# PASSIFLORA FORMOSA SP. NOV., A HITHERTO MISUNDERSTOOD TAXON IN PASSIFLORA SUBGENUS TACSONIA (PASSIFLORACEAE) FROM COLOMBIA

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A new species of *Passiflora* is described from the Andes of Colombia. *Passiflora* formosa T. Ulmer is characterized by its densely tomentose ovary, the 5–7 petiolar glands and the large leaves which are up to 19cm long. It most closely resembles *P. lanata* and *P. cuatrecasasii*. The differences between these species are discussed.

Keywords. Colombian flora, new species, vine.

### INTRODUCTION

During the studies on the morphology and taxonomy of *Passiflora* L. subgenus *Tacsonia* (Juss.) Triana & Planch., several specimens of critical species complexes were examined. Some specimens previously identified as *Passiflora lanata* (Juss.) Poir. were found to differ from the typical form of that species. A collection (Uribe 5945) from the Department Boyacá was first identified by the collector as *P. cuatrecasasii* Killip. Escobar re-identified the material and assigned this specimen to *P. lanata*, but pointed out that this plant differed in the density of indument, the leaf size and the length of peduncles noting that the specimen was somewhat extraordinary within the species (Escobar, 1988).

A re-examination of the specimen and further material in this complex revealed that the plant 5945 collected by Uribe differs from both *P. cuatrecasasii* and *P. lanata* in many points and should be regarded as an independent species. The species in question might be of hybrid origin from both species, but this is unlikely, because *P. cuatrecasasii* is not known from the Department Boyacá. A further collection (Uribe 1061, US) from Boyacá, which was placed in *P. cuatrecasasii* by Killip (1960) and *P. lanata* by Escobar (not mentioned in Escobar, 1988), might also belong to *P. formosa*. However, there are small differences in the form of the leaves and in the number of petiolar glands between both plants. Thus it must be examined in the field, whether this specimen belongs to *Passiflora formosa*.

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# THE NEW SPECIES

# Passiflora formosa T. Ulmer, sp. nov.

Type: Colombia, Department Boyacá: carretera de Virolín, entre Duitama y Charalá, kilometro 35, en el bosque, 3100m, 2 ix 1967, *L. Uribe Uribe* 5945 (holo. US-2596373; isotypes COL, MO, US-2741317).

Planta scandens; stipulae lineares 0.6 0.9cm longae; petioli sub apice cum 5-7 glandulis; folia coriacea, lanceolata, 8.7 19.1cm longa, apice acuta, serrulata, subtus



FIG. 1. Holotype of Passiflora formosa T. Ulmer (Uribe 5945), deposited at US.

obtecta indumento denso; pedunculi singulares, 8.5-11cm longi; bracteae librae, lanceolatae, 2.6-3.2cm longae; floral tubus (hypanthium) cylindricus glaber; sepala oblonga, obtusa 3.8 4.6cm longa; petalo sepalis subaequalibus; corona annularis undulata; ovarium tomento-sum. Ab speciebus *P. cuatrecasasii* et *P. lanata* petiolis 5-7 glandulosis, foliis 8.7 19.1cm longis, margine bracteorum integra et ovario tomentoso differens.

Vine, densely felty except for upper leaf surface, stipules and most parts of the flowers; stem terete to subangular, striate, younger parts densely felty (villous); stipules linear, 0.6-0.9cm long, blackish when dry, glabrous, margin entire; petiole 1.1-1.7 cm long with 5-7 blackish, subsessile glands in the upper half of the petiole, often covered by the indument; leaves entire, lanceolate, (8.7-)10.5-14.9(19.1)cm long, 2.8 5.3cm wide, acute at apex, base truncate to slightly cordate, glabrous and rugose on upper surface, the nerves impressed, densely felty (villous) underneath with pale brown to beige trichomes, slightly revolute at margin, serrate, thickcoriaceous; *peduncles* 8.5–11cm long, solitary, pendent; *bracts* free to base, lanceolate, 2.6 3.2cm long, 0.5 0.7cm wide, acute at apex, felty, margin entire, borne about 1cm below base of flower. Flowers 12.5-14cm long, 9-10cm in diameter, pinkish to pale purple; *floral tube* (hypanthium) cylindrical, 8.5–9cm long, 0.7–1cm wide (pressed), slightly dilated at base, glabrous; *sepals* oblong, glabrous, 3.8–4.6cm long, 1.4 1.9cm wide, obtuse, aristate, awn about 0.2cm long, pinkish to pale purple; petals subequal to sepals, pinkish to pale purple; corona uniscrate, reduced to a slightly denticulate, dark ring at the apex of the floral tube; androgynophore 10.3-11cm long; ovary ovoid to ellipsoid, densely tomentose with brownish trichomes; fruit unknown.

### TAXONOMIC REMARKS

*Passiflora formosa* belongs to the sect. *Colombiana* Escobar, ser. *Colombianae* Escobar which includes nine species (Escobar, 1988). These are spread over the Cordillera Oriental in Colombia. Two of them are also known from the west of Venezuela. The members of this series are recognized by the mostly unlobed, rugose leaves, the short petioles, the linear to lanceolate stipules, the comparatively short peduncles and the bracts, which are mostly free to the base.

*Passiflora formosa* is closely related to *P. lanata* and *P. cuatrecasasii*. It differs from *P. lanata* by having 5 7 petiole glands, a densely tomentose ovary, larger dimensions of leaves and flowers, longer peduncles and a less dense indumentum.

From *P. cuatrecasasii* the new species can be distinguished by its smaller bracts with an entire margin, more glands at the petiole, the colour of the stipules and much longer lanceolate leaves with a felty indument underneath. The differences of the three species are summarized in Table 1.

*Passiflora formosa* is known only from the type collection in the Andes of Colombia at 3100m elevation.

Etymology: The epithet refers to the statement of Uribe who found the plant

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Characteristics	P. cuatrecasasii	P. formosa	P. lanata
Petiolar glands	2-3 (-5)	5.7	2-4
Leaf size (cm)	$3 8 \times 2.5 - 5.2$	$10.5 - 19 \times 2.8  5.3$	5-12 × 2.7 -6
Lower leaf surface	Densely pubescent	Felty	Densely lanate
Length of peduncle (cm)	(3.8) )7-10.5	8.5-11	2.2 - 6(8)
Margin of bracts	Serrate	Entire	Entire
Length of sepals (cm)	3 5	3.8 4.6	2.3-3.5
Ovary	Densely tomentose	Densely tomentose	Glabrous

TABLE 1. Comparison of Passiflora formosa and its closest relatives

growing between Duitama and Charalá along the road to Virolín. He reported it to be a very beautiful species.

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### REFERENCES

ESCOBAR, L. K. (1988). Passifloraceae. *Passiflora*. Subgeneros: *Tacsonia*, *Rathea*, *Manicata* y *Distephana*. In: PINTO, P. & LOZANO, G. (eds) *Flora de Colombia* 10: 1–139.

KILLIP, E. P. (1960). Supplemental notes on the American species of Passifloraceae with descriptions of new species. *Contr. U.S. Natl. Herb.* 35: 1–23.

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