

Note

New combinations in *Lycianthes* (Dunal) Hassl. (Solanaceae) for New Guinea and Australia

Lycianthes (Dunal) Hassl. was erected as a genus by Hassler (1917), and greatly expanded in circumscription by Bitter (1920), but for many years subsequently, *Lycianthes* was treated as a subgenus or section of the huge genus *Solanum* L.

Symon & Clarkson (1985) discussed the status of *Lycianthes* and concluded that while some authors were using *Lycianthes* at generic rank, they preferred to accept it at a lower rank, because of a lack of distinguishing features. Symon (1985) followed the same course.

However, since the early 1970's, increasing numbers of publications have advocated generic status for *Lycianthes* (e.g. D'Arcy 1973; Deb 1980; D'Arcy 1986; Benitez de Rojas & D'Arcy 1997). The anatomical study by D'Arcy (1986) showed that the calyx of *Lycianthes* is quite unlike *Solanum sens. str.* but very similar to *Capsicum* L.

The molecular studies of Olmstead & Palmer (1992) and Olmstead *et al.* (1999) have produced cladograms where *Lycianthes* clusters with *Capsicum*, and where *Solanum sens. str.* comprises a separate clade. *Lycianthes* is now widely accepted as a genus by botanists in the New World, where the great majority of species occur.

This note provides new combinations for species occurring in Irian Jaya, Papua New Guinea and Australia. For several New Guinea species, combinations under *Lycianthes* already exist.

Lycianthes belensis (Merr. & L.M.Perry) A.R.Bean, **comb. nov.**

Solanum belense Merr. & L.M.Perry, J. Arnold Arbor. 30: 50–1 (1949). **Type:** Irian Jaya. Bele River, 18 km NE of Lake Habbema, November 1938, L. Brass 11223 (holo: A; iso: BM, L).

Distribution: Endemic to the island of New Guinea; known from Irian Jaya and Papua New Guinea.

Lycianthes bitteriana (Symon) A.R.Bean, **comb. nov.**

Solanum bitterianum Symon, J. Adelaide Bot. Gard. 8: 34–6 (1985). **Type:** Papua New Guinea. C.N.G.T. Logging area, Stoney Creek, foot of Mt Missim (near Bulolo), 1 May 1977, D.E. Symon 10651 & A. Kairo (holo: ADW; iso: CANB, F, K, L, LAE, MO, US).

Distribution: Endemic to the island of New Guinea; known from Papua New Guinea.

Lycianthes dendropilosa (Symon) A.R.Bean, **comb. nov.**

Solanum dendropilosum Symon, J. Adelaide Bot. Gard. 8: 44 (1985). **Type:** Papua New Guinea. near Kepilam village, Lagaip Valley, Laiagam, Western Highlands, 2 August 1960, R.D. Hoogland & R.Schodde 7291 (holo: CANB; iso: BM, BRI, L, LAE, US).

Distribution: Endemic to the island of New Guinea; known from Papua New Guinea.

Lycianthes multifolia (Merr. & L.M.Perry) A.R.Bean, **comb. nov.**

Solanum multifolium Merr. & L.M.Perry, J. Arnold Arbor. 30: 50 (1949). **Type:** Irian Jaya. 6 km SW of Bernhard Camp, Idenburg River, February 1939, L. Brass 12907 (holo: A; iso: BM, BRI, L, LAE).

Distribution: Endemic to the island of New Guinea; known from Irian Jaya.

Lycianthes peranomala (Wernham) A.R.Bean, **comb. nov.**

Solanum peranomalum Wernham, Trans. Linn. Soc. London, Bot. 9: 119 (1916). **Type:** New Guinea. Mt Carstensz, undated, C.B.Kloss (holo: BM).

Distribution: Endemic to the island of New Guinea; known from Irian Jaya.

***Lycianthes pustulata* (Symon) A.R.Bean, comb. nov.**

Solanum pustulatum Symon, J. Adelaide Bot. Gard. 8: 58, 60 (1985). **Type:** Papua New Guinea. confluence of Warapuri and Warrangga Rivers, Wahgi-Jimi Divide, north of Nondugl, Minj sub-dist., Eastern Highlands, 5 September 1963, *P. van Royen* NGF18229 (holo: BRI; iso: K, L, LAE).

Distribution: Endemic to the island of New Guinea; known from Papua New Guinea.

***Lycianthes rostellata* (Merr. & L.M.Perry) A.R.Bean, comb. nov.**

Solanum rostellatum Merr. & L.M.Perry, J. Arnold Arbor. 30: 51–2 (1949). **Type:** Papua New Guinea. East Mt Tafa, Central Division, May 1933, *L. Brass* 4135 (holo: A; iso: BRI, L, NY).

Distribution: Endemic to the island of New Guinea; known from Papua New Guinea.

***Lycianthes shanesii* (F.Muell) A.R.Bean, comb. nov.**

Solanum shanesii F.Muell., Fragm. 6: 144 (1868). **Type:** Queensland. Rockhampton, 25 February 1868, *P. O'Shanesy* (lecto: MEL[MEL 12404]), *fide* Symon, J. Adelaide Bot. Gard. 3: 136 (1981).

Distribution: Endemic to Queensland. The distribution map of Symon & Clarkson (1985) shows a large disjunction between occurrences at Rockhampton and Cape York Peninsula, but the species is now known to occur more or less continuously from the Torres Strait to around Gladstone. *L. shanesii* is the only known species of *Lycianthes* in Australia.

***Lycianthes umbonata* (Symon) A.R.Bean, comb. nov.**

Solanum umbonatum Symon, J. Adelaide Bot. Gard. 8: 63, 65 (1985). **Type:** Papua New Guinea. Edie Creek, c. 4 miles [6 km] SW of Wau, Morobe district, 26 April 1963, *T. Hartley* 11756 (holo: CANB; iso: BRI, L, LAE).

Distribution: Endemic to the island of New Guinea; known from Papua New Guinea.

***Lycianthes vitiensis* (Seem.) A.R.Bean, comb. nov.**

Solanum vitiense Seem., J. Bot. 1: 206 (1863), Fl. Vit. 176, t. 36 (1866). **Type:** Ovalau, Fiji Islands, July & October 1860, *B. Seemann* 340 (holo: K (2 sheets); iso: BM, GH, MEL, NSW, OXF).

Distribution: Found in Papua New Guinea (Bougainville only), Solomon Islands, Fiji, Samoa and Tonga.

***Lycianthes wollastonii* (Wernham) A.R.Bean, comb. nov.**

Solanum wollastonii Wernham, Trans. Linn. Soc. London, Bot. 9: 120 (1916). **Type:** New Guinea. Camp VIII–IX, [Mt Carstensz], undated, *C.B. Kloss* (holo: BM).

Distribution: Endemic to the island of New Guinea; known from Irian Jaya.

References

- BENITEZ DE ROJAS, C. & D'ARCY, W.G. (1997). The genus *Lycianthes* (Solanaceae) in Venezuela. *Ann. Missouri Bot. Gard.* 84: 167–200.
- BITTER, G. (1920). Die Gattung *Lycianthes*. *Abh. Naturwiss. Vereine Bremen* 24: 292–520.
- D'ARCY, W.G. (1973). Flora of Panama. Family 170, Solanaceae. *Ann. Missouri Bot. Gard.* 60: 573–780.
- D'ARCY, W.G. (1986). The calyx in *Lycianthes* and some other genera. *Ann. Missouri Bot. Gard.* 73: 117–27.
- DEB, D.B. (1980). Enumeration, synonymy and distribution of the Solanaceae in India. *J. Econ. Taxon. Bot.* 1: 33–54.
- HASSLER, E. (1917). Solanaceae. Austro-Americanae. *Annuaire Conserv. Jard. Bot. Genève* 20: 173–83.
- OLMSTEAD, R.G. & PALMER, J.D. (1992). A chloroplast DNA phylogeny of the Solanaceae: subfamilial relationships and character evolution. *Ann. Missouri Bot. Gard.* 79: 346–60.
- OLMSTEAD, R.G., SWEERE, J.A., SPANGLER, R.E., BOHS, L. & PALMER, J.D. (1999). Phylogeny and provisional classification of the Solanaceae based on chloroplast DNA. In: M. Nee, D.E. Symon, R.N. Lester & J.P. Jessop (eds). *Solanaceae IV*, pp. 111–137. Royal Botanic Gardens, Kew.

Austrobaileya 6 (3): 567–569 (2003)

SYMON, D.E. & CLARKSON, J.R. (1985). The Reinstatement of *Solanum shanesii* F.Muell. Section *Lycianthes* (Solanaceae) with discussion of its significance. *J. Adelaide Bot. Gard.* 7: 201–6.

SYMON, D.E. (1985). The Solanaceae of New Guinea. *J. Adelaide Bot. Gard.* 8: 1–171.

A.R. Bean

**Queensland Herbarium, Brisbane Botanic gardens Mt Coot-tha, Mt Coot-tha Road, Toowong,
Queensland 4066**



Bean, A. R. 2003. "New combinations in Lycianthes (Dunal) Hassl. (Solanaceae) for New Guinea and Australia." *Austrobaileya: A Journal of Plant Systematics* 6(3), 567–569. <https://doi.org/10.5962/p.299691>.

View This Item Online: <https://www.biodiversitylibrary.org/item/281479>

DOI: <https://doi.org/10.5962/p.299691>

Permalink: <https://www.biodiversitylibrary.org/partpdf/299691>

Holding Institution

Queensland Herbarium

Sponsored by

Atlas of Living Australia

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: Queensland Herbarium

License: <http://creativecommons.org/licenses/by-nc-sa/4.0/>

Rights: <http://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.