

1. PANDANUS, Linn.

Male flowers in dense spikes, sessile or pedunculate in the axils of leafy or coloured bracts, forming a terminal compound spike. Stamens either separate or more or less united in clusters. Female flowers: Ovaries densely packed in a globular or oblong head or spike, with 1 ascending ovule in each. Drupes crowded or connate in a globular or cone-like head, often separable into clusters.—Stem woody, usually arborescent and branching. Leaves, long, coriaceous, spreading, prickly on the edges and often on the midrib, generally closely inserted towards the ends of the branches in 3 spiral series.

The genus is widely spread over the tropical regions of the Old World, chiefly near the sea. Of the four or five Australian species one is common in a great part of the range of the genus, the others appear to be all endemic.

SECT. I. **Keura.** *Filaments connate in clusters. Stigmas peltate or reniform, sessile on the flat convex or broadly conical apex of the ovaries. Drupes connate in clusters or rarely separate.*

Filaments united in a column longer than the free part.

Drupes connate in clusters, nearly flat on the apex.

Male spikes sessile 1. *P. odoratissimus.*

Drupes all free. Other characters of *P. odoratissimus* 2. *P. aquaticus.*

Drupes connate in clusters, each with a conical apex.

Male spikes pedunculate 3. *P. pedunculatus.*

Filaments very shortly united at the base. Drupes connate in clusters, each with a very convex apex 4. *P. Forsteri.*

SECT. II. **Acrostigma.** *Filaments free. Stigmas raised on the acute or acuminate apex of the ovary or style. Drupes free or equally connate at the base.*

Single Australian species 5. *P. monticola.*

Pandanus

2. **P. aquaticus**, *F. Muell. Fragm.* v. 40 and viii. 220.—Differs from *P. odoratissimus*, according to F. Mueller's notes, in the stem emitting no adventitious descending roots, and in the drupes in the head not cohering in clusters. Our specimen consists of leaves only and a male inflorescence, in no respects distinguishable from those of *P. odoratissimus*, and the want of adventitious roots may occur in many species.

N. Australia. Upper Victoria River, *F. Mueller.*

NIB

PANDANACEAE

Pandanus Kimberleyan
St. John

1. ***P. odoratissimus***, *Linn. f. Suppl.* 424.—Stems “from a creeping base arborescent, branched, 15 to 20 ft. high.” Leaves 3 to 5 ft. long or on young luxuriant individuals twice as long, 2 to 3 in. broad, acuminate, bordered by small prickles turned upwards. Male inflorescence terminal, recurved, often above 1 ft. long, consisting of about 6 to 20 dense spikes of $1\frac{1}{2}$ to 3 in., each one sessile in the axil of a leafy bract, the lowest of which are often 1 ft. long and nearly resemble the smaller upper leaves, tapering into a long narrow point, the upper ones gradually smaller with shorter points and whiter, but all much longer than the spikes, the margins serrulate, scabrous but scarcely prickly. Stamens exceedingly numerous, densely covering the rhachis, but the filaments united 10 to 20 together in a column often $\frac{1}{2}$ in. long, shortly free only at the ends, with linear anthers of $1\frac{1}{2}$ to 2 lines. Drupes

cuneate, hard and woody, 2 to 3 in. long, very obtuse, connate in clusters of 8 to 20 and these collected in a globular head 6 to 8 in. diameter, the clusters flat and areolate at the top, the apex of each drupe scarcely prominent, and the remains of the stigmas quite flat, the pericarp when old splitting into fibres at the base.—Roxb. Corom. Pl. t. 94 to 96; *P. spiralis*, R. Br. Prod. 341, and the numerous synonyms quoted by S. Kurz in Seem. Journ. Bot 1867, 125, and in Journ. Asiat. Soc. Bengal, xxxviii. 149, under *P. verus*, a Rumphian designation used previous to the establishment of the Linnæan nomenclature.

N. Australia. R. Brown (no label in his herbarium); Arnhem's Land and Islands of the Gulf of Carpentaria, F. Mueller; Port Darwin, Schultz, n. 613; Escape Cliffs, Hulse; King's Sound, Hughan.

The species is widely spread over tropical Asia and the Malayan Archipelago. The single drupes in F. Mueller's specimens as well as the clusters of drupes are much larger than in the usual Indian specimens as observed by Dr. J. B. Balfour, but they show no character to distinguish them specifically.

NID

PANDANACEAE

Pandanus semiarmatus
St. John

1. *P. odoratissimus*, Linn. f. *Suppl.* 424.—Stems “from a creeping base arborescent, branched, 15 to 20 ft. high.” Leaves 3 to 5 ft. long or on young luxuriant individuals twice as long, 2 to 3 in. broad, acuminate, bordered by small prickles turned upwards. Male inflorescence terminal, recurved, often above 1 ft. long, consisting of about 6 to 20 dense spikes of $1\frac{1}{2}$ to 3 in., each one sessile in the axil of a leafy bract, the lowest of which are often 1 ft. long and nearly resemble the smaller upper leaves, tapering into a long narrow point, the upper ones gradually smaller with shorter points and whiter, but all much longer than the spikes, the margins serrulate, scabrous but scarcely prickly. Stamens exceedingly numerous, densely covering the rhachis, but the filaments united 10 to 20 together in a column often $\frac{1}{2}$ in. long, shortly free only at the ends, with linear anthers of $1\frac{1}{2}$ to 2 lines. Drupes

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N30

PANDANACEAE

Pandanus tectorius
Soland