

Perianth deciduous, slightly oblique, with a slender tube and 6 nearly equal lanceolate or oblong lobes. Stamens 6, inserted at the base of the lobes; filaments slightly dilated at the base; anthers linear or oblong, 2-lobed at the base. Style filiform, obtuse, with a terminal slightly 3-furrowed stigma. Ovary 3-celled, with several ovules (10 to 12 in the Australian species examined) in each cell, in 2 rows, bordering a narrow peltate placenta. Capsule often oblique and opening irregularly, with few rather large seeds.—Bulbous herbs usually tall. Leaves all radical, long, flat or channelled. Scape simple, leafless. Flowers large, mostly white, in a terminal umbel surrounded by a few membranous or slightly coloured bracts.

The genus extends over tropical and southern Africa and Asia. Of the five Australian species, one appears to be the same as a common Asiatic one, the four others are probably endemic.

Flowers sessile in the umbel or on pedicels shorter than the ovary.

Filaments not $\frac{1}{2}$ as long as the perianth-lobes. Umbels few-flowered. Ovary usually beaked 1. *C. venosum*.

Filaments more than $\frac{1}{2}$ as long as the lobes.

Umbels many-flowered. Ovary usually beaked 2. *C. asiaticum*.

Umbels 1- or 2-flowered. Ovary not beaked 3. *C. uniflorum*.

Flowers on pedicels usually longer than the ovary, which is not beaked.

Perianth-lobes about 3 in. long and $\frac{3}{4}$ to 1 in. broad 4. *C. flaccidum*.

Perianth-lobes 2 to 2 $\frac{1}{2}$ in. long and 3 to 5 lines broad 5. *C. pedunculatum*.

2. *C. asiaticum*, Linn.; Ker in Bot. Mag. t. 1073. "Bulb produced into a column." Leaves long, attaining in the typical form a breadth of at least 2 in. Scape 1 to 2 ft. high. Flowers 8 to 20 or even more in the umbel, sessile or on pedicels shorter than the ovaries, the involucrel bracts 2 to 4 in. long. Ovaries usually produced at the top into a beak varying from 2 or 3 lines to nearly 1 in. Perianth white, the tube above 3 in. long; segments of the limb 2 to near 3 in. long, acuminate, tapering at the base, 3 to 4 or rarely 5 lines broad in the middle. Filaments from $\frac{3}{4}$ the length to nearly the length of the segments, usually purple towards the base; anthers 3 to 4 lines long.—Kunth, Enum. v. 547; *C. arenarium*, Herb. in Bot. Mag. t. 2355; *C. australasicum*, Herb. Amaryll. 259, partly.

N. Australia. Victoria river, F. Mueller; Port Darwin, Schultz, n. 600.
Queensland. Rockingham bay, Dallachy (with shortly pedicellate flowers).

Var. *angustifolium*. Leaves under 1 in. broad.—*C. angustifolium*, R. Br. Prod. 297 partly; *C. confertum*, Herb. in Bot. Mag. t. 2522.—King's Sound, N.W. coast, Chapman; Adams bay, Hulls; Port Darwin, Schultz, n. 696; Port Denison, Fitzalan; Rockhampton, O'Shanesy, Bowman.

The specimen in Brown's herbarium, to which he has attached the label of *C. angustifolium*, appears to me certainly to belong to the narrow-leaved form of *C. asiaticum*. The marginal asperities described by him are distant, and appear occasionally but rarely on other specimens of *C. asiaticum*. In the same sheet are several specimens of *C. uniflorum*, to which the name of *C. angustifolium* would be more appropriate, but the leaves have no marginal asperities.

C. brachyandrum, Herb. in Bot. Mag. under n. 2121, and Amaryll. 249, described from a single plant raised from tropical Australian seeds but since lost, should probably be reckoned amongst the varieties of *C. asiaticum*. The filaments, though said to be short, are described as very much longer than those of *C. venosum*.

4. **C. flaccidum**, *Herb. in Bot. Mag. under n. 2121 and t. 2133.* Bulb not seen. Leaves as far as known elongated, varying in breadth from $\frac{1}{2}$ to 1 in. Scape $1\frac{1}{2}$ to 2 ft. high. Flowers white, usually 6 to 8 in the umbel, on pedicels varying from $\frac{1}{2}$ to 1 in., the bracts of the involucre much dilated at the base, 3 to 4 in. long. Ovary not beaked and scarcely contracted under the perianth. Perianth-tube 3 to 4 in.

long, the segments of the limb about $2\frac{1}{4}$ to 3 in. long, and much broader than in any other Australian species, $\frac{3}{4}$ in. in some specimens, nearly 1 in. in others, the whole size of the flower evidently variable. Filaments from $\frac{3}{4}$ to $\frac{3}{4}$ as long as the segments; anthers scarcely above 3 lines.—*Amaryllis australasia*, Ker in Bot. Reg. t. 426; *A. australis*, Spreng. Syst. ii. 54.

N. S. Wales. Darling river, Mrs. Ford, and thence to Cooper's Creek, Victorian and other Expeditions; Murray river, C. Stuart; "from the paddock of Mr. Bigge," Leichhardt.

S. Australia. Flinder's range, F. Mueller; in the interior, lat. 32° to 22° , M'Douall Stuart.

There is in the Banksian herbarium a specimen laid in as from New Holland, R. Brown, but no corresponding one in Brown's own herbarium. There may be therefore some mistake, for we have no evidence of the plant growing in those parts of Australia visited by R. Brown. *C. arenarium* B., *Herb. in Bot. Mag. t. 2531*, appears to me to represent the larger-flowered form of this species, which is that generally sent from the interior of N. S. Wales. F. Mueller's South Australian specimens belong to the smaller form figured Bot. Mag. t. 2133.

Perianth persistent or at length withering away, the tube more or less elongated above the ovary (except in *C. recurvata*), the limb of 6 spreading nearly equal segments. Stamens 6, inserted at the mouth of the tube; anther-cells more or less free at the base. Ovary 3-celled, with numerous ovules in two rows in each cell. Style connate with the perianth-tube, shortly free above it with 3 erect or connate stigmatic lobes papillose outside. Fruit succulent, sessile within a sheathing bract. Seeds few, the testa striate, the funicle usually dilated.—Herbs with a thick rhizome and long flat or plicate-nerved radical leaves. Scapes very short or rarely longer than the spike. Flowers in short spikes or heads, each one subtended by a broad sheathing bract longer than the ovary and fruit.

The genus extends over tropical and Southern Africa and Asia, with one American species. Both the Australian species have a wide range over tropical Asia.

Leaves broad. Flowers in a dense nodding head on a scape of several inches. Perianth tube scarcely any

1. *C. recurvata*.

Leaves narrow. Flowers in an almost sessile spike. Perianth-tube filiform

2. *C. ensifolia*.

2. *C. ensifolia*, R. Br. Prod. 290. Stem short, produced into a descending rhizome with fibrous roots, and more or less covered with the scarious sheathing bases of old leaves. Leaves usually 6 to 9 in. long and $\frac{1}{4}$ to $\frac{1}{2}$ in. broad in the middle, but sometimes 1 to $1\frac{1}{2}$ ft. long and almost $\frac{3}{4}$ in. broad, tapering at both ends, with prominent nerves and more or less hairy especially towards the base. Spikes short and erect at the base of the leaves, the scarious sheathing bracts subulate-acuminate, often 1 in. long. Ovary almost sessile, elongated, enclosed in the bract. Perianth-tube filiform, hairy, $\frac{1}{2}$ to $\frac{3}{4}$ in. long above the ovary; segments of the limb usually 3 to 4 lines long, with lanceolate-pointed segments more or less hairy outside. Filaments short; anthers linear, the parallel cells shortly free at the base. Style column very short below the stigmas, which are as long as the anthers and connate or shortly free at the top. Capsule oblong, enclosed in the sheathing bract. Seeds several, the black testa elegantly striate but not tubercular.—*C. stans*, Labill. Sert. Austr. Caled. 18, t. 24; *C. orchioides*, Miq. Fl. Ind. Bat. iii. 585 and others, but not of Roxb.

Queensland. Prince of Wales and other islands off Cape York, R. Brown; Wide bay, Leichhardt; Rockingham bay, Dallachy; Fitzroy island, C. Walter; Broad Sound, Bowman; Keppel bay, Thozet; Moreton bay, C. Stuart.

N. S. Wales. Macleay river, Beckler.

The species has a wide range in eastern tropical Asia, for I can find no difference in the numerous specimens I have seen from Australia, New Caledonia, the Indian Archipelago, Bengal, China, and Japan. The Asiatic ones have been generally referred to the *C. orchioides*, Roxb. Corom. Fl. i. 14, t. 13, and I had myself considered them as a small variety of that species in the Hongkong Flora, p. 366 (where, however, I had by

mistake described the perianth segments as 5 to 6 lines long instead of 3 to 4); but upon a more careful comparison with Roxburgh's plate and description, and with specimens probably authentic from Rottler's herbarium, it appears that the latter may be a distinct larger-flowered species of limited range in the Indian Peninsula, and possibly the same as Wight's *C. malabarica*. The South American (Guiana and W. Indian) *Hypoxis scorzonifolia*, Lam., is scarcely distinguishable from the true *Curculigo ensifolia*, although for reasons unexplained it is still retained in *Hypoxis* by Seubert in the great Flora Brasiliensis.

Var. longifolia. This may prove to be a distinct species if the characters are found constant. It is more slender and nearly glabrous. Leaves rigid, $1\frac{1}{2}$ ft. long and only 3 to 4 lines broad in the broadest part, tapering into a long point and into a still longer petiole. Spike loose and elongated, each flower with its spathe or sheathing bract on a pedicel of $\frac{1}{4}$ in. or rather more. Perianth-tube not so slender as in the typical form, but the segments of the limb the stamens style and fruit quite those of *C. ensifolia*.

N. Australia. Port Darwin, Schultz, n. 781.

Perianth persistent, divided to the ovary into 6 rarely 4 nearly equal spreading segments. Stamens 6, rarely 4, inserted at the base of the segments; anthers oblong or linear, more or less lobed at the base. Ovary 3-celled rarely 2-celled, with many ovules in 2 rows in each cell. Style short, with 3, rarely 2, oblong or linear erect stigmas connate or free, papillose outside. Capsule globular oblong or linear, crowned by the persistent perianth, which (usually but not always in the Australian species) "at length falls off, carrying with it the top of the capsule, this then bursts into 3 valves and scatters the seeds." Seeds globular, with a crustaceous tubercular testa, the hilum prominent and hooked. —Herbs with bulbous or tuberous rhizomes, covered with sheathing membranous or fibrous scales. Leaves radical, flat or terete, usually hairy. Scape leafless or with a single sheathing leaf. Flowers white or yellow, solitary or few in a short raceme.

The genus is spread over tropical Asia and Africa, more abundant in South Africa, with two or three American species. Of the six Australian species, one is also in New Zealand, the others are all believed to be endemic.

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| Capsule globular or oblong, not above twice as long as broad. | |
| Anthers deeply divided at the base | 1. <i>H. hygrometrica</i> . |
| Anthers scarcely or very shortly lobed at the base. | |
| Perianth-segments 3 to 5 lines long. Stamens nearly equal. | |
| Capsule ovoid or oblong | 2. <i>H. glabella</i> . |
| Perianth-segments scarcely 2 lines long. Stamens alternately shorter. Capsule small, globular | 3. <i>H. pusilla</i> . |
| Capsule linear, 4 or 5 times as long as broad. | |
| Leaves subulate. Stamens alternately longer. Stigmas long and narrow | 4. <i>H. leptantha</i> . |
| Leaves linear-terete. Stamens nearly equal. Stigmas short | 5. <i>H. occidentalis</i> . |
| Leaves narrow-linear but flat with prominent nerve-like margins | 6. <i>H. marginata</i> . |

6. **H. marginata**, *R. Br. Prod.* 289. Leaves slightly hairy, flat though very narrow, the longest $1\frac{1}{2}$ ft. long, but some only 2 or 3 in., about 1 line broad, all with prominent nerve-like margins. Scapes filiform, 1-flowered, 2 to 4 in. long, with very long fine spreading hairs under the flower and upon the ovary. Capsule linear, nearly $\frac{1}{2}$ in. long and very narrow.

N. Australia. Islands of the Gulf of Carpentaria, *R. Brown*. The specimens are very few, but quite distinct from any others known to me, whether from India or the other parts of Australia. An imperfect specimen, however, from Port Darwin, *Schultz*, n. 641, appears very nearly allied to it; it has only one imperfect small leaf, and I do not see the long hairs of *H. marginata*. The scape bears two flowers, one, already in fruit, has the long narrow capsule of *H. occidentalis* and *H. marginata*.