

## Revision of the Genus *Pandanus* Stickman, Part 8 The Hong Kong Coastal *Pandanus*

HAROLD ST. JOHN<sup>1</sup>

*Pandanus remotus* sp. nov. (sect. *Pandanus*)  
Figs. 43–46

DIAGNOSIS HOLOTYPE: Arbori ad 3 m. alti, truncis 15 cm. diametro sublaevibus saepe decumbentibus et copsis densis formantibus, radicibus fulturosis paucis et parvis, foliis 95–160 cm. longis 4.5 cm. latis ligulatis sed in base amplexantibus et 7 cm. latis longiter in apice acuto diminuentibus fragilibus et faciliter transruptibus base inerme sed parte subbasalis cum serris luteis 3.5–5 mm. longis 6–20 mm. distantibus in medio serris 2–4 mm. longis 5–12 mm. distantibus parte subapicale cum serris 0.5–1 mm. longis 3–10 mm. distantibus nervo mediale cum serris adscendentibus subulatis simulantibus sed minoribus, syncarpiis in flore 4 cm. longis late ellipsoideis cum bracteis albis numerosis amplexantibus maximis 53 cm. longis 3 cm. latis, syncarpio in fructu terminali, pedunculo 19–20 cm. longo tereto in basi pluribracteato eis ocreatis; syncarpiis 23 cm. longis 20 cm. diametro ellipsoideo, axili in fructu carnosos et succifero et celeriter multo contracto et solum fibris paucis remansis, phalangibus plusminusve 50 et 4.2–4.6 cm. longis 2.1–3 cm. latis 1.6–2.6 cm. crassis dimidia supra cuneata lateribus laevibus planis vel subcurvatis sublucidis luteis in sicco brunneis sed sinibus aurantiacis apice convexo sinibus lateralibus carpellorum vadosis sed ad mediam productis sinibus apicalibus centralibus 3–4 mm. profundis dimidia infera valde distenta carnosae luteae saccharosae, carpellis 7–10 plerumque 8–9 subaequalibus apicibus liberis conico-pyramidalis tertia supra suboblata eis marginalis asymmetricis et paene divergentibus, stigmatibus 1.5–2 mm. longis ovalibus lineatis obliquis centripetalibus, endocarpio mediali osseoso obscure mahogani-colorato in latere 0.5–1.5 mm. lato, seminibus 10 mm. longis 4 mm. diametro ellipsoideis, meso-

carpio supero cavernoso medullosos et fibroso, mesocarpio infero carnosos et valde fibroso.

DESCRIPTION OF ALL SPECIMENS EXAMINED: Trees 3 m. tall, the trunk 15 cm. in diameter, nearly smooth, often decumbent, forming dense thickets; prop roots few and small; leaves 95–160 cm. long, 4.5 cm. wide, though at the very base widening to 7 cm. at the clasping part, ligulate, long tapering to an acute tip, texture fragile, so, easily and often torn across, the very base unarmed, but just above it subulate serrate, the yellowish teeth 3.5–5 mm. long, 6–20 mm. apart, at the middle the teeth 2–4 mm. long, 5–12 mm. apart, near the tip the teeth 0.5–1 mm. long, 3–10 mm. apart, the midrib with similar, ascending, but smaller subulate teeth; inflorescence of staminate trees pendent, terminal, 40–50 cm. long, and the panicle 3–5 cm. wide, sweet fragrant; bracts white, divergent, the lowest ones 44–53 cm. long, 3.6 cm. wide, the lower half linear-lanceolate, the upper half a slender, tapering subulate tip, the midrib unarmed, but the margins appressed subulate serrate, the uppermost bract 5–7 cm. long, 6–8 mm. wide; lateral spikes numerous, 4–5.5 cm. long, borne on stalks up to 15 mm. long; staminal columns 5–15 mm. long, racemose, the lower half naked; filaments 1.5–2.5 mm. long; anthers 3–4 mm. long, linear-oblong, bearing an apical projection of the connective 1–1.2 mm. long, subulate; pistillate inflorescence with white bracts; pistillate flowering heads broad ellipsoid, 4 cm. long, surrounded by numerous white bracts, the largest ones 53 cm. long, 3 cm. wide; in fruit the syncarps terminal, on a peduncle 19–20 cm. long, terete, and at base with several ochreate bracts, naked above; syncarps 23 cm. long, 18–20 cm. in diameter, ellipsoid, the core at maturity juicy, fleshy, and almost wholly rotting and shrinking, leaving but very little fiber; phalanges 50 or more in number, 4.2–4.6 cm. long, 2.1–3 cm. wide, 1.6–2.6 cm. thick, upper half cuneate, with sides smooth,

<sup>1</sup> Botanist, B. P. Bishop Museum, Honolulu 17, Hawaii. Manuscript received September 27, 1960.

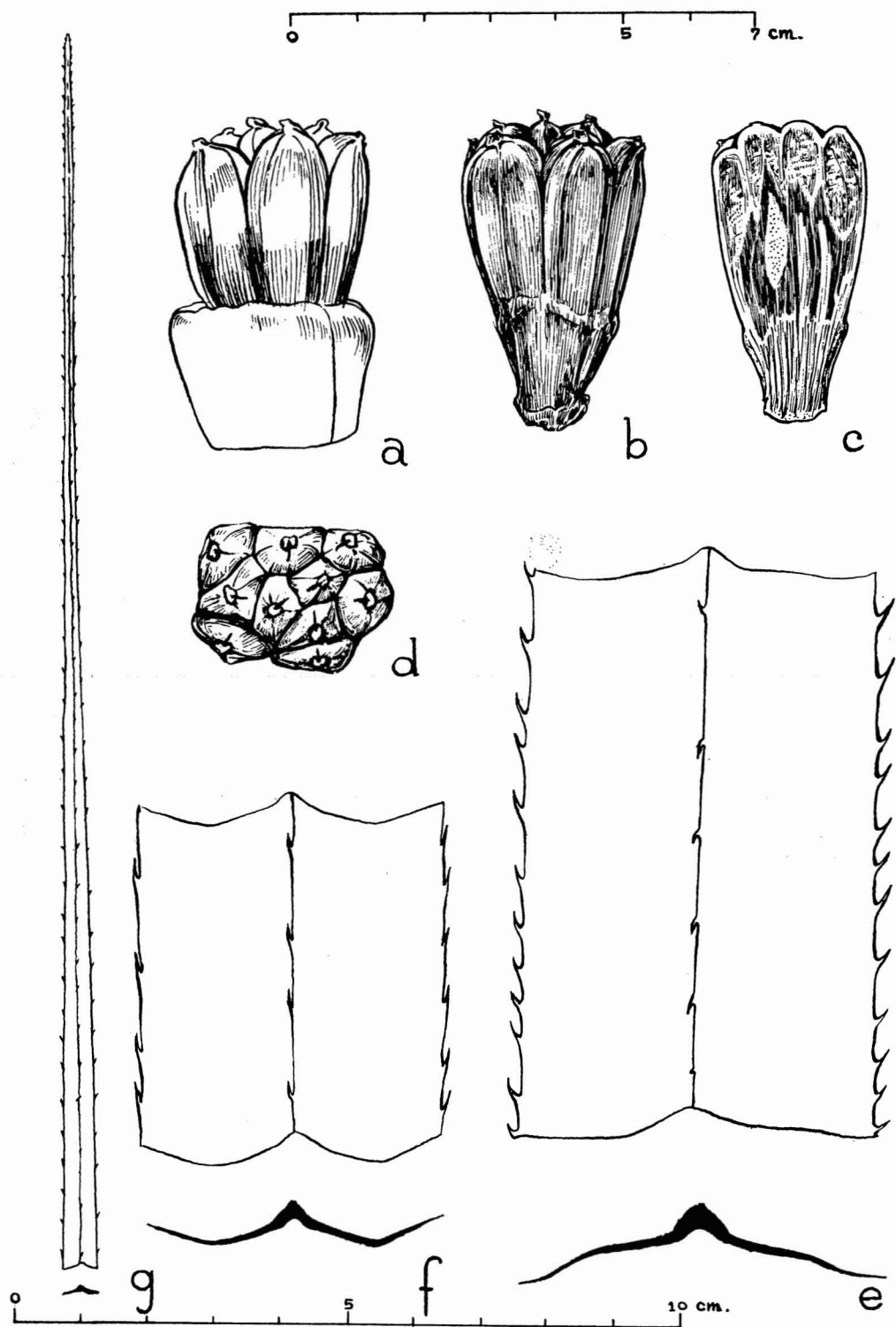


FIG. 43. *Pandanus remotus*, from holotype. *a*, Ripe phalange, lateral view,  $\times 1$ ; *b*, dried phalange, lateral view,  $\times 1$ ; *c*, phalange, longitudinal section,  $\times 1$ ; *d*, phalange, apical view,  $\times 1$ ; from topotype, *St. John* 26,322, *e*, leaf base, lower side,  $\times 1$ ; *f*, leaf middle, lower side,  $\times 1$ ; *g*, leaf tip, lower side,  $\times 1$ .



FIG. 44. *Pandanus remotus*, holotype, showing syncarp.

plane or gently curved, a little shiny, yellow with orange creases, drying brownish, the apex convex, the lateral carpal sutures shallow but distinct down to the middle, the central apical sutures 3–4 mm. deep, the lower half conspicuously enlarged and swollen with orange, juicy flesh, on the one drawn when fresh at the mid-section the upper part was 1.8 cm. in diameter while the fleshy lower part was 3 cm. in diameter, on drying the fleshy enlargement largely vanishes except for shoulders on each angle at the juncture and fleshy traces below that; pulp of the base very sweet and with a faint peach flavor but then with an irritating after taste; carpels 7–10, mostly 8–9, subequal, their apices conic-pyramidal, the upper  $\frac{1}{3}$  somewhat oblate, the marginal ones asymmetric and a little divergent; stigmas 1.5–2 mm. long, oval, creased, oblique, centripetal, below it the proximal suture extending  $\frac{1}{2}$  way to valley bottom; endocarp median, dark mahogany-colored, bony, that around the outer seeds 0.5–1.5 mm. thick; seeds 10 mm. long, 4 mm. in diameter, ellipsoid; upper mesocarp fibrous and cavernous between membranous cross partitions; lower mesocarp fleshy and very fibrous.

**HOLOTYPE:** Hong Kong: Shek-o Bay, sands at top of beach, forming thickets, July 19, 1956, *H. St. John* 25,930 (BISH).

**SPECIMENS EXAMINED:** Same data, staminate plant, *St. John* 25,929 (BISH); same locality. Oct. 20, 1959, *St. John* 26,322 (BISH); Hong Kong, Ringgold & Rodgers Expedition, 1853–56, *C. Wright* (US).

**DISCUSSION:** The striking feature of this species is the fleshy distention of the base of each fruiting phalange. Their large expansion causes the phalanges to be widely separated on the head. This type of fruiting structure was almost unknown in the *Pandanus* species of the central and eastern Pacific, but is now frequently found on the islands near the Asiatic coast. Two of this group from Mindanao, Philippines, were described by Martelli as *P. coronatus* forma *coronatus*, and forma *minor*. The first differs from ours in its more conic carpal apices, larger stigmas, and its phalange length of 3.5 cm. The forma *minor* differs in its low convex carpal apices and its phalange length of only 3 cm. In both the swollen fleshy base is smaller than in ours, but they were described and figured from dried material, so this point is uncertain.

The new specific epithet is from the Latin, *remotus*, distant, in allusion to the widely separated phalanges of the syncarp.



FIG. 45. *Pandanus remotus*, paratype, *St. John* 25,929, staminate plant with white inflorescence.

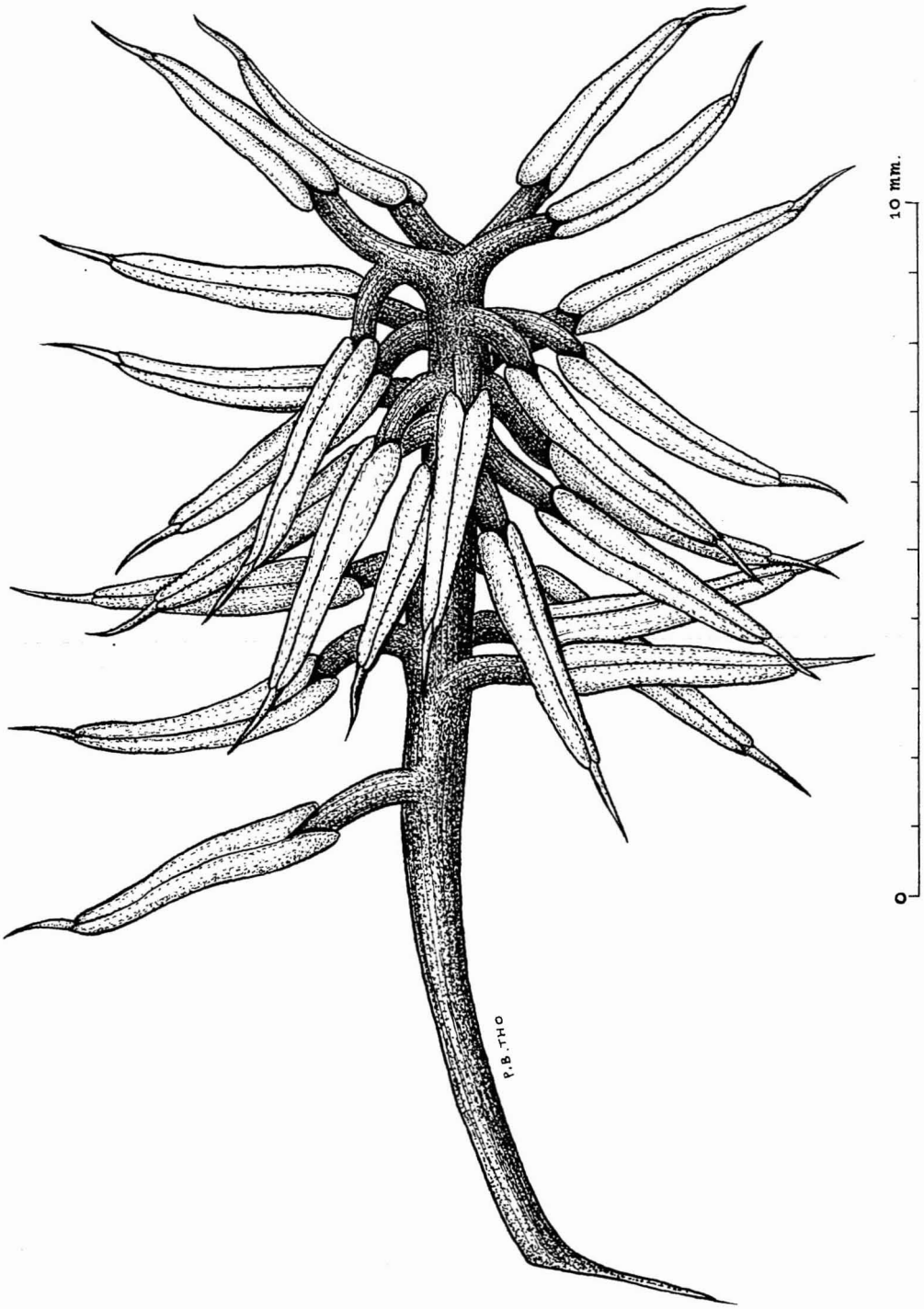


FIG. 46. *Pandanus remotus*, paratype, St. John 25,929, staminate column,  $\times 10$ .