem. Rhizome often elongate-tuberous, ca. 10 cm in diameter. Cataphylls membranous, linear, acute. Leaves rosulate, petiolate. Petiole vaginate in the basal part, up to 2 m long; sheath gradually narrowed into the petiole. Leaf blade herbaceous to subcoriaceous, sagittate to cordate, sometimes slightly hastate, up to 1 m long, acuminate and mucronate at the apex; basal lobes obtuse; sinus parabolic, not penetrating to the main ribs of the basal lobes. Peduncle terete, bluish-green, 20–25 cm long and 1 cm in diameter. Spathe ca. 20 cm long; tube coriaceous, closed, green, ca. 10 cm long and 2.5 cm in diameter; limb enclosing the flowering spadix, lanceolate, acuminate, ca. 10 cm long and 4 cm wide, 3-costate on the back, outside light green, inside cream-

coloured. Spadix up to 13 cm long, obliquely sessile. The basal, female part swollen, ca. 4 cm long and 2.8 cm in diameter; ovaries cylindrical, ca. 1.5 mm high, 3-locular, crowned by a lobate, flat stigma, ca. 1.5 mm in diameter. Sterile part cylindrical, 3–4 cm long and 0.8 cm in diameter, provided with a basal whorl of slender, erect appendages (pistillodes?), up to 6 mm long, and ca. 10 remote whorls of peltate synandrodia, gradually growing more elongate towards the apex. Male part ca. 6 cm long, acute, in the basal part provided with whorls of synandria consisting of a peltate central column with ca. 5 adnate stamens. Towards the apex the peltate central part of the synandria gradually becoming reduced and, sometimes, appearing as a sterile pistil. Apical part of the spadix covered with a dense mass of stamens which are gradually elongated towards the apex.

A cultivar often grown for the edible rhizomes is known as "pom tajer". It may rapidly develop into a very large plant provided with large leaves and forming a short, thick stem in the next years. Inflorescences are rather rare, however, as the plant is, in culture, harvested before producing flowers.

Lower Coppename Riv., Boskamp (Jonker 401, fl. Jan. 1956 [U]); Paramaribo, Tourtonnelaan (Jonker 681, fl. March 1956 [U]); Marowijne Riv., Nassau Mts., alt. 415 m, in clearing (Cowan & Lindeman 39082, fl. Jan. 1955 [NY, U]).

Another cultivar, grown everywhere as a leafy vegetable is known as "tajerblad", "taja wirie", etc. The bundled leaves are sold. It is a much smaller herb, up to 50 cm high, provided with rosulate, herbaceous leaves. It has never been collected in flower and consequently it is unknown whether it has to be considered a juvenile or undeveloped form of the previous cultivar. To this cultivar belongs the specimen from herb. Hermann, cited by us in Fl. of Sur. as *X. belophyllum* (Willd.) Kunth.

Paramaribo, market (Jonker 273, 275 [U]); Coronie, Agricultural Experiment Fields (Jonker 558 [U]).

4. *Xanthosoma jacquinii* Schott, Melet. I (1832), p. 19; id., Syn. Aroid. (1856), p. 57; id., Prod. Syst. Aroid. (1860), p. 183; Engler in Mart., Fl. Bras. III. 2 (1878), p. 169; id. in DC., Mon. Phan. Prod. II (1879), p. 470; Hemsley, Biol. Centr. Amer. Bot. III (1885), p. 418; Engler u. Krause in Das Pflanzenreich IV 23E (1920), p. 47; Simmonds in Kew Bull. 1950 (1951), p. 400; — *Xanthosoma maximiliani* Schott in Bonplandia X (1862), p. 322; Engler in Mart., Fl. Bras. III. 2 (1878), p. 192; Schott in Peyritsch, Aroid. Maxim. (1879), p. 42, tab. 31–33; Engler in DC., Mon. Phan. Prod. II (1879), p. 470; Engler u. Krause in Das Pflanzenreich IV 23E (1920), p. 49.

Plant up to 3 m high; milky juice evil-smelling; large specimens provided with an aerial stem which is up to 1.5 m high and 20 cm in diameter. Rhizome tuberous, brownish-black outside, inside white. Petiole terete, up to 1.5 m long, vaginate in the basal part. Leaf blade herbaceous to subcoriaceous, broadly cordate, often slightly hastate, ca. 80 cm long and 60 cm wide; acuminate and mucronate; margin slightly undulate; basal lobes angular, obtuse, in larger

leaves usually overlapping; midrib of the basal lobes exposed in the sinus over 2–3 cm. Peduncle 20–40 cm long and 0.5 cm in diameter. Spathe ca. 19 cm long; tube coriaceous, green, closed, 6.5 cm long and 3.5 cm in diameter; limb herbaceous, enclosing the flowering spadix, white, crimson-purple within at base, 12.5 cm long and 6 cm wide. Spadix stipitate, up to 15 cm long, green; stipe 1 cm long, adnate to the spathe. Female part slightly swollen, ca. 1.5 cm long and 1 cm in diameter; ovaries cylindrical, ca. 2 mm high, 3- to 4-locular, crowned by a disciform, 0.5 mm high style which is 8 mm in diameter. Sterile part rose-coloured, swollen at the base and constricted in the apical part, 4.5 cm long; basal swollen part 1.3 cm in diameter, provided with large synandrodia which are 6 mm in diameter and 6 mm high; apical part provided with smaller synandrodia which are diminishing and narrower towards the apex; apical synandrodia ca. 3 mm high, 5 mm long and 2 mm wide. Male part ellipsoid, ca. 6.5 cm long and 0.8 cm in diameter, cream-coloured to flesh-coloured; synandria 3 mm high and 3 mm in diameter, consisting of ca. 6 stamens. Fruit baccate, up to 1 cm long and 0.5 cm in diameter.

Distribution: S. Florida, West-Indian Islands, Central America, tropical South America; also cultivated.

Lower Suriname R., plant. Peperpot (Lindeman 3694, fl. Apr. 1953 [U]); Coronie, Leasowes, near Sarah lake (Jonker 550, ster. March 1956 [U]).

Vernacular name: tajer.

Apparently this species is only rarely cultivated in Suriname. We were told in Coronie that the tubers were edible and that the leaves were eaten too. Sometimes, however, the leaf appears too acrid for human food; then they are used as pig's wash. According to Engler and Krause (1920) the species is widely cultivated in the tropics of both hemispheres. According to Simmonds (1951) it is, in Trinidad and Tobago, a good wild species that is never cultivated and, according to local tradition, poisonous.

Other species grown for human food are: *X. violaceum* Schott, *X. atrovirens* C. Koch et Bouché, *X. mafaffa* Schott, *X. brasiliense* (Desf.) Engl. We did not observe cultures of these species in Suriname. The vernacular name "tajer" is also applied to *Colocasia esculenta* (L.) Schott.

Caladium Vent.

1. *Caladium schomburgkii* Schott, hitherto known from French and British Guiana only, was collected near Albina, where it occurred abundantly. Because of its white-veined leaves the Suriname material belongs to the var. *argyroneurum* (C. Koch) Engl.

Lower Marowijne Riv., N of Albina, (Jonker 374, fl. Jan. 1956 [U]).

We found the var. *pictum* Engl., characterized by its red-spotted leaves, grown in pots in a garden at Coronie, Friendship.

2. *Caladium humboldtii* Schott in Oest. Bot. Wochenbl. (1854), p. 417; Schott, Syn. Aroid. (1856), p. 54; Schott, Prod. Syst. Aroid.

(1860), p. 174; Engler in Mart., Fl. Bras. III. 2 (1878), p. 187; Engler in DC., Mon. Phan. Prod. II (1879), p. 467; Engler u. Krause, in Das Pflanzenreich IV 23E (1920), p. 38; — *Caladium argyrites* Lem. in Ill. Hortic. V (1858), t. 185 f. 3; Van Houtte in Fl. d. Serr. 2. Sér. III (1860), p. 104 & t. 1345; Stahel, Nutt. Pl. Sur. 2nd Ed. in Bull. Landbouwproefst. Sur. No. 59 (1944), p. 180; — *Caladium lilliputiense* Rodrig. in Ill. Hortic. XLII (1895), p. 363 & t. 47.

Small plants, up to 22 cm high. Petioles up to 21.5 cm long; basal part vaginate, up to 4 cm long and 0.3 cm wide. Leaf blade 4–10 cm long and 2–5.5 cm wide, peltate, cordate, slightly hastate, white, green-streaked along the white midrib and principal veins. Flowers unknown.

Distribution: Amazonian Brazil, Venezuela; also cultivated.

Coronie, Totness, cultivated (Jonker 559, ster. Feb. 1956 [U]).

3. *Caladium bicolor* (Ait.) Vent. After studying the Suriname material in the field we uphold our opinion expressed in our previous publication (Jonker and Jonker, 1953, l.c.) that the varieties, established by Engler and Krause, are of little value.

We describe, however, a new forma, twice collected by us and, in sterile state, also collected before, by Stahel. The new form is characterized by its large dimensions: 6–8 dm high.

Caladium bicolor (Ait.) Vent. f. **robustum** Jonk. et Jonk., **nov. form.**

Herba valida, 6–8 dm alta. Lamina 35–51 cm longa, 15–30 cm lata. Petiolus ad 87 cm longus. Pedunculus ad 57 cm longus.

Typus: A. M. E. Jonker–Verhoef & F. P. Jonker 459, in herbario U – Surinamo, fluv. Wayombo, in pago Donderskamp.

Distribution: Endemic.

Paramaribo, Coppenamestraat (Jonker 194, fl. Dec. 1955 [U]); Wayombo Riv., Donderskamp (Jonker 459, type, fl. Jan. 1956 [U]); without locality (Stahel s.n., ster. Jan. 1921 [U]).

Colocasia Schott

Colocasia esculenta (L.) Schott is a subspontaneous weed in Suriname and found everywhere in cultivated areas. A small number of cultivars are grown for the tubers and as leafy vegetables. The species very rarely flowers in Suriname. The cultivar "Chinese tajer" is characterized by the light-coloured, greyish-green, slightly pruinose leaves provided with a white spot above, opposite the insertion of the petiole. Petiole and veins white.

Paramaribo, Tourtonnelaan, probably escaped from cultivation (Jonker 682, ster. March 1956 [U]).

Another cultivar: "dasitajer", "dasjitaja", "dasini", or "dasheen" (meaning: from China) is characterized by darker, bluish-green leaves with white veins and provided with a red spot opposite the insertion of the petiole. The latter is purplish-red; the sheath is purple outside and white with red, reticulate venation inside. "Wild" specimens of this cultivar, which are very common e.g. in Paramaribo and often reach a height of over 2 m, are also known as "krastajer" indicating that the plants are too acrid for human food. We collected

a single flowering specimen in a garden at Berg en Dal, Suriname Riv. Dr. Lindeman collected a deflorated specimen in a garden at Paramaribo, brought there by Dr. Geijskes from a village at the Tapanahony River.

Peduncle terete, 10–24 cm long. Spathe yellowish-green outside, linear-lanceolate, elongate, ca. 25 cm long and 1.5 cm in diameter, enclosing the much shorter, sessile spadix. Basal, female part of spadix ca. 3 cm long and 8 mm in diameter, covered with 4– to 6–angled, depressed, 1–locular ovaries with 5 (4–6) parietal placentas and crowned by a sessile, much smaller, 5–(4–6)lobed stigma. Ovaries 1.7 mm high and 1 × 2 mm in diameter; between the ovaries numerous scattered pistillodes. Sterile part ca. 2 cm long and 3 mm in diameter, bearing in the basal part pistillodes and in the apical part synandrodia; the latter 0.8 mm high and 2.5 × 0.7 mm in diameter. Male part 4 cm long and 0.5 cm in diameter. Synandria prismatic, truncate, 3– to 6–lobed, consisting of 3–6 stamens; the latter ca. 1 mm long and 1 mm wide. Sterile, apical appendix of the spadix ca. 5 mm long and 3 mm in diameter.

Paramaribo, in garden (Lindeman 3510, defl. Apr. 1953 [U]); id., Tourtonnelaan (Jonker 683, ster. March [U]); Suriname Riv., Berg en Dal, in garden (Jonker 639, fl. Feb. [U]).

The cultivars occurring in Suriname do not agree with the varieties mentioned by Engler and Krause in Das Pflanzenreich IV 23E (1920), p. 65–68.

Alocasia Neck.

Robust herbs provided with an underground rhizome and, sometimes, with a short stem. Petioles rather long, vaginate in the basal part. Leaf blades ovate, cordate or peltate. Plants usually with several inflorescences. Spathes large, coloured. Spadices consisting from the base upwards of a female part, a short sterile part, a male part and a long, sterile appendix. Ovaries usually 1-locular with 3–4 parietal placentes each with two basal ovules.

Distribution: Tropical Asia, New Guinea included. A number of species introduced in other tropical countries.

1. *Alocasia indica* (Roxb.) Schott in Oest. Bot. Wochenbl. IV (1854), p. 410; Schott, Syn. Aroid. (1856), p. 46; Schott, Prodr. Syst. Aroid. (1860), p. 144; Engler in DC., Mon. Phan. Prod. II (1879), p. 501; Engler u. Krause in Das Pflanzenreich IV 23E (1920), p. 87; — *Arum indicum* Roxb., Fl. Ind. III (1832), p. 498.

Stout plant, usually ca. 1–2 m high, rosulate or, in older specimens, provided with a thick, fleshy stem. Leaf blade pergamentaceous, ovate, rounded and mucronate at the apex, cordate at the base, up to 76 cm long and 50 cm wide. Petiole thick, fleshy, up to 140 cm long and 4 cm in diameter, vaginate in its lower half; sheath up to 8 cm wide. Cataphylls pergamentaceous, lanceolate, acute, up to 35 cm long and 4–5 cm wide. Peduncle terete, up to 54 cm long. Spathe up to 23 cm long; basal part tubular, ovoid, coriaceous, up to 5 cm long; limb spreading, broadly elliptical, rounded and mucronate

to shortly cuspidate at the apex, up to 18 cm long and 6.5 cm wide. Spadix shorter than the spathe, basal part enclosed by the tube and base of the spathe limb; upper part patent from the spathe. Female part 1.8 cm long and 0.7 cm in diameter; ovaries obconical, 1-locular with 3 parietal placentas each with two basal ovules, ca. 2 mm high and 1.5 mm in diameter, crowned by the small, sessile, 3-lobed stigma. Sterile part, between the female part and the male part, constricted in the middle, 1.4 cm long and 0.6 cm in diameter. Male part ca. 2.6 cm long and 0.9 cm in diameter; synandria consisting of 4–6 stamens, 2 mm high and 1.5 mm in diameter. Appendix up to 12 cm long, clavate, acute or obtuse, covered with a dense mass of small synandrodia, variable in shape and size.

Distribution: tropical Asia, introduced in other tropical countries.

var. *metallica* (Schott) Schott, Prod. Syst. Aroid. (1860), p. 415; Engler in DC., Mon. Phan. Prod. II (1879), p. 502; Engler u. Krause in Das Pflanzenreich IV 23E (1920), p. 88; Birdsey, The cult. Aroids (1951), p. 138; — *Alocasia metallica* Schott in Oest. Bot. Wochenbl. IV (1854), p. 410; Schott, Syn. Aroid. (1856), p. 46; non *Alocasia metallica* W. J. Hook. in Bot. Mag. (1860), t. 5190; — *Caladium metallicum* Hort., Van Houtte, Fl. d. Serr. 2. Sér. III (1860), p. 115; — *Caladium plumbeum* C. Koch and *Xanthosoma plumbeum* C. Koch in Berl. Allg. Gartenztg. XVII (1857), p. 136; — *Alocasia plumbea* (C. Koch) Van Houtte in Fl. d. Serr. 2. Sér. XXI (1875), p. 93, t. 2206.

Petiole and lower surface of the leaf blade blackish purple; upper surface shining, purplish green. Leaf sheath cream-coloured to pink inside. Cataphylls pink. Peduncle light purple. Tubular part of the spathe dark brownish purple; limb greenish with purple stripes to pink outside, yellowish green or white to pink inside. Flowers weakly fragrant. Female part of the spadix light yellow; sterile part light yellow; male part white to creamy; appendix light yellow to cream-coloured.

Distribution: Java, Borneo; introduced to other tropical countries: in gardens in S. Florida and tropical America, sometimes escaped. In Suriname richly flowering.

Commewijne Riv., Margrita (Jonker 342, fl. Jan. 1956 [U]); Paramaribo, Tourtonnelaan (Jonker 477, fl. Jan. 1956 [U]; Jonker 679, fl. March 1956 [U]).
Vernacular names: Zwarte tajer, Indiaanse tajer, Blakka taja.

2. *Alocasia macrorrhiza* (L.) Schott in Oest. Bot. Wochenbl. IV (1854), p. 409; Schott, Syn. Aroid. (1856), p. 45; Schott, Gen. Aroid. (1858), t. 40; Schott, Prod. Syst. Aroid. (1860), p. 146; Engler in Mart., Fl. Bras. III. 2 (1878), p. 202; Engler in DC., Mon. Phan. Prod. II (1879), p. 502; Engler u. Krause in Das Pflanzenreich IV 23E (1920), p. 84, Fig. 15; Birdsey, The cult. Aroids (1951), p. 24; — *Arum macrorrhizum* L., Spec. Plant. (1753), p. 965; — *Arum peregrinum* L., Spec. Plant. (1753), p. 966; Plumier, Pl. Amer. (1755), p. 25, t. 36; Aubl., Pl. Guian. Fr. II (1775), p. 835; — *Colocasia macrorrhiza* (L.) Schott, Melet. I (1832), p. 18; — *Colocasia peregrina* (L.) Schott, Syn. Aroid. (1856), p. 42.

Large, rosulate herbs, up to 5 m high, sometimes provided with an

aerial stem when older. Rhizome tuberous, edible. Petioles vaginate in the basal half, ca. 136 cm long, thick, swollen; sheath ca. 6 cm in diameter. Leaf blade ovate, coriaceous, erect, ca. 70 cm long and 45 cm wide, acute and shortly cuspidate at the apex, cordate at the base. Lower surface light green and provided with prominent, yellow veins. Margin sinuate. Basal lobes ovate, obtuse. Sinus triangular, not penetrating to the main ribs of the basal lobes; the two main ribs about rectangular to each other.

Distribution: a native of tropical Asia, cultivated and subspontaneous in other tropical countries. Never observed in flowering state in Suriname. In 1737 Linnaeus already mentioned, in his Hortus Cliffortianus, this species from America. Aublet recorded it, in 1775, from French Guiana. The culture of this species has apparently disappeared in Suriname.

Near Paramaribo, road to Leonsberg, in abandoned plantation (Jonker 519, ster. Feb. 1956 [U]); Lower Suriname Riv., plant. Dordrecht (Lindeman 5764, ster. Apr. 1955 [U]).

Vernacular names: loemboe (Jav.), krassietaja, krastajer.

cultivar *variegata* Hort.

Leaves yellow-variegated.

Cultivated in gardens, Paramaribo.

Typhonium Schott

Small, rosulate, stemless herbs. Underground part tuberous. Leaves petiolate, sagittate to 3–lobed or 3–partite or pinnatisect. Peduncle short. Spathe convolute in the basal part; limb spreading, rather large, acuminate. Spadix consisting of a basal, female part covered with naked, 1–locular ovaries containing 1 or 2 basal ovules, a sterile part covered with staminodes or partly naked, a male part densely covered with naked flowers consisting of two stamens, and a sterile, stipitate, exserted, apical appendix.

Mrs. E. Geijskes–Sollewijn Gelpke drew our attention to a small Aroid growing as a weed in the streets of the centre of Paramaribo, especially in the vicinity of the Governor's House. We collected a specimen flowering in her garden. It appeared to belong to the Asiatic species *Typhonium trilobatum* (L.) Schott recorded by Simmonds from Trinidad as naturalized in that island. According to Engler in Das Pflanzenreich IV 23F (1920), p. 115, this is *T. divaricatum* (L.) Dcne. Linnaeus, however, based his *Arum divaricatum* on the good illustration of "*Nelenschena major*" by Rhede, Hort. Mal. XI (1692), p. 39, t. 20. This species is characterized by the staminodes. The part of the spadix between the male part and the female part is covered over its whole length with patent staminodes of which those on the basal half are clavate and those on the upper half vermiform. Synonyms are *Arum cuspidatum* Bl. in Cat. Hort. Buitenzorg, p. 101 and *Typhonium cuspidatum* (Bl.) Bl., Rumphia I (1835), p. 133, t. 30. Also belonging to this species is the drawing of *Arum flagelliforme* Roxb. in Wight's Icon. III (1844), p. 6, t. 791. *Arum flagelliforme* Lodd., Bot. Cab. IV (1823), t. 396 too belongs in the synonymy and con-

sequently also *Typhonium flagelliforme* (Lodd.) Bl., Rumphia I (1835), p. 134, figured by Engler in Das Pflanzenreich l.c., p. 113, Fig. 16.

Typhonium trilobatum (L.) Schott is characterized by a naked part of the spadix, between the female and the male part, with only basal whorls of acute, orange, erect staminodes. Linnaeus based his species on Ray, Hist. Plant. III (1704), p. 575, no. 17; on Hermann, Par. Bat. (1705), p. 78, t. 78; and on Commelin, Hort. Med. Amstel. (1697), p. 97, fig. 51. Illustrations of this species are to be found in Miller, Fig. Plant. Gard. Dict. I (1760), Pl. 52, fig. 2; Curtis, Bot. Mag. (1796), t. 339; and a detailed one in Curtis, Bot. Mag. (1822), t. 2324. Ray and Hermann, however, mentioned as a synonym *Nelenschena major* Rhede. But as Linnaeus himself only mentioned the latter in the synonymy of *Arum divaricatum*, we follow him in this.

Typhonium roxburghii Schott is also often confused with the two above mentioned species. It is characterized too by the sterile part of the spadix which is provided with basal whorls of hanging, uniform staminodes.

Typhonium trilobatum (L.) Schott, Wiener Ztschr. III (1829), p. 72; Schott, Aroid. I, 1853 (1855), p. 11, t. 16; Schott, Syn. Aroid. (1856), p. 18; Schott, Prod. Syst. Aroid. (1860), p. 108; Simmonds in Kew Bull. 1950 (1951), p. 405; — *Arum trilobatum* L., Spec. Plant. (1753), p. 965; Curtis, Bot. Mag. (1796), t. 339; — *Arum divaricatum*, non L., Wight, Icon. Pl. Ind. Or. III (1844), p. 76, t. 790; — *Typhonium divaricatum* auct., non Dcne, Blume, Rumphia I (1835), p. 130, t. 36; Schott, Aroid. I, 1853 (1855), p. 12, t. 18; Engler in DC., Mon. Phan. Prod. II (1879), p. 611; Engler in Das Pflanzenreich IV 23F (1920), p. 115; — *Arum trilobatum β auriculatum* Curtis, Bot. Mag. (1822), t. 2324; — *Arum acaule foliis trilobus, flore sessile radicato* Linn, Flor. Zeylan. (1748), n. 326, p. 155.

Tuber subglobose, ca. 2 cm in diameter. Petiole up to 12.5 cm long, the basal 3 cm vaginate; sheath white along its margin. Apical part of the petiole semiterete, slightly sulcate. Leaf blade herbaceous, ovate, hastate, acuminate, up to 9 cm long and up to 6.5 cm wide at the base; basal lobes triangular, obtuse, 3.5–4.5 cm long and up to 2 cm wide; both halves of the sinus rounded, penetrating to the main ribs of the basal lobes; naked part of the main ribs ca. 0.5 cm long. Peduncle up to 3 cm long. Inflorescence producing an acrid carrion smell, flowering during a single day only. Basal part of the spathe tubular, ca. 1.5 cm long and 1 cm in diameter, green. Limb triangular, ovate, long-cuspidate, brownish-purple inside with a velvety sheen, becoming greenish towards the base and brownish-green outside, ca. 14 cm long and up to 5 cm wide; cusp contorted, especially when older or in dried state, ca. 7 cm long. Spadix sessile. Female part 2.5 mm long, included in the tubular part of the spathe, covered with light-yellowish-green, 1.5 mm high ovaries; the latter crowned with a small, disciform stigma beset with minute, dark red glands. Sterile part also included, 1.2 cm long, naked for the upper 6 mm; basal half bearing spirally arranged, subulate, erect, orange, 4 mm long staminodes. Male part 5–6 mm long and 3.5 mm in dia-

meter, enclosed by the basal part of the limb, densely covered with orange flowers. Appendix shortly stipitate, subulate, brownish-purple, ca. 12.5 cm long and up to 3 mm in diameter, obliquely truncate at the base; stipe up to 2 mm long.

Distribution: Tropical Asia, subspontaneous in Trinidad and Suriname (Paramaribo).

Paramaribo (Jonker 94, fl. Dec. 1955 [U]).

Philodendron Schott

A number of rare species was recollected:

1. *Philodendron fragrantissimum* (Hook.) Kunth. We can now add the following characteristics to the description in Fl. of Sur.:

Liana, provided with hanging aerial roots. Leaf blade coriaceous. Peduncle pinkish, towards its apex white. Spadix subsessile or shortly stipitate; stipe red. Female part of the spadix light yellow; male part white.

Wayombo Riv., Donderskamp, path from river to village (Jonker 461, fl. Jan. 1956 [U]).

Vernacular name: Akĕkwà (Arow.).

2. *Philodendron jenmanii* Krause. Second collection:

Swamp between Lelydorp and Uitkijk (Jonker 311, fl. Dec. 1955 [U]).

3. *Philodendron dioscoreoides* Gleas. Only known, in sterile state, from British Guiana and one collection from Suriname, upper Nickerie River. We visited the upper Nickerie area and observed that the species was rather common there, but always sterile. Palm-stone collectors in that region knew it by the vernacular name IJzerblad (= iron leaf) and stated that it never flowered.

Upper Nickerie Riv., right bank, camp Powiesi Boutoe (Jonker 405, ster. Jan. 1956 [U]).

4. *Philodendron guttiferum* Kunth var. *guttiferum*. Second collection:

Suriname Riv., Brokopondo (Jonker 633, fl. Feb. 1956 [U]).

var. *rudgeanum* (Schott) Jonk. et Jonk. Fourth collection:

Perica Riv., Capoerica ridge (Lindeman 5337, fl. Jan. 1954 [U]).

We have the impression that var. *guttiferum* occurs in the interior and var. *rudgeanum* in the coastal region.

5. *Philodendron sphalerum* Schott. This endemic species was collected for the third time. The following characteristics can be added to the description in Fl. of Sur.: Spathe light green outside, inside creamy white. Spadix creamy white.

Perica Riv., Capoerica ridge (Lindeman 5139, fl. Dec. 1953 [U]).

6. *Philodendron splitgerberi* Schott. The type material, sterile, collected by Splitgerber, has been lost. The original drawings by Schott, however, have been kept in the Vienna herbarium. We collected the species in fertile state.

Philodendron splitgerberi Schott, Prod. Syst. Aroid. (1860), p. 251; Engler in DC., Mon. Phan. Prod. II (1879), p. 376; id. in Engl., Bot. Jahrb. XXVI (1899), p. 524; Krause in Das Pflanzenreich IV 23 Db (1913), p. 44; Jonker and Jonker in Act. Bot. Neerl. II (1953),

p. 358, also published as Med. Bot. Mus. en Herb. Utr. n. 118; Jonker and Jonker in Fl. Sur. I. 2 (1953), p. 60.

Epiphytic climber provided with an apical rosette. Internodes 3–3.5 cm long and 0.6 cm in diameter. Cataphylls decaying to a dense mass of brown fibres. Leaves petiolate, glabrous. Petioles broadly and, at the apex, crisply winged, up to 32 cm long and 1.5 cm wide; those of the rosulate leaves shortly vaginate in the basal 2.5 cm; sheath of the stem leaves up to 10 cm long and 1.5 cm wide, auriculate at the apex. Leaf blade coriaceous, triangular ovate, truncate at the base, acuminate and mucronate at the apex, 26–32 cm long and 10–18 cm wide at the base. Peduncle 5–6 cm long and 0.6 cm in diameter. Spathe closely convolute, 8–10.5 cm long, enclosing the spadix. Basal half swollen, bright red; apical half cream-coloured. Spadix obliquely sessile. Female part 3 cm long and 1.8 cm in diameter; ovaries ca. 7 mm high and 4 mm in diameter, 7-locular; ovules several, biseriate. Sterile part ca. 1 cm long and 0.7 cm in diameter. Fertile male part 5.2 cm long and 0.7 cm in diameter. Male flowers consisting of 3–4 stamens, each of them ca. 1 mm long and 0.7 mm wide.

Distribution: Endemic.

Suriname Riv., 12 km SE of Jodensavanne, camp VIII of Forestry Service (Jonker 648, fl. Feb. [U]).

The following species are new for Suriname:

7. *Philodendron longepetiolatum* Engl., hitherto known from British and French Guiana only and cited in Fl. of Sur. as to be expected. The following characters are to be added to that description:

Leaf blade acute or truncate and often more or less cuneate at the base. Spathe outside bright green on the back and light yellow along the margins, inside creamy yellow. Female part of the spadix light green; male part white.

Suriname Riv., Mapane creek, Suhoza (Lindeman 6720, fl. Dec. 1954 [U]). Note: we also observed the species in flowering state near Kwakoegron, Saramacca Riv. It was, however, impossible to collect it.

8. *Philodendron jacquinii* Schott, Syn. Aroid. (1856), p. 90; Schott, Prod. Syst. Aroid. (1860), p. 259; — *Arum hederaceum* Jacq., Stirp. Amer. (1763), p. 240, t. 152; Willd., Spec. Plant. IV (1805), p. 486, p.p.; — *Philodendron hederaceum* auct., Kunth, Enum. Plant. III (1841), p. 49, p.p.; — *Philodendron hoffmannii* Schott in Oest. Bot. Ztschr. VIII (1858), p. 178; Schott, Prod. Syst. Aroid. (1860), p. 256; Ørst., Praecurs. Fl. Centroam. (1873), p. 59; Engler in DC., Mon. Phan. Prod. II (1879), p. 399; Engler in Engl., Bot. Jahrb. XXVI (1899), p. 553; Krause in Das Pflanzenreich IV 23 Db (1913), p. 125.

Non-rosulate epiphytic climber. Stems, peduncles and petioles often provided with bladders in dried state. Internodes 5–7 cm long and ca. 1 cm in diameter, shortly setose. Leaves petiolate. Petioles shortly setose, up to 23 cm long; the basal 6.5–14 cm vaginate; sheath up to 3 cm wide. Leaf blade papyraceous, ovate, cordate at the base, acute to shortly acuminate and mucronate at the apex, 14–23 cm long and

11–15.5 cm wide; midrib and principal veins shortly setose beneath; basal lobes orbicular, 5–8 cm in diameter; sinus rounded, penetrating to the main ribs of the basal lobes; denudate part of the main ribs up to 1.5 cm long. Peduncle glabrous, 3–6 cm long. Spathe closely convolute, 8–10 cm long and 9 cm wide, green outside, inside red in the basal part and green towards the apex. Spadix sessile, ca. 8 cm long, covered with an evil-smelling slime which attracts insects. Female part up to 2.5 cm long and 1.5 cm in diameter, green; ovaries elongate, prominent, 6 mm high and 2 mm in diameter, 3-locular; each locule containing two basal ovules. Sterile part up to 3 cm long and 0.8 cm in diameter, ivory-coloured. Male part up to 4 cm long and 0.9 cm in diameter, light green to ivory, in dried state sometimes red; male flower consisting of 3 anthers which are 2.5 mm long and 1 mm wide.

Distribution: Central America.

Near Paramaribo, road to Leonsberg, abandoned plantation, epiphyte on *Pimenta officinalis* (Jonker 521, fl. Feb. 1956 [U]).

9. *Philodendron ornatum* Schott. In citing the species by this name, we are uniting *Philodendron rubens* Schott (1856) and *P. tobagense* Engl. (1899) — already united by Simmonds in Kew Bull. 1950 — with *P. ornatum* Schott (1853) and *P. asperatum* (Koch) Koch (1855), based on *Zantedeschia asperata* C. Koch (1853). In accordance with art. 57 of the Int. Code of Botanical Nomenclature (1956) we choose *P. ornatum* Schott (1853). The only difference between *P. rubens* (= *P. tobagense*) and *P. ornatum* (= *P. asperatum*) is the colour of the spathe: red inside in the former and white inside in the latter. In our opinion this is of no specific value.

Philodendron ornatum Schott in Oest. Bot. Wochenbl. III (1853), p. 378; Schott, Syn. Aroid. (1856), p. 84; Schott, Prod. Syst. Aroid. (1860), p. 247; Engler in Mart., Fl. Bras. III. 2 (1878), p. 155; Engler in DC., Mon. Phan. Prod. II (1879), p. 382; Engler in Engl., Bot. Jahrb. XXVI (1899), p. 525; Krause in Das Pflanzenreich IV 23Db (1913), p. 51; — *Zantedeschia asperata* C. Koch, Ind. Sem. Hort. Berol. (1853) App. p. 5; — *Philodendron asperatum* (Koch) Koch, Ind. Sem. Hort. Berol. (1855) App. p. 4; Schott, Syn. Aroid. (1856), p. 85; Schott, Prod. Syst. Aroid. (1860), p. 248; Ender, Ind. Aroid. (1864), p. 85; Engler in Mart., Fl. Bras. III. 2 (1878), p. 156; Engler in DC., Mon. Phan. Prod. II (1879), p. 383; Engler in Engl., Bot. Jahrb. XXVI (1899), p. 525; Krause in Das Pflanzenreich IV 23Db (1913), p. 51; — *Philodendron rubens* Schott, Syn. Aroid. (1856), p. 84; Schott, Prod. Syst. Aroid. (1860), p. 245; J. D. Hooker in Bot. Mag. (1873), t. 6021; Engler in DC., Mon. Phan. Prod. II (1879), p. 389; Engler in Engl., Bot. Jahrb. XXVI (1899), p. 530; Krause in Das Pflanzenreich IV 23 Db (1913), p. 61; Simmonds in Kew Bull. 1950 (1951), p. 402; — *Philodendron imperiale* Schott in Oest. Bot. Ztschr. XV (1865), p. 71; Schott in Peyritsch, Aroid. Maxim. (1879), p. 51, t. 40–42; — *Philodendron tobagense* Engl. in Engl., Bot. Jahrb. XXVI (1899), p. 524; Krause in Das Pflanzenreich IV 23 Db (1913), p. 52.

Climber. Internodes ca. 7.5 cm long and 0.7 cm in diameter.

Cataphylls pink, large, papyraceous, acute, up to 22 cm long and 6 cm wide, 2-crested on the back, decaying to brown fibres. Leaves petiolate. Petiole of the stem leaves consisting of a 9–10 cm long and 1.2 cm wide sheath, which is auriculate at the apex, and a 4 cm long verrucose pulvinus; warts white. Petiole of the rosulate leaves without sheath, 22–33 cm long, white-verrucose towards the leaf blade, especially on the 3.5–5.5 cm long, often pink pulvinus. Leaf blade of the stem leaves triangular-ovate, truncate at the base, cuspidate at the apex, up to 17.5 cm long and 10 cm wide at the base, pink when young; cusp up to 1.5 cm long. Leaf blad of the rosulate leaves ovate, cordate at the base, cuspidate at the apex, up to 48 cm long and 26.5 cm wide. Sinus broadly triangular to rounded and then penetrating to the main ribs of the orbicular basal lobes; denudate part of the ribs 2–2.5 cm long. Basal lobes up to 13 cm in diameter.

Distribution: S. Brazil, Venezuela, Trinidad, Tobago.

Cottica Riv., Moengo, forest near bauxite mines (Jonker 484, ster. Jan. 1956 [U]).

10. *Philodendron hederaceum* Schott, Melet. I (1832), p. 19; Kunth, Enum. Plant. III (1841), p. 49 p.p.; Schott, Syn. Aroid. (1856), p. 90; Schott, Prod. Syst. Aroid. (1860), p. 255; — *Colocasia hederacea sterilis minor folia cordata* Plumier, Descr. Pl. Amer. (1693), p. 39, t. 51 & 55; — *Arum hederaceum* Willd., Spec. Plant. IV (1805), p. 486 p.p.; — *Philodendron scandens* Koch et Sello in Ind. sem. hort. Berol. (1853) App. p. 4; Schott, Syn. Aroid. (1856), p. 83; Schott, Prod. Syst. Aroid. (1860), p. 243; Engler in Engl., Bot. Jahrb. XXVI (1899), p. 528; Urb., Symb. Ant. IV (1903), p. 134; Krause in Das Pflanzenreich IV 23 Db (1913), p. 56; Simmonds in Kew Bull. 1950 (1951), p. 404; — *Philodendron oxycardium* Schott, Syn. Aroid. (1856), p. 82; Schott, Prod. Syst. Aroid. (1860), p. 241; Engler in DC., Mon. Phan. Prod. II (1879), p. 386; Engler in Engl., Bot. Jahrb. XXVI (1899), p. 527; Urb., Symb. Ant. IV (1903), p. 134; Krause in Das Pflanzenreich IV 23 Db (1913), p. 56; — *Philodendron isertianum* Schott, Prod. Syst. Aroid. (1860), p. 242.

Climber. Internodes long. Leaves petiolate, not rosulate. Petiole vaginate in the basal half. Leaf blade ovate, cordate at the base, cuspidate at the apex; sinus narrowly triangular, acute, not penetrating to the main ribs of the basal lobes. Peduncle up to 6 cm long and 0.8 cm in diameter. Spathe tube green after flowering. Ovary oblong, 5-locular; ovules several, biseriate.

Distribution: West-Indian Islands, Guatemala, Venezuela.

Perica Riv., Capoerica ridge (Lindeman 5438, defl. Jan. 1954 [U]).

If *P. hederaceum* is considered a nomen confusum, the correct name for this taxon is *P. scandens* C. Koch et Sello.

11. **Philodendron wayombense** Jonk. et Jonk., **nov. spec.** (Fig. 1).

Caudex scandens internodiis ad 15 cm longis, ad 2 cm crassis. Foliorum petiolus teres, 34–57 cm longus, ad 7 cm longitudinis vaginatus. Lamina pergementacea, 54–61 cm longa, 30–60 cm lata, ambitu cordato-ovata, margine inciso sinuata. Pedunculi 1–3 ex

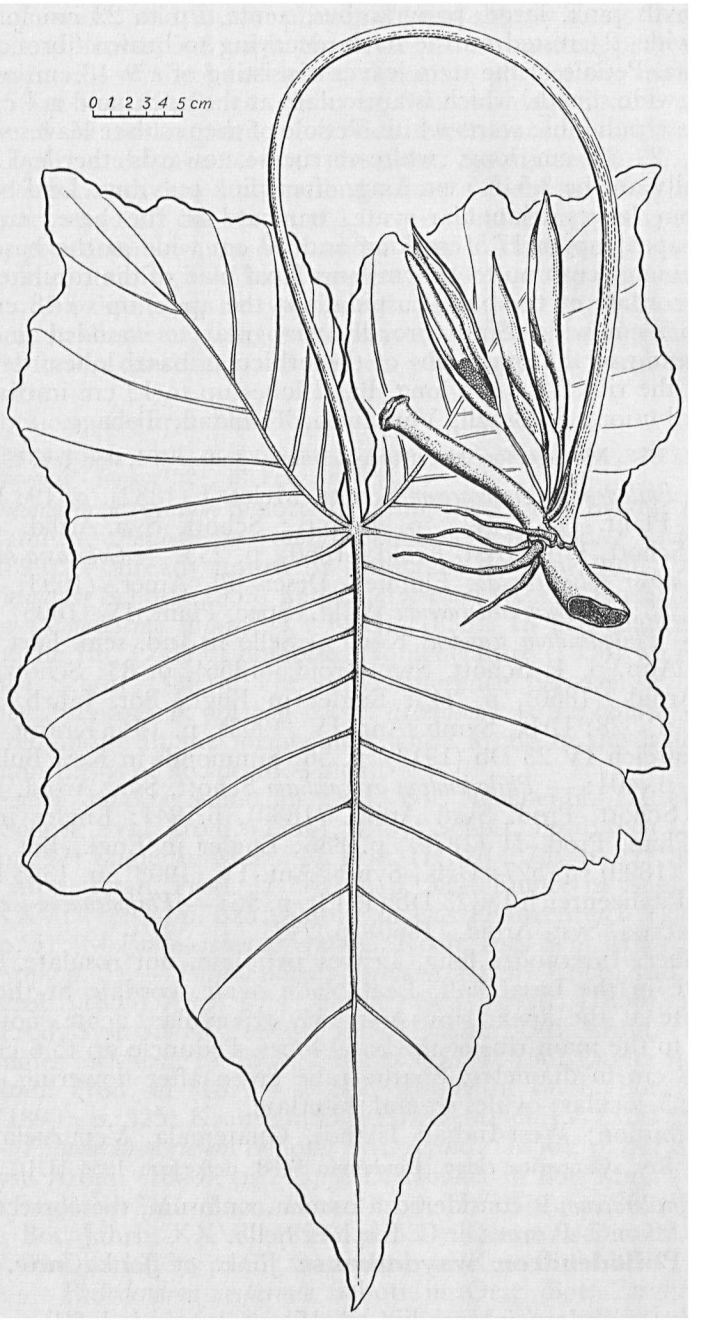

Fig. 1. *Philodendron wayombense* Jonk. et Jonk., typus.

axillo provenientes, 1–8 cm longi. Spatha viridis, rubro-maculata, ca. 14 cm longa, 4 cm lata. Spadix oblique sessilis, pars feminea ad 3.5 cm longa, 0.7 cm crassa, mascula basi sterilis, ad 7 cm longa, 0.7 cm crassa. Pistilla ovoidea, 2 mm longa, 1 mm lata, 5–6–locularia; ovula 5–6 placentae breviae affixa.

Typus: A. M. E. Jonker–Verhoef et F. P. Jonker 462, in herbario U. Surinamo ad flumen Wayombo prope Donderskamp.

The leaves of this new species resemble those of *Philodendron subincisum* Schott from Mexico, erroneously considered by Engler a synonym of *P. lacerum* (Jacq.) Schott. In the leaves of *P. wayombense*, however, the apical lobe is provided with ca. 9 pairs of veins; this number being 6 in *P. subincisum*. Moreover, the leaf blade is ovate in *P. subincisum* and slightly 5–lobed in *P. wayombense*. For this reason the species is related to *P. pedatum* (Hook.) Kunth, of which the first leaves are distinctly 3– to 5–lobed with a large terminal lobe, and the later leaves pinnatifid or pinnatisect. Also the number of locula of the ovary and the number of ovules point to a relationship with the latter species.

The plants contain a milky juice of which the smell strongly resembles that of raw carrots.

Wayombo Riv., Donderskamp, path from river to village (Jonker 462, fl. Jan. 1956 [U]).

Vernacular name: mesji tjoepie (Arow.).

These investigations have been carried out in the Botanical Museum and Herbarium of the State University of Utrecht, Netherlands (Director: Dr. J. Lanjouw) and in the laboratory of the WOSUNA at Paramaribo, Suriname. We wish to tender our most sincere thanks to the foundation "WOSUNA" (Scientific Research Suriname and the Netherl. Antilles) for the opportunity to visit Suriname and to study the Aroids in the field. A special word of thanks is due to Dr. D. C. Geijskes, then director of WOSUNA at Paramaribo, and to his successor Mr. J. Heiting.

The authors wish to express also their thanks to the directors of the Royal Botanic Gardens, Kew (Surrey), England and of the State Herbarium, Leiden, Netherlands, for the loan of herbarium specimens.