

Pleurothallis asteria K.W. Holcomb, sp. nov.

Plant small in size, epiphytic, caespitose, roots very slender.

Ranicauls up to 9.5 cm long, very slender, suberect, enclosed by a thin tubular sheath below the middle and another at the base.

Leaf 5.5 cm long, 3.25 cm wide, thinly coriaceous, cordate, spreading, acute.

Inflorescence a single, successive, resupinate flower, 26 mm long, pedicel 17 mm long, borne from a reclining, spathaceous bract at the base of the leaf.

Labelum (Lip) 3 mm long, 2 mm wide, yellow mottled with brown from the base, pale yellow to white at the lower ¼ to the apex, minutely verrucose, held flat against the synsepal, triangular-sagittate with a well-developed orbicular glenion at the base, trilobed, basal lobes rounded, apex acute.

Dorsal Sepal 13 mm long, 2.5 mm wide, 3-veined, yellow, membranous, glabrous, convex, acutely reflexed, attenuate, acute.

Synsepal 13 mm long, 3 mm wide, 4-veined, yellow, membranous, glabrous, convex, attenuate, acute.

Petals 11 mm long, 1.5 mm wide, 3-veined, yellow, narrowly ovate, attenuate, acute.

Column 1 mm long, 1.5 mm wide, the anther and bilobed stigma apical.

Eponomy: Named for Asteria, the Titan goddess of falling stars. This is a reference to the flowers which resemble a shooting star.

COLOMBIA: Without collection data. K.W. Holcomb 18312 (*Holotype: GEO*),

Pleurothallis asteria has circulated in the orchid trade for decades erroneously identified as a form of *P. index*. This misidentification is due to an incorrect illustration for *P. index* which was published in Luer's *Icones Pleurothallidarum* Vol. XXVII.

Morphological and Taxonomic Comparisons:

Pleurothallis index was published in *Phytologia* in 1980 based on SEL4582 without a corresponding illustration (Figs 4 & 5). According to the description, *P. index* is identified by a large, suberect spathaceous bract at the base of the leaf. A large, suberect spathaceous bract is, in fact, present on the preserved specimen.

In 2005, Luer published an illustration of *P. index* based on SEL6721 (Figs. 6 & 7). However, a large, spathaceous bract is absent in both the preserved specimen and the corresponding illustration. The absence of the suberect, spathaceous bract confirms SEL6721 and SEL4582 are different species.

Unfortunately, flowers of neither SEL 4582 nor SEL6721 were preserved in spirits. Therefore, it cannot be confirmed with complete certainty that SEL6721 is, in fact, *P. asteria*. Therefore, SEL6721 was not used as the holotype for *P. asteria*.

Diagnosis:

Pleurothallis asteria is similar to *Pleurothallis index*, which is distinguished by flowers that are produced from a large, suberect spathaceous bract at the base of the leaf. However, this characteristic is entirely absent in *P. asteria*. The flowers of *P. asteria* are instead produced on a very long pedicel from a short, reclining spathaceous bract. (Fig. 2)

There are also significant differences in the lip morphology of the two species. *Pleurothallis asteria* has a flat, verrucose lip, whereas *P. index* has a suberect, papillose lip. (Fig. 3)

Vegetatively, the two species are superficially similar. However, *P. asteria* is significantly smaller than *P. index*, 9.5 cm tall vs. 16 cm tall. In addition, the leaves of *P. index* are deeply cordate with basal lobes that overlap each other. The basal lobes of the leaves of *P. asteria* do not overlap each other.

Pleurothallis index clearly belongs in Section *Macrophyllae-Fasciculatae*. However, based on the attenuate sepals, triangular lip, and long pedicel, *P. asteria* is more similar to species in Series *Amphygiae*.

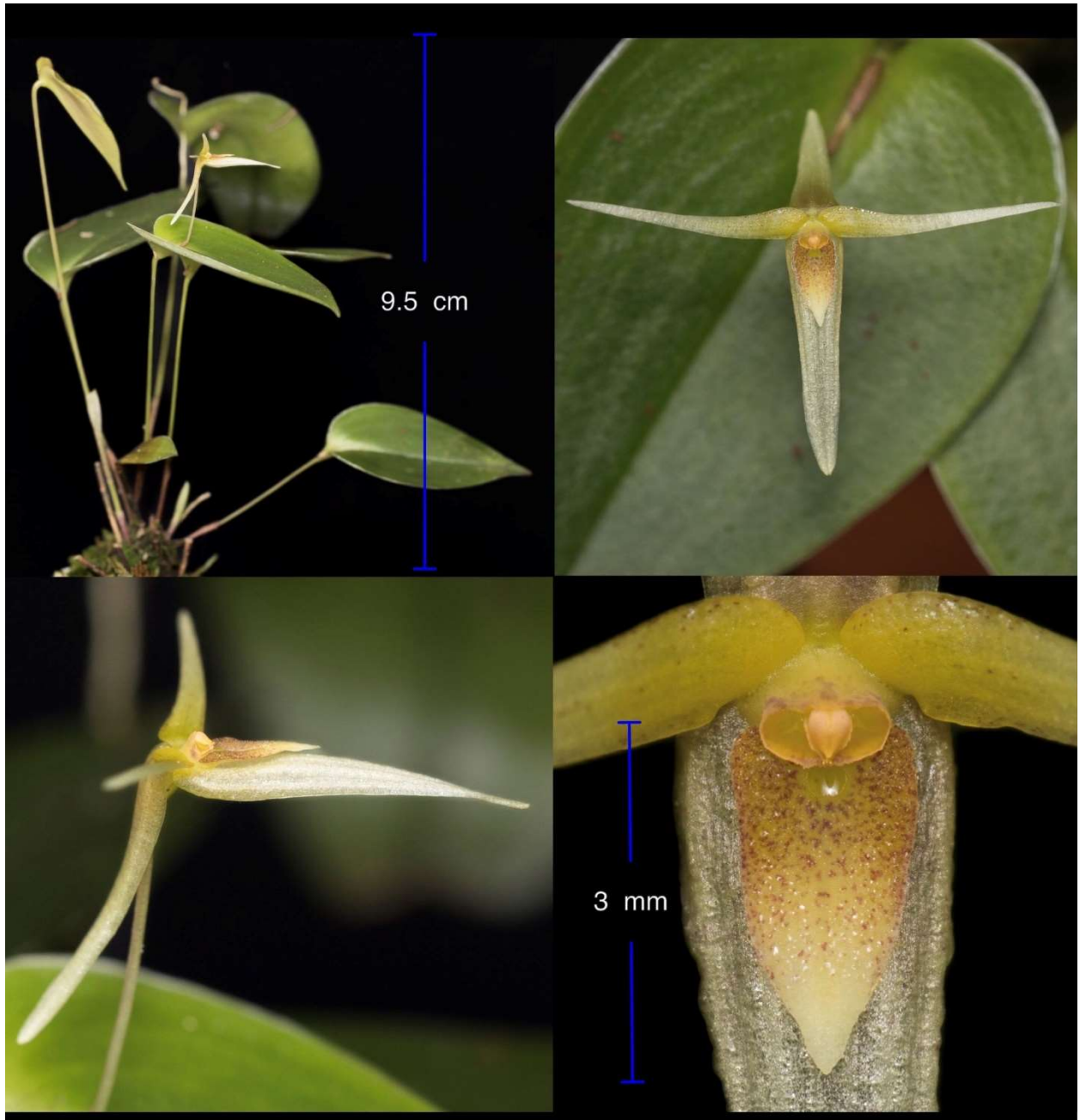


Fig. 1. *Pleurothallis asteria*
Photos of the plant used to prepare the holotype material.



Fig. 2

Pleurothallis asteria, top; *Pleurothallis index*, bottom



Fig. 3

Pleurothallis asteria, left; *Pleurothallis index*, right

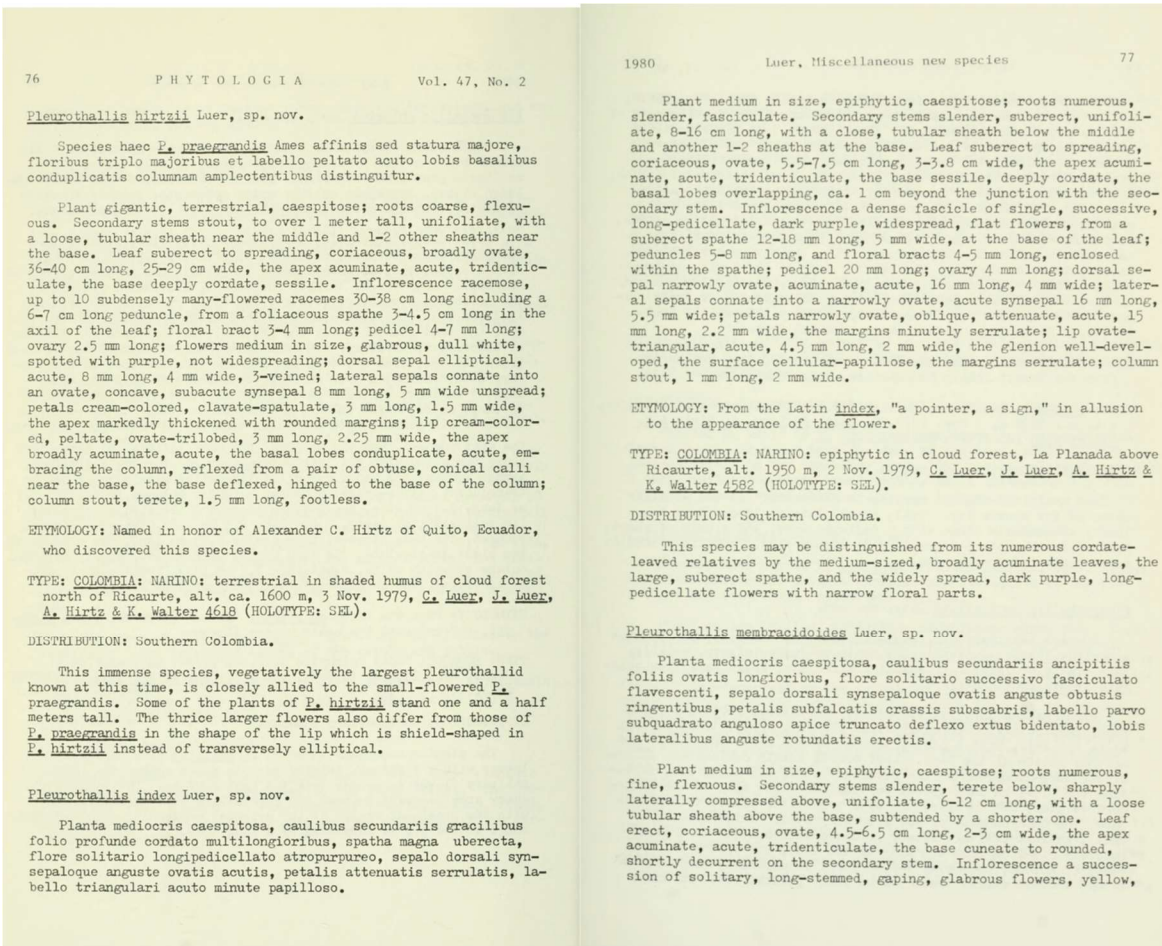


Fig. 4.
Courtesy Texensis Publishing



Fig 5.
Courtesy Marie Selby Botanical Gardens Herbarium

Acronia index (Luer) Luer, comb. nov.

Ety.: From the Latin *index*, "a pointer," in allusion to the dorsal sepal.

Bas.: *Pleurothallis index* Luer, *Phytologia* 47: 76, 1980.

Plant medium in size, epiphytic, caespitose; roots slender, densely fasciculate. Ramicauls slender, erect, round in cross-section, 5-15 cm long, with close, tubular sheaths above the base. **Leaf** thinly coriaceous, spreading, sessile, broadly ovate, 3.5-6.5 cm long, 2.5-4.75 cm wide, the apex subacute, shortly acuminate, the base deeply cordate, the basal lobes up to 1.5 cm long. **Inflorescence** a fascicle of solitary, successive flowers borne from a suberect, foliaceous spathe 10-18 mm long, 3-5 mm broad, at the base of the leaf; peduncles abbreviated, 3-4 mm long, confined within the spathe with the floral bract 5-6 mm long; pedicel 9-11 mm long; ovary 4-5 mm long; **sepals** yellow, membranous, glabrous, the dorsal sepal very narrowly ovate, acute, acutely reflexed, 15-19 mm long, 4 mm wide, 3-veined, the lateral sepals connate completely into a similar synsepal, 15-19 mm long, 4.5-6 mm wide expanded, 4-veined; **petals** yellow, very narrowly ovate, acute, acuminate, 14-18 mm long, 1.5-2 mm wide at the base, 3-veined, minutely ciliate; **lip** yellow, triangular, acute, 4-4.5 mm long, 2 mm wide, minutely pubescent, the basal angles obtuse, the disc shallowly concave, with a well-defined glenion at the base, the base subtruncate, firmly hinged to the column-foot; **column** stout, 0.5-1 mm long, 2 mm broad, the anther and bilobed stigma apical, the foot obsolescent.

COLOMBIA: **Nariño**: La Planada above Ricaurte, alt. 1600 m, 3 Nov. 1979, *C. Luer, J. Luer, A. Hirtz & K. Walter 4582* (Holotype: SEL). **Chocó**: San José Palmar, cultivated at Colomborquídeas, 20 Nov. 1981, *C. Luer 6721A* (SEL).

ECUADOR: **Esmeraldas**: epiphytic in wet forest west of Lita, alt. 750 m, 18 Jan. 1987, *C. Luer, J. Luer, A. Hirtz, C.H. Dodson, D. Benzing & D. Bermudes 12361* (MO).

This species is characterized an erect, long-pedicellate, spindly flower arising from a semi-erect spathe at the base of a deeply cordate leaf. The dorsal sepal, synsepal and petals are narrowly elongated, with the dorsal sepal acutely reflexed and the petals outstretched and lightly incurved, resembling the stance of a crab spider awaiting its prey. The lip is triangular and minutely pubescent.

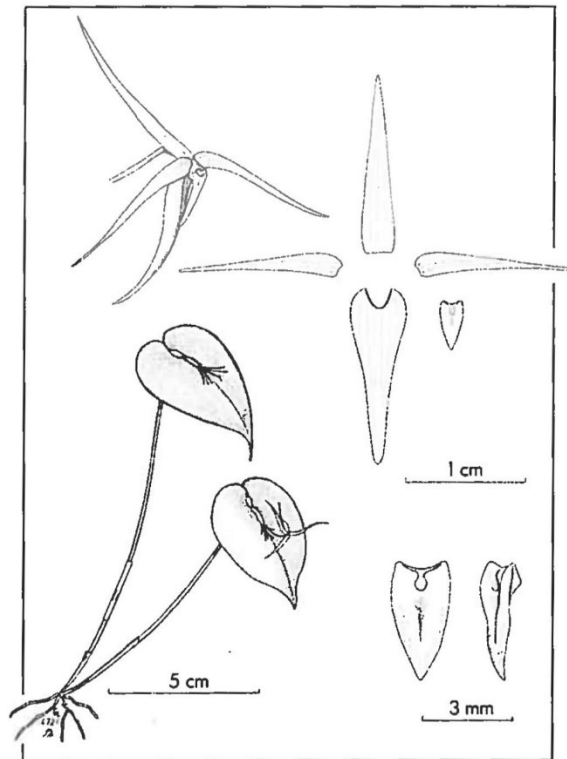


Fig. 105. *Acronia index*

Fig. 6

Courtesy Missouri Botanical Garden Press

PLEUROTHALLIDINAE

Volume 2.10

November 3, 2023

ISSN #2834-1783

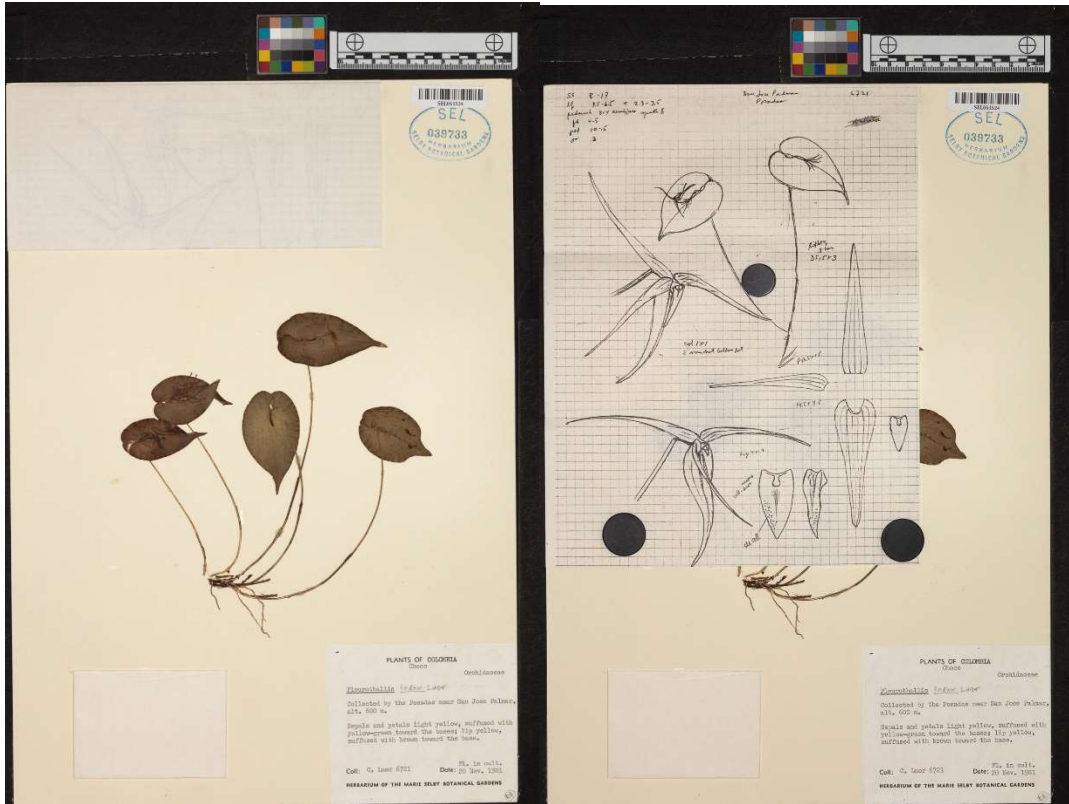


Fig. 7
 Courtesy Marie Selby Botanical Gardens Herbarium