

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

Plant medium, epiphytic, caespitose, roots slender.

Ramicauls Up to 27.5 cm, slender, arching, a tubular sheath from below the base and two sheaths at the base.

Leaf Up to 17.25 long, 1.75 cm wide, coriaceous, narrowly linear, attenuate, acute.

Inflorescence a single, successive flower lying on top of the leaf, borne from a spathaceous bract 2 mm long at the base of the leaf, pedicel 17 mm long, ovary 5.5 mm long, flowers resupinate.

Labellum (Lip) dark purple, 7.5 mm long, 3 mm wide, ovate, acuminate, dorsal surface verrucose, concave at the base with a well-defined glenion, convex just above the middle, apex acute.

Sepal yellow, 31 mm long, 6 mm wide, verrucose, 3 veined, with revolute margins above the middle, the apex sharply acuminate.

Synsepal rose suffused with yellow, 29.5 mm long, 8 mm wide verrucose, 4 veined, with revolute margins above the middle, acute.

Petals burgundy, 10 mm, 1 mm wide, 1 veined, minutely serrated, narrowly linear, acute.

Column stout, semiterete, 2 mm wide, 0.5 mm long, the anther and bi-lobed stigma apical.

Etymology: From the Latin *tectum*, “roof”, and *sepalum*, “sepal”, referring to the dorsal sepal which curves forward over and above the lip.

Type: UNKNOWN: Without collection data. Acquired from Andy’s Orchids, Encinitas, California, in 2015 as *Pleurothallis grandiflora*-type. Flowered in cultivation by the author in 2015. *K. W. Holcomb (Holotype: GEO 18245)*

Distribution: The distribution of this species is unknown. The holotype was discovered in a private collection in the USA erroneously labeled as *Pleurothallis grandiflora*-type. The label referenced Brazil as the country of origin. However, that information is considered unreliable. To date, no observations have been found on flickr or iNaturalist that match the holotype.

Morphological Comparison: The holotype for *Pleurothallis tectosepala* was acquired under the erroneous name, *Pleurothallis grandiflora*-type. However, it has no morphological similarities to *P. grandiflora*. Most likely, it was given this inaccurate identification due to the large size of the flower.

Pleurothallis tectosepala is most similar to *P. angustissima*. Based on photographic observations of *P. angustissima*, the flowers of *P. tectosepala* and *P. angustissima* have similar coloration (Fig 2.). However, there are significant morphological differences in the flowers of the two species. The flowers of *P. tectosepala* are significantly larger, 6 cm vs. 4.6 cm in *P. angustissima*. Also, the surface of the sepals of *P. tectosepala* is verrucose compared to the glabrous sepals of *P. angustissima*. The lip of *P. tectosepala* is verrucose vs. the minutely erose lip of *P. angustissima*. *P. tectosepala* has a much longer lip than *P. angustissima*, 7.5 mm vs. 4.8 mm in *P. angustissima*. The lip of *P. tectosepala* is acuminate and convex at the apex vs. the obtuse, flat lip of *P. angustissima*. The lip of *P. angustissima* has a defined callus on the underside of the lip. This trait is absent in *P. tectosepala*. *P. tectosepala* has a dorsal sepal which curves forward over the lip, whereas the dorsal sepal of *P. angustissima* does not (Fig 2.).

Diagnosis: *Pleurothallis tectosepala* is easily distinguished by its large, verrucose “warty” flowers and its longer, lip with a convex apex.



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



Fig 2. *Pleurothallis angustissima* photographed *in situ*, Puyo, Ecuador.
Photo by: Fred Debruille

References

Luer, C. A. (2005). *Icones Pleurothallidarum XXVII: Dryadella and Aconia section Macrophyllae-Fasciculatae*. Monographs in Systematic Botany from Missouri Botanical Garden, 103, 1-311