Polish Botanical Journal 46(1): 27–29, 2001

GENERA ET SPECIES ORCHIDALIUM. 2.

DARIUSZ L. SZLACHETKO & HANNA B. MARGOŃSKA

Abstract: *Spuricianthus* Szlach. & Marg., *gen. nov.,* a new orchid genus of the subfamily Thelymitroideae (Acianthinae) from New Caledonia is described and illustrated. A new combination at the species level – *Spuricianthus atepalus* (Reichenb. f.) Szlach. & Marg., *comb. nov.* – is validated.

Key words: Magnoliophyta, Liliopsida, Orchidaceae – Thelymitroideae, *Spuricianthus*, New Caledonia

Dariusz L. Szlachetko & Hanna B. Margońska, Department of Plant Taxonomy and Nature Conservation, Gdańsk University, Al. Legionów 9, PL-80-441 Gdansk, Poland, e-mail: biodarek@univ.gda.pl

Collecting materials to the first volumes of *Gynostemia Orchidalium* and *Genera et Species Orchidalium*, we were given access to the rich orchid spirit collection kept in the Museum National d'Histoire Naturelle in Paris, made mostly by H. S. MacKee. Our attention was drawn to well-preserved specimens of various species of *Acianthus* R. Br., especially *Acianthus atepalus* Reichenb. f. This unique species differs from any other representatives of the genus in lacking petals and having an entire, ecallose lip. We were much surprised, however, when we began to study in detail its gynostemium structure. It appeared much more similar to *Caladenia* R. Br. or related genera than to other *Acianthus* species. Looking for any other taxon of Acianthinae having a similar gynostemium we found a New Zealand/Tasmanian genus, *Townsonia* Cheesem, but *Townsonia* and *Acianthus atepalus* clearly differ in their vegetative parts. The former has tuberoids produced in nodes of creeping, horizontal rhizome; a single petiolate leaf is produced from the rhizome node, near or remote from the base of the flowering stem; the petals are reduced, much shorter than the sepals, but exist; the lip is undivided, but with median triangular thickening and 2 longitudinal basal calli. The gynostemium of *Townsonia* is rather slender, suberect. The column part is prominent, longer than the anther and broadly winged. The anther is bent forward, and its base is below the stigma apex. The staminodes are prominent, form wing-like structures along the column part, and apically are toothed.

In *Acianthus atepalus* the tuberoids are single, oblong-ovoid, and not produced on the rhizome;

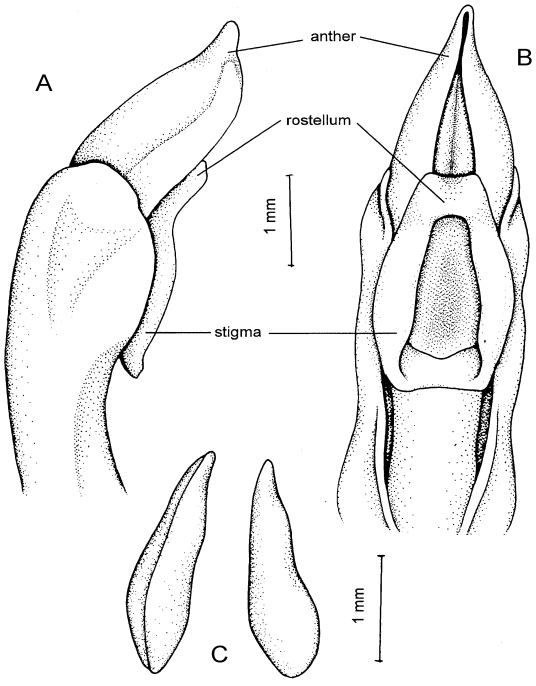

Fig. 1. Gynostemium structure in genus *Spuricianthus* Szlach. & Marg. *gen. nov*. A – side view, B – dorsal view, C – pollinia (drawn from *MacKee 32030*, P, DLSz).

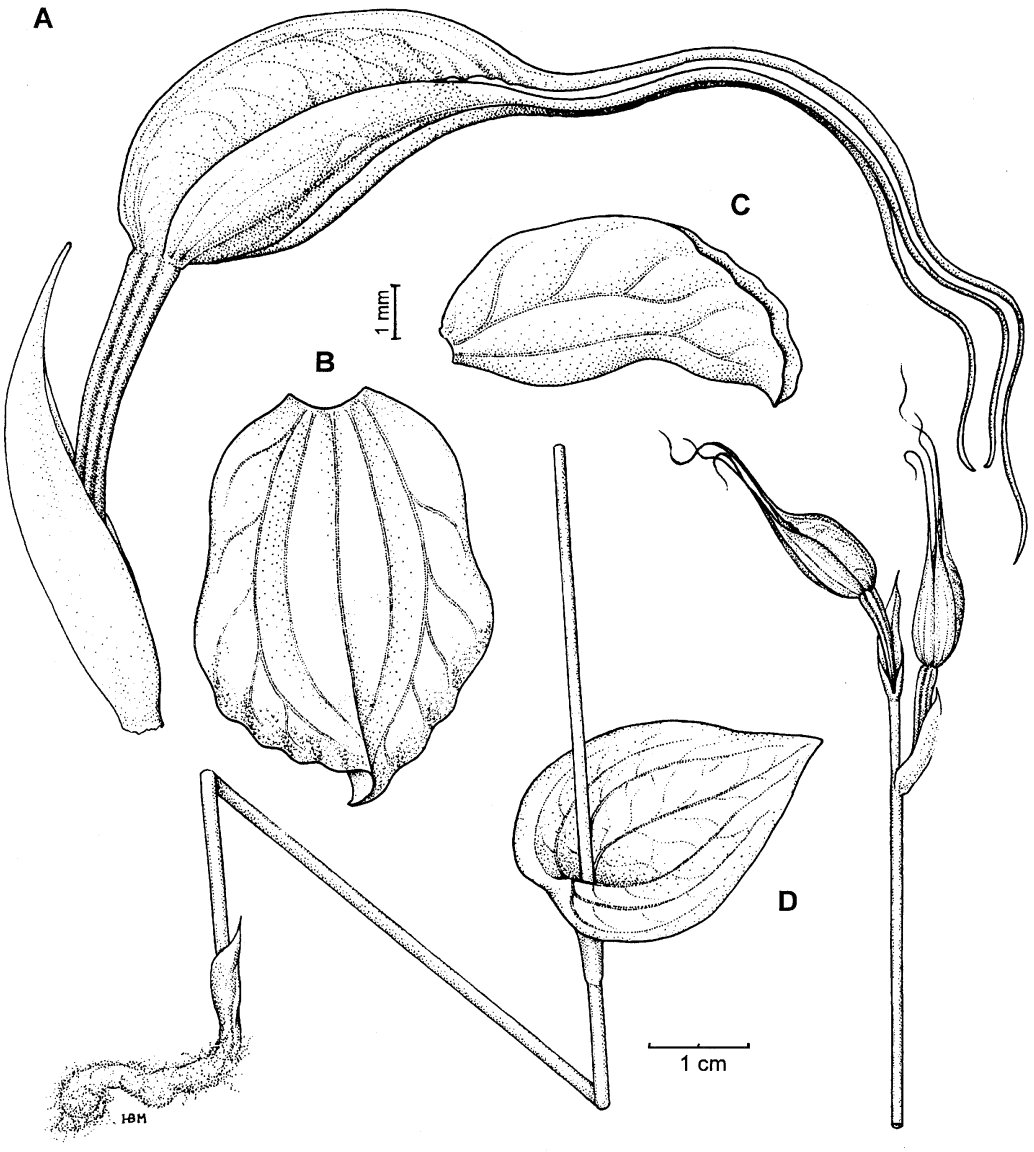

Fig. 2. *Spuricianthus atepalus* Szlach. & Marg., *sp. nov*. A – flower with floral bract, B – lip, frontal view, C – lip, side view, D – plant with inflorescence (drawn from *MacKee 32030*, P, DLSz).

the leaf is single as well, but produced near the middle of the stem; the flowers are medium-sized, not fully opened, the sepals are long-caudate, and the petals are completely reduced: the lip is orbicular, ecallose, concave at the base, thickened along the mid-vein, papillate along the apical margins, and gynostemium-embracing. The gynostemium is short, rather slender and suberect. The column part is slightly longer than the anther, and winged near the stigma. The anther base is set near the apex of the stigma. The staminodes are transformed into narrow wings along the column part.

In our opinion any similarities in gynostemium morphology in *Townsonia* and *Acianthus atepalus* are just the result of convergence rather than a close relationship.

We think that *Acianthus atepalus* should be separated from *Acianthus* in a monotypic genus which we propose below:

Spuricianthus Szlach. & Marg., *gen. nov.* (Fig. 1)

Genus a subtribus Acianthinae *pertinens. Ab omnibus congeneribus subtribus* Acianthinae *petalis nullis, labello rotundato sine incrassationibus et gynostemio cum staminem moventem recedit*

Tuberoids single, oblong-ovoid. Leaf single, near the middle of the stem, cordate-ovate to lanceolate-ovate, with reticulate venation. Flowers medium-sized, not fully opened. Sepals long-caudate. Petals lacking. Lip orbicular, ecallose, concave at base, thickened along the mid-vein, papillate along the apical margins, gynostemium-embracing.

Gynostemium short, rather slender, suberect. Column part slightly longer than anther, winged near stigma. Column foot lacking. Anther base near apex of stigma. Anther suberect, oblong-ovoid with conical apex, motile. Pollinia 4 in 2 pairs, powdery, attenuate at apex, rounded at base. Staminodes transform into narrow wings along column part. Stigma confluent, oval, emarginate, concave in center. Rostellum truncate, erect, thickened. Viscidium lacking (Fig. 1).

GENERITYPE: *Spuricianthus atepalus* (Reichenb. f.) Szlach. [*Acianthus atepalus* Reichenb f.]

ETYMOLOGY. *Spurii* – (Lat.) – false; a false *Acianthus.* An allusion to the superficial similarity of the new entity to the species of *Acianthus*.

DISTRIBUTION. *Spuricianthus* is endemic to New Caledonia.

NOTE. This genus is unique among Acianthinae because of its very peculiar gynostemium structure, more similar to Caladeniinae than to other members of Acianthinae, except perhaps *Townsonia*, but these genera differ from one another in vegetative parts morphology.

A monotypic genus.

Spuricianthus atepalus (Reichenb. f.) Szlach. & Marg., *comb. nov.* (Fig. 2)

Basionym: *Acianthus atepalus* Reichenb. f., Linnaea **41**: 56. 1877.

ACKNOWLEDGMENTS. We are grateful to the Curators of B, BM, K, P and W for their hospitality during personal visits, to the Curator of L for the loan of herbarium materials, and to Prof. Dr. Ryszard Ochyra for Latinizing the diagnosis. This study was financed by KBN grants no. 6P04C-063–15 and 6P04C-055-16.

Received 4 September 2000