

PLEURANTHODIUM REPLACES THE ILLEGITIMATE PSYCHANTHUS (ZINGIBERACEAE)

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Twenty-two species of *Alpinia* previously placed under the illegitimate name *Psychanthus* (K. Schum.) Ridley are transferred to *Pleuranthodium* (K. Schum.) R. M. Smith.

In a recent publication (Smith in *Edinb. J. Bot.* 47: 77–82, 1990), I decided there was justification for the acceptance of *Psychanthus* (K. Schum.) Ridley (formerly treated as a section of *Alpinia* Roxb.) at generic level. In so doing I failed to check the *Index Nominum Genericorum*, and thus was unaware that *Psychanthus* Ridley is a later homonym of *Psychanthus* Rafinesque (= *Polygala*). Such inexcusable negligence now necessitates the adoption of K. Schumann's sect. *Pleuranthodium* at generic level and the required new combinations are made below.

Pleuranthodium (K. Schum.) R. M. Smith, **stat. nov.**

Syn.: *Psychanthus* (K. Schum.) Ridley in *Trans. Linn. Soc. Bot.* 9: 215 (1916) – non Rafinesque (1814).

Alpinia sect. *Alpinia* (*Autalpinia*) K. Schum. *Bot. Jahrb.* 27: 271, 272 (1899) – p.p. excl. type.

Alpinia sect. *Pleuranthodium* K. Schum., *Pflanzenr. Zing.* 322 (1904); Val. in *Nova Guinea (Botanique)* 8: 939 (1913) & in *Bot. Jahrb.* 52: 45, 59 (1914).

Alpinia sect. *Psychanthus* K. Schum., *Pflanzenr. Zing.* 319 (1904); Val. op. cit. 938 (1913) & op. cit. 52: 45, 59 (1914).

Inflorescence unbranched, often at first enclosed by a large sheath, sometimes pendulous, sometimes pushed out laterally from the uppermost leaf sheath. *Bracts* and/or bracteoles, absent or very soon deciduous (rarely seen). *Flowers* borne singly; calyx short, bell-shaped, occasionally circumscissile, the top half falling before anthesis, or sheath-like; labellum cup-shaped, usually broader than long, the side lobes curving behind the filament or adnate (sometimes only partially so) to it, fleshy pads (?staminodes) almost always present at the base; filament cymbiform and subapically dentate or narrower and without teeth; anther thecae often divergent, not embracing the style, ecristate; stigma clavate, geniculate with a small terminal orifice; epigynous glands massive, splitting irregularly. *Capsule* ellipsoid to almost spherical, splitting to the base into three equal valves.

Lectotype species (selected here): *P. tephrochlamys* (Lauterb. & K. Schum.) R. M. Smith.

Distribution: New Guinea, the Bismarck Archipelago and Australia.

KEY TO THE SECTIONS

1. Calyx sheath-like; side lobes of labellum connate to the base of the filament above the petals; filament not cymbiform, not toothed **Pleuranthodium**
- + Calyx short, bell-shaped, occasionally circumsissile; side lobes of the labellum curving behind the filament; filament cymbiform with subapical teeth **Psychanthus**

Pleuranthodium (K. Schum.) R. M. Smith sect. **Pleuranthodium**

Syn.: *Alpinia* sect. *Pleuranthodium* K. Schum., Pflanzenr. Zing. 322 (1904).

Psychanthus sect. *Pleuranthodium* (K. Schum.) R. M. Smith in Edinb. J. Bot. 47:80 (1990).

Lectotype species: *P. tephrochlamys* (Lauterb. & K. Schum.) R. M. Smith.

Distribution: as for the genus.

Pleuranthodium biligulatum (Val.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia biligulata* Val. in Nova Guinea (Botanique) 8: 939 (1913).

Psychanthus biligulatus (Val.) R. M. Smith in Edinb. J. Bot. 47: 81 (1990).

Syntypes: *Versteeg* 1411; *von Roemer* 643.

Pleuranthodium branderhorstii (Val.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia branderhorstii* Val. in Nova Guinea (Botanique) 8: 941 (1913).

Psychanthus branderhorstii (Val.) R. M. Smith *op. cit.* 81.

Type: *Branderhorst* 412.

Pleuranthodium floccosum (Val.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia floccosa* Val. in Nova Guinea (Botanique) 8: 940 (1913).

Psychanthus floccosus (Val.) R. M. Smith, *op. cit.*, 81.

Type: *Schlechter* 17326.

Pleuranthodium macropycnanthum (Val.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia macropycnantha* Val. in Bot. Jahrb. 52: 64 (1914).

Psychanthus macropycnanthus (Val.) R. M. Smith. *op. cit.* 81.

Syntypes: *Schlechter* 17839; *von Roemer* 538.

Pleuranthodium neragaimae (Gilli) R. M. Smith, **comb. nov.**

Syn.: *Alpinia neragaimae* Gilli in Ann. Naturh. Mus. Wien 84: 43 (1983).

Psychanthus neragaimae (Gilli) R. M. Smith, *op. cit.* 81.

Type: *Gilli* 285 (W).

Pleuranthodium pelecystylum (K. Schum.) R. M. Smith, **comb. nov.**Syn.: *Alpinia pelecystyla* K. Schum. in Bot Jahrb.27:277,f.2f.*Psychanthus pelecystyla* (K. Schum.) R. M. Smith, *op. cit.*
81.Type: *Beccari* 784.**Pleuranthodium piundaundensis** (van Royen) R. M. Smith, **comb. nov.**Syn.: *Riedelia piundaundensis* van Royen, Alp. Fl. New Guin. 2:
875 (1979).*Psychanthus piundaundensis* (van Royen) R. M. Smith, *op.*
cit. 81.Type: Papua New Guinea, Piundaunde valley, above Kombugomambuno, *van*
Balgooy 584 (L).**Pleuranthodium platynema** (K. Schum.) R.M.Smith, **comb. nov.**Syn.: *Alpinia platynema* K. Schum., Pflanzenr. Zing. 438 (1904).*Psychanthus platynema* (K. Schum.) R. M. Smith, *op. cit.* 82.Type: *Schlechter* 14327.**Pleuranthodium pterocarpum** (K. Schum.) R. M. Smith, **comb. nov.**Syn.: *Alpinia pterocarpa* K. Schum., Pflanzenr. Zing. 322 (1904).*Psychanthus pterocarpus* (K. Schum.) R. M. Smith, *op. cit.*
82.Type: *Zippelius* s.n.**Pleuranthodium racemigerum** (F. Muell.) R. M. Smith, **comb. nov. Fig. 1D.**Syn.: *Alpinia racemigera* F. Muell., Fragm. 8: 27 (1827).*Psychanthus racemiger* (F. Muell.) R. M. Smith, *op. cit.* 82.Type: *Dallachy* s.n. (MEL).**Pleuranthodium roemeri** (Val.) R. M. Smith, **comb. nov.**Syn.: *Alpinia roemeri* Val. in Nova Guinea (Botanique) 8: 941
(1913).*Psychanthus roemeri* (Val.) R. M. Smith, *op. cit.* 82.Type: *von Roemer* 696.**Pleuranthodium tephrochlamys** (Lauterb. & K. Schum.) R. M. Smith, **comb. nov.**Syn.: *Alpinia tephrochlamys* Lauterb. & K. Schum. [in Bot. Jahrb.
27: 277 (1899) – nom. nud.] & Fl. Schutzgeb. Südsee 226
(1900).*Psychanthus tephrochlamys* (Lauterb. & K. Schum.) R. M.
Smith. *op. cit.* 82.Type: *Lauterbach* 2540 (K).

Pleuranthodium trichocalyx (Val.) R. M. Smith, **comb. nov. Fig. 1A.**

Syn.: *Alpinia trichocalyx* Val. in Bot. Jahrb. 52: 63 (1914).

Psychanthus trichocalyx (Val.) R. M. Smith *op. cit.* 82.

Syntypes: *Schlechter* 16219, 16084.

Pleuranthodium (K. Schum.) R. M. Smith sect. **Psychanthus** (K. Schum.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia* sect. *Psychanthus* K. Schum., Pflanzenr. Zing. 319 (1904).

Psychanthus (K. Schum.) Ridley sect. *Psychanthus*

Type species: *P. papilionaceus* (K. Schum.) R. M. Smith.

Distribution: as for genus, excluding Australia.

Pleuranthodium comptum (K. Schum.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia compta* K. Schum. in Bot. Jahrb. 27: 277 (1899) & Pflanzenr. Zing. 319 (1904).

Psychanthus comptus (K. Schum.) R. M. Smith, *op. cit.* 79.

Type: *Hollrung* 195a.

Pleuranthodium floribundum (K. Schum.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia floribunda* K. Schum., Pflanzenr. Zing. 439 (1904).

Psychanthus floribundus (K. Schum.) R. M. Smith, *op. cit.* 80.

Type: *Schlechter* 14291.

Pleuranthodium gjellerupii (Val.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia gjellerupii* Val. in Nova Guinea (Botanique) 8: 115 (1913).

Psychanthus gjellerupii (Val.) R. M. Smith, *op. cit.* 80.

Type: *Gjellerup* 115.

Pleuranthodium hellwigii (K. Schum.) R. M. Smith, **comb. nov. Fig. 1B.**

Syn.: *Alpinia hellwigii* K. Schum., Pflanzenr. Zing. 320 (1904).

Psychanthus hellwigii (K. Schum.) R. M. Smith, *op. cit.* 80.

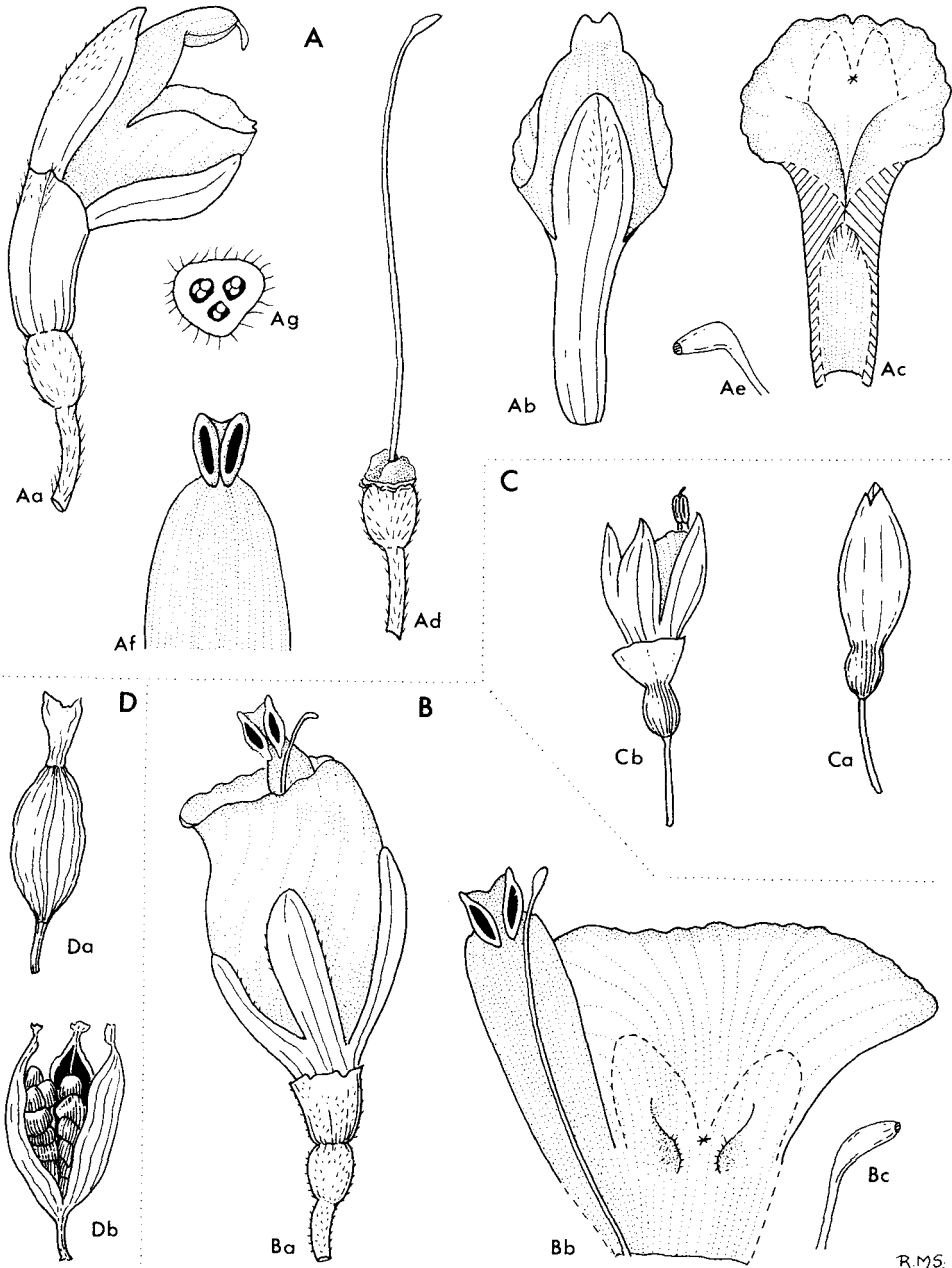
Type: *Hellwig* 416.

Pleuranthodium iboense (Val.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia iboensis* Val. in Bot. Jahrb. 52: 60 (1914).

Psychanthus iboensis (Val.) R. M. Smith, *op. cit.* 80.

Type: *Schlechter* 17081.



R.M.S.

FIG. 1. A, *Pleuranthodium trichocalyx*: Aa, flower $\times 2$; Ab, corolla from back, calyx removed $\times 2$; Ac, labellum and l.s. of corolla tube (* point at which lateral petals become connate) $\times 2$; Ad, gynoecium $\times 3$; Ae, stigma, much enlarged. B, *P. hellwigii* vel aff.: Ba, flower $\times 2$; Bb, corolla, dissected $\times 2$; Bc, stigma, much enlarged. C, *P. peekelii*: Ca, bud with calyx enveloping corolla $\times 2$; Cb, flower fully open showing circumscissile calyx $\times 2$. D, *P. racemigerum*: Da, fruit before dehiscence $\times 2$; Db, fruit after dehiscence $\times 2$. A and B from living material, C and D from dried material.

Pleuranthodium papilionaceum (K. Schum.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia papilionacea* K. Schum. in Fl. Kais. Wilh. Land 29 (1899) & Bot. Jahrb. 27: 29, t.2 H (1899) & in Pflanzenr. Zing. 319, t.39R (1904).

Psychanthus papilionaceus (K. Schum.) R. M. Smith, *op. cit.* 80.

Type: *Hollrung* 195.

Pleuranthodium pedicellatum (Val.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia pedicellata* Val. in Bot. Jahrb. 52: 60 (1914).

Psychanthus pedicellatus (Val.) R. M. Smith, *op. cit.* 80

Type: *Schlechter* 16057.

Pleuranthodium peekelii (Val.) R. M. Smith, **comb. nov. Fig. 1C.**

Syn.: *Alpinia peekelii* Val. in Bot. Jahrb. 52: 62 (1914).

Psychanthus peekelii (Val.) R. M. Smith

Type: *Peekel* 765.

Pleuranthodium schlechteri (K. Schum.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia schlechteri* K. Schum. in Pflanzenr. Zing. 438 (1904).

Psychanthus schlechteri (K. Schum.) R. M. Smith, *op. cit.* 80.

Type: *Schlechter* 14519.

Pleuranthodium scyphonema (K. Schum.) R. M. Smith, **comb. nov.**

Syn.: *Alpinia scyphonema* K. Schum. in Pflanzenr. Zing. 438 (1904).

Psychanthus scyphonema (K. Schum.) R. M. Smith, *op. cit.* 80.

Type: *Schlechter* 14519.