

## IRIDACEAE (D. J. L. Geerinck, Bruxelles)<sup>1</sup>

Perennial herbs, often with bulbs, tubers or rhizomes, sometimes undershrubs. *Leaves* simple, equitant (except in *Crocus*), with parallel nerves. *Inflorescences* terminal or axillary, in cymes, spikes or panicles, sometimes very contracted or flowers solitary, bracteate and with 1 or 2 spathes. *Flowers* bisexual, actinomorphic to zygomorphic, often marcescent. Tepals free or united into a tube, in 2 whorls, the inner ones rarely inconspicuous (*Patersonia*). *Stamens* 3 or exceptionally 2 with 1 staminode (in the Australian *Diplarrhena*), free or united into a tube, basifixed or dorsifixed, opposite to the outer tepals. *Ovary* inferior (or superior in the Tasmanian *Isophysis*), 3-celled with axillary placentas; style entire or trifold, sometimes tepaloid; stigmas 3 or 6, terminal or sometimes axillary, alternating with or opposite to the outer tepals; ovules generally numerous. *Fruit* capsular, dehiscent loculicidally, apically or irregularly. *Seeds* angular, flat or globose, sometimes winged.

**Distribution.** Cosmopolitan, with c. 60 genera and c. 800 spp., predominantly in the tropics and the southern hemisphere. In *Malesia*: only two Australasian genera each with 1 sp., and four exotic ones introduced and naturalized.

Many are cultivated in botanic gardens and occasionally in private gardens; see for an elaborate treatment BACKER, *Handb. Fl. Java* 3 (1924) 116–130 and BACKER & BAKH, *f. Fl. Java* 3 (1968) 144–154.

**Ecology.** Both native species are characteristic mountain plants.

**Morphology.** This family is usually herbaceous, but in a few genera (*Klattia*, *Nivenia*, *Patersonia*, *Witsenia*) stems may be woody at the base. The leaves are equitant and are laterally compressed, the two halves are free at the sheathing base and gradually fused to the top. The flowers are actinomorphic to distinctly zygomorphic with intermediate forms, sometimes in the same genus.

**Uses.** *Belamcanda chinensis* and *Eleutherine palmifolia* are used for medicinal purposes, probably mainly on account of their glucosides; cf. HEYNE, *Nutt. Pl.* (1927); BURKILL, *Dict.* (1935); QUISUMBING, *Med. Pl. Philip.* (1951).

### KEY TO THE GENERA

1. Flowers all sessile. Tepals united into a tube. Capsules included in bracts or spathes.
2. Flowers actinomorphic. Inner tepals inconspicuous. Stamens united into an undivided or trifold tube.  
Caespitose or rhizomatous herbs or undershrubs . . . . . 1. *Patersonia*
2. Flowers ± zygomorphic. Tepals unequal. Stamens free. Cormogenous herbs. . . . . 5. *Gladiolus*
1. Flowers all pedicelled. Tepals free or nearly so. Capsules exerted from bracts or spathes.
3. Tepals clawed. Stamens free.
4. Cormogenous herbs. Stamens appressed against the back of the style-arms. Ovary not beaked. Style trifold with bilobed arms . . . . . 6. *Trimezia*
4. Rhizomatous herbs. Stamens not appressed against the back of the style-arms. Ovary beaked. Style trifold with undivided arms . . . . . 3. *Belamcanda*
3. Tepals not clawed.
5. Tepals shortly connate, subequal. Stamens united into a tube, rarely nearly free. Caespitose to rhizomatous herbs. . . . . 2. *Sisyrinchium*
5. Tepals free, the inner ones smaller. Stamens free. Bulbous herbs . . . . . 4. *Eleutherine*

### 1. PATERSONIA

R.BR. *ex* KER-GAWL. *Bot. Mag.* (1807) t. 1041, *nom. cons.*; *Prod. Nov. Holl.* (1810) 304; BTH. *Fl. Austr.* 6 (1875) 400; GEERINCK, *Bull. Jard. Bot. Nat. Belg.* 44 (1974) 41. — *Genosiris* LABILL. *Nov. Holl. Pl. Sp.* 1 (1804) 13, t. 9. — **Fig. 1–3.**

Caespitose to rhizomatous herbs or undershrubs. *Inflorescences* terminal, in few-flowered contracted cymes, each with 2 spathes. *Flowers* actinomorphic, sessile, bluish to purple, exceptionally yellow or whitish, Tepals dimorphic, united into a long and filiform tube at the base, the inner lobes inconspicuous. *Stamens* 3,

(1) With co-operation by the General Editor.



Fig. 1. *Patersonia lowii* STAFF on Mt Losir, Gajolands, N. Sumatra, at c. 2400 m altitude (Photogr. DE WILDE-DUYFJES, April 1975, n. 16390).

united into an undivided or trifid tube. *Ovary* cylindrical, lanate; style entire; stigmas 3, subfoliaceous, alternating with the outer tepals. *Capsules* loculicidal, included. *Seeds* angular or ellipsoidal.

Distr. Australia and Tasmania (12 spp.), and Malesia (1 sp.).

Ecol. Open, low shrubberies, heaths and sedge-lands, 2000–3500 m.

Note. In sterile state the habit of *Patersonia* is strikingly resembling that of the sedge genus *Machaerina*. A specimen mentioned by WENT f. (Nova Guinea 14, 1924, 114) as *Patersonia* from Mt Goliath (DE KOCK 50) belongs to *Machaerina*, as corroborated anatomically by Dr P. BAAS.

1. *Patersonia lowii* STAFF, Trans. Linn. Soc. Bot. II, 4 (1894) 241, t. 20, f. 7–9; MERR. Philip. J. Sc. 2 (1907) Bot. 268; En. Born. (1921) 119; En. Philip. I (1923) 220; Not. Nat. Ac. Nat. Sc. Philad. n. 47 (1940) 2. — *P. borneensis* STAFF, Trans. Linn. Soc. Bot. II, 4 (1894) 241; GIBBS, J. Linn. Soc. Bot. 42 (1914) 165; MERR. En. Born. (1921) 119. — *P. novoguineensis* GIBBS, Arfak (1917) 101; WENT f. Nova Guinea 14 (1924) 114, incl. var. *auriculata* WENT, l.c.; HATUS. Bot. Mag. Tokyo 56 (1942) 426. — Fig. 1–3.

Tufted herb, 15–60 cm high. *Leaves* basal to subbasal, flat to  $\pm$  biconvex, 5–60 cm by 3–6 mm,

reddish or rarely whitish tomentellous to glabrescent along the margins towards the top,  $\pm$  glaucous. *Inflorescences* equalling the leaves or nearly so; peduncle 8–50 cm long, glabrous, the lower part surrounded by a persistent central leaf; spathes suboval to narrowly suboval,  $2\frac{1}{2}$ –5 cm by 7–12 mm, dark brown-orange, greyish when growing old, distinctly striate, with a red-hairy line on the keel to glabrous. *Flowers* bluish to pale mauve or purple, sometimes whitish; perigone-tube 2– $2\frac{1}{2}$  cm long, the outer lobes 8–16 by 6–10 mm. Staminal tube entire; anthers yellow. *Ovary* c. 5 mm long. *Capsules* 2–3 cm long; valves 3–4 mm wide. *Seeds* c. 2 mm, black.

Distr. *Malesia*: Sumatra (Gajolands: Mt Losir), Borneo (Mts Kinabalu and Murud, Kalabit Highlands), Philippines (Mindoro), New Guinea (Tamrau Range, Arfak Mts, Mamberamo River, Central to Milne Bay Districts). Fig. 4.

Ecol. Open shrubby vegetation or open forests, sedge meadows and heaths, on stony or impervious



Fig. 2. *Patersonia lowii* STAFF. a Habit, b, capsule, both nat. size, c, seed,  $\times 5$  (a VAN ROYEN & SLEUMER 7102, b–c BRASS 22259).



Fig. 3. *Patersonia lowii* STAFF. Same locality as in fig. 1.

clay soils, often gregarious, 2000–3500 m. *Fl. fr.* Dec.–Aug. Flowers open early in the morning but become soon marcescent.

Vern. New Guinea: *atetdzjii*, Mt Arfak, Manikiang lang.

Notes. The sizes of the tepals and of the seeds have been taken from the original descriptions of the synonymous taxa.

A variable species concerning the indument; the disjunct populations are not uniform. It seems to be allied to the widely distributed Australian *P. fragilis* (LABILL.) ASCHERSON & GRAEBNER, which differs by glabrous leaves and spathes, inflorescences much shorter than the leaves and the lower part of the peduncles never surrounded by a central leaf.

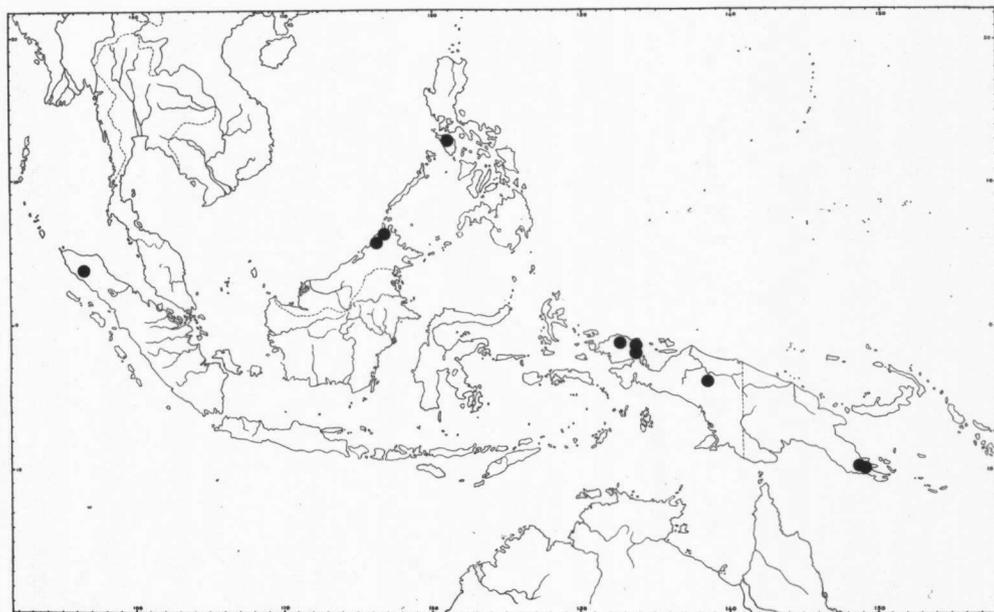


Fig. 4. Range of *Patersonia lowii* STAFF.

## 2. SISYRINCHIUM

LINNÉ, *Sp. Pl.* (1753) 954; JOHNSTON, *J. Arn. Arb.* 19 (1938) 376; FOSTER, *Contr. Gray Herb.* 166 (1948) 28. — *Renalmia* R.BR. *Prod.* (1810) 592, *pro parte, non* L. *f.* 1781. — Fig. 5–6.

Caespitose to rhizomatous herbs. *Inflorescences* axillary or terminal in panicles of fan-shaped and few-flowered cymes or of many-flowered clusters, each with 1–2 spathes. *Flowers* actinomorphic, pedicelled, bluish or yellowish. Tepals subequal, shortly connate at the base. *Stamens* 3, united into a tube at the base, rarely nearly free. *Ovary*: style trifid, the lobes filiform; stigmas 3, small, alternating with the outer tepals. *Capsules* exserted. *Seeds* small, globose.

Distr. About 100 *sp.* in Central and South America, 1 native *sp.* in New Zealand, Australia and East Malesia (New Guinea); also one species introduced.

The Papuan-Australasian species was mostly arranged in the closely allied genus *Libertia* SPR. However, the tepals are not dimorphic but about similar so that it must be arranged in *Sisyrrinchium*.

KEY TO THE SPECIES

- 1. Leaves cauline, distichous. Inflorescences in 1-2-flowered, contracted cymes, a few at a cauline leaf. Flowers c. 5 mm long. Stamens nearly free, glabrous . . . . . 1. *S. pulchellum*
- 1. Leaves mostly basal. Inflorescences in 3-6-flowered cymes, generally 2 at a cauline leaf. Flowers c. 7 mm long. Stamens united in a hairy tube, trifid at the top . . . . . 2. *S. micranthum*

1. *Sisyrinchium pulchellum* (R.Br.) F.v.M. Fragm. Phyt. Austr. 7 (1870) 92; Trans. R. Soc. Victoria 1 (1889) 34; GEERINCK, Bull. Jard. Bot. Nat. Belg. 44 (1974) 59. — *Renalmia pulchella* R.Br. Prod. (1810) 592, to replace *S. pulchellum* R.Br. l.c. 305. — *Libertia pulchella* Spr. Syst. Veg. 1 (1824) 169; LANE-POOLE, For. Res. (1925) 77; LAUT. Bot. Jahrb. 62 (1929) 462; STEEN. Bull. Jard. Bot. Btzg III, 13 (1934) 220; HOOGL. Blumea 4 (1958) 235; BALGOOY, Pac. Pl. Areas 2 (1966) 286; L. MOORE, New Zeal. J. Bot. 5 (1967) 267. — Fig. 5a.

Glabrous herb, 10-35 cm high. Leaves cauline, distichous, linear, 4-22 cm by 1-10 mm. Inflorescences in 1-2-flowered, contracted cymes, a few at a cauline leaf, each cyme with 1 spathe: this 4-15 (-40) by 2-6 mm. Pedicels to 4 cm. Flowers c. 5 mm long. Tepals white to yellowish, c. 4 by 1½-2 mm. Stamens nearly free, filaments c. 4 mm, anthers 1 mm long. Ovary ellipsoid, c. 1 mm long; style with undivided part 1-2 mm, the lobes 1-2 mm long. Capsules globular, 2-5 mm Ø; valves c. 2 mm wide. Seeds black, 1 mm Ø.

Distr. New Zealand, Australia (New South Wales, Victoria, Tasmania), and East Malesia: New Guinea (Lake Habbema area and Mt Antares in West, many localities in East). Fig. 6.

Ecol. Open forests and shrubby vegetation, in tree fern heath and alpine grassland, common on Mt Sarawaket in *Libocedrus-Dacrydium* forest (LANE-POOLE), 2400-3700 m. Fl. mostly Jan.-Aug.

Note. MOORE (l.c. 255-275) studied the variation in New Zealand and distinguished three species among which are two polyploids.

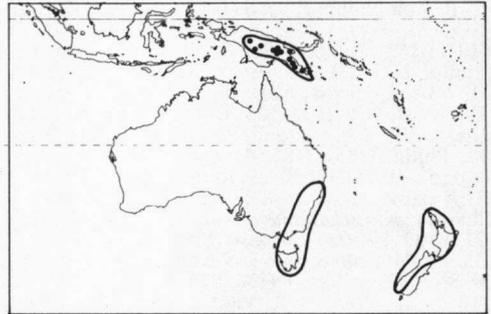


Fig. 6. Range of *Sisyrinchium pulchellum* (R.Br.) F.v.M.



Fig. 5. *Sisyrinchium pulchellum* (R.Br.) F.v.M. a. Inflorescence, nat. size. — *S. micranthum* Cav. b. Inflorescence, nat. size (a KALKMAN 4497, b VAN ROYEN 16028).

2. *Sisyrinchium micranthum* Cav. Diss. Bot. 6 (1788) 345, t. 191; BACK. Handb. Fl. Java 3 (1924) 125; JOHNSTON, J. Arn. Arb. 19 (1938) 390; FOSTER, Contr. Gray Herb. 166 (1948) 31; WILLIS, Handb. Fl. Victoria 1 (1962) 335; STEEN. Blumea 15 (1967) 154; BACK. & BAKH. f. Fl. Java 3 (1968) 150. — Fig. 5b.

Slender herb, 5-25 cm high, glabrous, with a flat stem. Leaves few, mostly basal, linear, 3-12 cm by 1-5 mm. Inflorescences in 3-6-flowered cymes, generally 2 at a cauline leaf, each cyme with 2 spathes, outer spathe 20-30 mm long, inner spathe 15-25 mm long, both 1-2 mm wide. Flowers c. 7 mm long. Tepals yellow with red or brown markings, c. 6 by 1 mm. Stamens united in a hairy tube, trifid at the top; filaments c. 1 mm long; anthers ½ mm long. Ovary ellipsoid, laxly hairy, c. 1 mm long; style with the undivided part c. 1 mm long, the lobes c. ¼-¾ mm long. Capsules globose, 2-3 mm long; valves c. 2 mm wide. Seeds black, 1 mm Ø.

Distr. Southern to Central America; naturalized in Australia, New Caledonia, Fiji, New Zealand, and also in Malesia: W. Java (Tjibodas), E. New Guinea (Morobe Distr.: Edie Creek), perhaps elsewhere.

Ecol. In the vicinity of the Tjibodas Botanic Garden as a weed in grassland and waste places, at c. 1450 m, certainly escaped from the garden. In Papua at c. 1950 m almost certainly introduced from Australia where it was first recorded about 1870. Poisonous to stock.

## 3. BELAMCANDA

ADANS. Fam. 2 (1763) 60.

Rhizomatous herbs. *Inflorescences* terminal, in panicles of flowered and corymbiform cymes, each with 2 spathes. *Flowers* actinomorphic, pedicelled, yellowish to orange. *Tepals* subequal, shortly connate, clawed. *Stamens* free. *Ovary* beaked; style trifid, the lobes short; stigmas 3, small, alternating with the outer tepals. *Capsules* exserted. *Seeds* large, globose.

Distr. Monotypic, native of China and Japan, cultivated in *Malesia* and many other countries and sometimes naturalized.

1. *Belamcanda chinensis* (L.) DC. in Redouté, Liliac. 3 (1805) t. 121; KOORD. Minah. (1898) 313; C. B. ROB. Philip. J. Sc. 6 (1911) Bot. 196; KOORD. Exk. Fl. Java 1 (1911) 312; MERR. Fl. Manila (1912) 152; Philip. J. Sc. 11 (1916) Bot. 260; En. Philip. 1 (1923) 220; BACK. Handb. Fl. Java 3 (1924) 124; HEYNE, Nutt. Pl. (1927) 461; GAGNEP. Fl. Gén. I.-C. 6 (1934) 675; BURK. Dict. (1935) 315; STEEN. Fl. Sch. Indon. (1949) 147; QUIS. Med. Pl. Philip. (1951) 181; HENDERS. Mal. Wild Fl. Monoc. (1954) 168, f. 98; OHWT. Fl. Japan (1965) 316; BACK. & BAKH. f. Fl. Java 3 (1968) 149. — *Balem-canda schularamani* RHEEDE, Hort. Mal. 11: 73, t. 37. — *Ixia chinensis* LINNÉ, Sp. Pl. (1753) 36. — *Pardanthus chinensis* KER-GAWL. in König & Sims, Ann. Bot. 1 (1805) 247; Bl. En. Pl. Jav. (1827) 26; ZOLL. Syst. Verz. 1 (1854) 70; FILET, Pl. Bot. Tuin Weltevreden (1855) 13; MIQ. Fl. Ind. Bat. 3 (1859) 579; BLANCO, Fl. Filip. ed. 3 (1877-83) t. 376.

Corymbosely branched, glabrous herb, 1-1½ m high. *Leaves* distichous, basal and cauline, broadly linear, 30-60 by 2-4 cm, glaucous. *Inflorescences* in 6-12-flowered cymes, once or twice branched; spathes membranous, c. 10 by 4 mm. *Pedicels* 2-4 cm, persistent. *Tepals* yellowish to orange, with red spots, unguiculate, obovate, 25-35 by

c. 7 mm, outer ones largest. *Filaments* filiform; anthers c. 10 mm long. *Ovary* ellipsoid, c. 5 mm long; style-arms gradually thickened upwards. *Capsules* obovate, 15-20 mm long; valves 8-12 mm wide. *Seeds* shining black, 5 mm Ø.

Distr. Native in China and Japan; in *Malesia* introduced and cultivated, locally naturalized (Sumatra, Java, S. Celebes, Philippines, Moluccas: Morotai, Banda, Ceram); cultivated and locally naturalized in many tropical and subtropical countries, e.g. Hainan, Taiwan (Formosa), Tonga, etc.

Ecol. In Java it is mainly naturalized in the eastern part between 750 and 2100 m, occurring in thickets and forest edges, and said not to grow well at low altitude.

The flowers open in the forenoon and have withered by midday.

Uses. HEYNE and BURKILL (*ll.cc.*) mention usage for several minor medicinal purposes, the dried rhizome being used as a purgative and for complaints of the chest and liver, etc.

Vern. Sumatra: *piso-piso*, Batak. Java: *akar tjamaka*, *djamaka*, *gégéngan brodjo lintang*, *suliga*, *S*, *sémprit*, *wordi*, J. Celebes: *kariménga kulo*, *katna*, *kětép*, *kětêw*, *kiris*, Minahasa, Alf. lang., *tagari*, Bonthain. Philippines: *abinaco*.

## 4. ELEUTHERINE

HERBERT, Bot. Reg. 29 (1843) t. 57, *nom. cons.*

Bulbous herbs. *Inflorescences* axillary in few-flowered and contracted cymes, each in 2 spathes. *Flowers* actinomorphic, pedicelled, whitish. *Tepals* free, the inner ones smaller. *Stamens* 3, free. *Style* deeply trifid; stigmas 3, small, alternating with the outer tepals. *Capsule* loculicidal, exsert. *Seeds* ellipsoidal to angular.

Distr. In America 2 *spp.* and according to GAGNEPAIN (Fl. Gén. I.-C. 6, 1934, 676) 2 *spp.* in Indo-China. Introduced in *Malesia*, and locally naturalized.

1. *Eleutherine palmifolia* (L.) MERR. Philip. J. Sc. 7 (1912) Bot. 233; Fl. Manila (1912) 153; Sp. Blanc. (1918) 104; En. Philip. 1 (1923) 220; QUIS. Med. Pl. Philip. (1951) 182; BACK. & BAKH. f. Fl. Java 3 (1968) 150. — *Sisyrinchium palmifolium* LINNÉ, Mant. 1 (1767) 122. — *Sisyrinchium bulbosum* MILL. Gard. Dict. ed. 8 (1768) n. 3. — *Ixia americana* AUBL. Pl. Guian. 1 (1775) 33. — *Moraea plicata* Sw. Fl. Ind. Occ. 1 (1797) 82. — *Antholyza meriana* (*non* L.) BLANCO, Fl. Filip. (1837) 24; ed. 3,

1 (1877) t. 100; MERR. Publ. Gov. Lab. Philip. 27 (1905) 85. — *E. plicata* HERBERT, Bot. Reg. 29 (1843) t. 57. — *E. bulbosa* (MILL.) URBAN in Fedde, Rep. 15 (1918) 305; LÉONARD, Bull. Soc. R. Bot. Belg. 84 (1951) 55. — *E. americana* MERR. ex HEYNE, Nutt. Pl. Ned. Ind. ed. 2, 1 (1922) 502; BACK. & SLOOT. Handb. Thee (1924) 91, t. 91; BACK. Handb. Fl. Java 3 (1924) 126; HEYNE, Nutt. Pl. (1927) 462.

Herb, 30-60 cm high, glabrous; bulb red, ovoid,

2½–5 cm long. *Leaves* basal 3–4 from each bulb, and cauline, narrowly elliptic, plicate-nerved, 25–60 by 1–2½ cm. *Inflorescences* in 4–10-flowered cymes; spathes 12–16 mm long, green. *Flowers* very fugacious, white. Tepals obovate, c. 15 mm long. *Stamens* yellow to orange, 8–10 mm long. *Ovary* ellipsoidal, c. 2 mm long; style-arms filiform, yellow; stigmas white. *Capsules* globose, c. 6 mm long. *Seeds* dark brown, c. 2 mm Ø.

Distr. Native in tropical America, cultivated and naturalized in tropical Africa and in *Malesia*: W. Java, W. Borneo, and the Philippines (Luzon, Leyte, Negros, Mindanao); in Java already noticed ± 1820.

Ecol. A weed, finally tufted, in estates and waste places, which multiplied by its tubers; c. 150–1500 m. In Java the scentless flowers open at about 5 o'clock in the afternoon, but have already wilted at about 7 o'clock.

Uses. According to QUISUMBING *l.c.* in the Philippines macerated bulbs are applied on the stomachs of children to relieve gas pains, and a decoction is diuretic. According to HEYNE *l.c.* this finally strongly stooling, tufted plant is cultivated and its bulbs have various applications in native medicine: diuretic, purgative, emetic, against dysentery, jaundice, etc.

Vern. *Vijfuursbloem*, D. Java: *babawangan*, *b. beureum*, *bawang sabrang*, *b. sieum*, S. *bawang kapal*, M. *brambang sabrang*, *luluwan sapi*, *tèki sabrang*, J. Philippines: *ahos-ahos*, C. Bis., *bakong sa Persia*, *mala-bauang*, *rosas sa Siam*, Tag., *hagu-sahis*, S. L. Bis., *palmilla*, Spanish.

Note. The tepals are sometimes numerous, up to 15; the number of the stamens is sometimes up to 8; the ovary is sometimes 4–11-locular with the same number of style-arms.

## 5. GLADIOLUS

LINNÉ, *Sp. Pl.* (1753) 36; GEERINCK, *Bull. Jard. Bot. Nat. Belg.* 42 (1972) 269; LEWIS & OBERMEYER, *J. S. Afr. Bot. Suppl.* 10 (1972).

Cormogenous herbs. *Inflorescences* terminal or sometimes axillary in spikes, rarely secund. *Flowers* ± zygomorphic, sessile, various in colour, each in a single spathe. Tepals unequal, united into an often curved tube. *Stamens* 3, often arched, free. Style entire; stigmas 3, obovate, alternating with the outer tepals. *Capsule* loculicidal, included. *Seeds* often winged.

Distr. About 180 *spp.* in Africa, South Europe and West Asia, one locally naturalized in *Malesia*.

1. *Gladiolus natalensis* (ECKLON) REINW. *ex* HOOK. *Bot. Mag.* (1831) t. 3084; GEERINCK, *Bull. Jard. Bot. Nat. Belg.* 42 (1972) 281; LEWIS & OBERMEYER, *J. S. Afr. Bot. Suppl.* 10 (1972) 44.

*var. natalensis.*

Stems 50–150 cm. *Leaves* almost basal, broadly linear, up to 30 by 4–5 cm. *Inflorescences* terminal in 2–25-flowered spikes; spathes 4–8 cm long. *Flowers* yellowish to pinkish, often with brown

markings. Perigone-tube curved, 2–5 cm long, lobes unequal, the upper 4½–5 cm, the outer laterals 3–4½ cm, the inner laterals 2–3 cm and the lower 2½–3½ cm long. *Filaments* curved, 4½–6 cm; anthers 1¼–1¾ cm. *Ovary* ellipsoid, 5–8 mm long; style curved, 2–7 cm; stigmas 5–7 mm. *Capsule* ellipsoid, 2–5 cm long; valves 7–10 mm wide. *Seeds* flat, winged, golden brown, 7–10 mm Ø.

Distr. Tropical and southern Africa, naturalized in *Malesia*: Philippines (Luzon).

## 6. TRIMEZIA

SALISB. *ex* HERBERT, *Bot. Reg.* 30, Misc. (1844) 88; DIELS, *Pfl. Fam. ed.* 2, 15a (1930) 497; FOSTER, *Rhodora* 64 (1962) 307.

Cormogenous herbs. *Inflorescences* axillary in few-flowered cymes, each in 2 spathes. *Flowers* actinomorphic, pedicelled, yellowish to reddish. Tepals free, clawed, the inner ones shorter and narrower with recurved tops. *Stamens* free, against the back of the style-arms. Style trifid, the lobes broadly flat, bilobed; stigmas small, opposite to the outer tepals. *Capsules* apically dehiscent, with 3 pores exerted beyond the spathe. *Seeds* globose to angular.

Distr. A few species in Central and tropical America, one introduced in *Malesia* (Malaya, West Java).

1. *Trimezia martinicensis* (JACQ.) HERBERT, Bot. Reg. 30, Misc. (1844) 88; BACK. Handb. Fl. Java 3 (1924) 121 ('*Trimeza*'); HENDERS. Mal. Wild Fl. Monoc. (1954) 168, f. 98; FOSTER, Rhodora 64 (1962) 308; BACK. & BAKH. f. Fl. Java 3 (1968) 148. — *Iris martinicensis* JACQ. En. Pl. Carib. (1760) 12. — *T. lurida* SALISB. Trans. Hort. Soc. 1 (1812) 308; HENDERS. Gard. Bull. S. S. 4 (1928) 341. — *Cipura martinicensis* KTH in H. B. K. Nov. Gen. Sp. 1 (1816) 320.

Glabrous herb, 100–150 cm. *Leaves* basal to cauline, linear, 20–100 cm long and 8–12 mm wide. *Inflorescences* in 3–6-flowered cymes, solitary or binate; spathes 2–2½ cm long, 10–25 cm peduncled. Pedicels 1½–3½ cm. *Flowers* yellow, brownish at the base. Outer tepals obovate, erect

to patent, 19–25 mm long and 10–13 mm wide; inner tepals narrower, S-shape curved. *Stamens* 3–4 mm long. *Ovary* ellipsoidal; style-arms 5–7 mm long, shortly bilobed. *Capsule* ellipsoid, 13–20 mm long. *Seeds* brown, superficially ribbed.

*Distr.* Native of Mexico, cultivated and locally naturalized in *Malesia*: Malaya, West Java.

*Ecol.* In sunny or slightly shaded localities, between grass, originally in Malaya at Kuala Lumpur, but now not uncommon in Malaya (HENDERSON), in West Java at Bogor on and around a native cemetery (BACKER), in both cases escaped from a Botanic Garden, below 250 m. Flowers expand in the forenoon and have withered by midday.

*Vern.* Forenoon yellow flag, E.