

NEW SPECIES OF *ORTHOSIA* DECNE. (APOCYNACEAE-ASCLEPIADOIDEAE) FROM PARANÁ, AND A KEY TO THE SPECIES OF SOUTHERN BRAZIL

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ABSTRACT: *Orthosia hatschbachii* Fontella & Goes, a new species of subfamily Asclepiadoideae, family Apocynaceae, from Paraná State, Brazil, is described and illustrated. This new species is closely related to *Orthosia latipes* (Decne.) Malme, differing mainly by the absence of flower scars along the peduncle, narrower corolla lobes, corona lobes high connate up to apex and retinaculum longer than pollinia. An identification key to the species of *Orthosia* genus that occurs in southern Brazil is also presented.

KEY WORDS: Apocynaceae, Asclepiadoideae, *Orthosia*, Brazil, Paraná, taxonomy.

RESUMO: *Orthosia hatschbachii* Fontella & Goes, uma nova espécie da subfamília Asclepiadoideae, família Apocynaceae, do Estado do Paraná, é descrita e ilustrada. A espécie é ligeiramente afim a *Orthosia latipes* (Decne.) Malme, diferindo principalmente devido ao pedúnculo desprovido de cicatrizes pela caducidade das flores, lobos da corola mais estreitos, lobos da corona soldados entre si quase até o ápice, retináculo mais longo que as polínias. Também é apresentada uma chave para identificação das espécies do gênero *Orthosia* ocorrentes no sul do Brasil.

PALAVRAS-CHAVE: Apocynaceae, Asclepiadoideae, *Orthosia*, Brazil, Paraná, taxonomia.

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INTRODUCTION

The genus *Orthosia* was created by Decaisne (1844) with six species, three from Brazil, one from Peru and two from Mexico. Fournier (1885) described eight Brazilian species. Araujo (1950) listed fourteen, and currently ten species are recognized for Brazil. *Orthosia* belongs to the Apocynaceae-Asclepiadoideae, tribe Asclepiadeae (R. Br.) Duby (Endress & Bruyns, 2000). According to Liede (1997) is mainly characterized by its decussate or distichous leaves which are ovate, linear or absent; simple, sciadioidal, subaxillary-axillary inflorescence; basally connate corona; corolla adaxially glabrous or with short trichomes; and the absence of free staminal parts and a fusiform follicle.

In southern Brazil, *Orthosia* is represented by: *O. congesta* Decne., *O. dusenii* (Malme) Fontella, *Orthosia latipes* (Decne.) Malme, *O. loandensis* Fontella & C. Valente, *O. urceolata* E. Fourn. and *Orthosia virgata* (Poir.) E. Fourn. *Orthosia latipes* from the

states of Santa Catarina and Rio Grande do Sul (Fontella-Pereira et al., 2004) is closely related to the new species here described, from which it differs by having flower scars along the peduncle, larger corolla lobes, corona lobes connate only in base and retinaculum shorter than pollinia.

RESULTS AND DISCUSSION

1. *Orthosia hatschbachii* Fontella & Goes, sp. nov.

Type: BRASIL. Paraná: Laranjeiras do Sul, Campo Novo, 8.VI.1968 (fl.), G. Hatschbach & O. Guimarães 19295 (holotype, MBM). (Fig. 1).

Species nova *O. latipedi* (Decne.) Malme affinis, sed praecipue pedunculo cicatricibus florum delapsorum destituto, lobis corollae angustioribus, lobis coronae usque ad apicem connatis, gynostegio corona occult et retinaculo pollinis longiore differt.

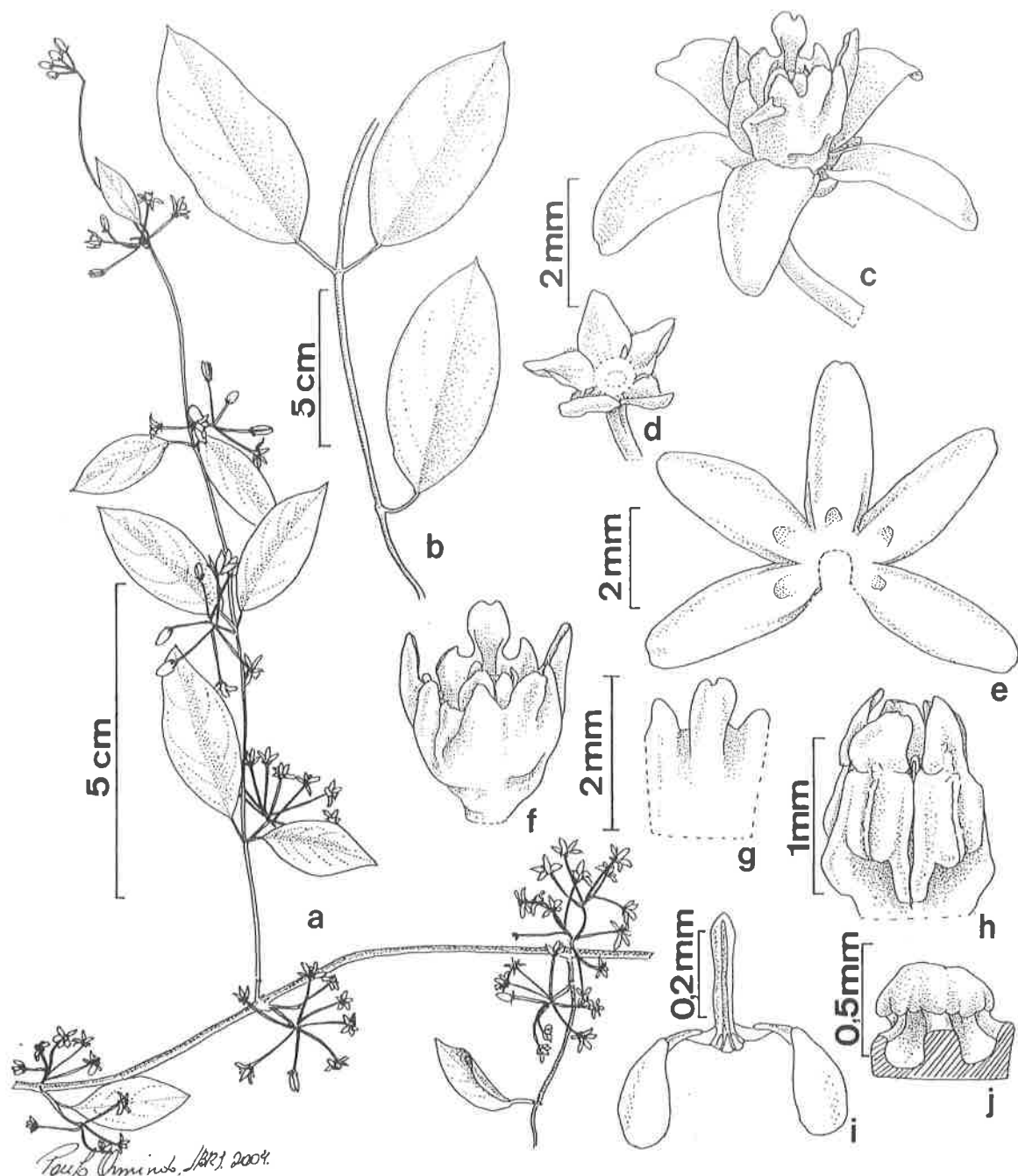


Figure 1 - *Orthosia hatschbachii* Fontella & Goes: **a.** Flowering branch; **b.** Foliate branch; **c.** Flower; **d.** Pedicell and sepals; **e.** Corolla, adaxial view; **f.** Corona and gynostegium; **g.** Corona lobe, adaxial view; **h.** Gynostegium; **i.** Pollinarium, abaxial view; **j.** Styler appendage.

Twining vine; lower stems and underground parts unknown, stems glabrous when young. Leaves opposite; blades 7.2-8.5 x 2.4-4.4 cm, elliptic or narrowly elliptic, concolor, apex cuspidate or acuminate, base obtuse or cuneate, revolute margins, secondary veins obscure, abaxially and adaxially glabrous, 2 collectors at the base of the adaxial surface; petiole 0.6-1.6 cm long, glabrous. Inflorescences with 7-12 flowers, subaxillary, umbelliform; peduncles 5-10 mm long, glabrous, without scars mark from the former attachment of flowers; pedicels 7-22

mm long, glabrous. Sepals 1-1.5 x 0.5-1 mm, ovate, glabrous on both surfaces, margins ciliate, 1 colleter on adaxial surface. Corolla cream-colored or greenish, rotate, tube 0.5-0.8 mm long, glabrous, lobes 3.0-4 x 1.2-1.5 mm, oblong or ovate-lanceolate, glabrous throughout; corona white, 2.0-2.5 mm long, exceeding the gynostegium, lobes trilobulate, fused almost up to the apex, medial lobule ca. 0.8 mm long, oblong, apex emarginated or truncate, and lateral lobules ca. 0.5 mm long, ovate-triangular. Gymnostegium ca. 1.3 mm high, shortly sti-

tate. Anther locular part ca. 0.8 x 0.4 mm, subrectangular, wings longer than the dorsum, apical membrane ca. 0.5 mm long, subtriangular or suborbicular, longer than the stigma head; corpusculum 0.33-0.39 x 0.03-0.09 mm, linear, apex acute; caudicles 0.14-0.19 mm, horizontal, articulate, filiform. Pollinia 0.23-0.28 x 0.13-0.15 mm, oval. Styler head capitate. Follicles and seeds not seen.

Additional specimen examined:
BRASIL. Paraná: Campina Grande do Sul, sítio do Belizário, 17.V.1967 (fl), G. Hatschbach 16404 (MBM).

The epithet honors the botanist Gert Hatschbach, Director of the Herbarium, Museu Botânico Municipal de Curitiba (MBM), Paraná, Brazil.

This new species can be distinguished from the others that occur in southern Brazil by the following key.

KEY TO THE SPECIES OF *Orthosia* FROM SOUTHERN BRASIL

1. Corona lobes fused almost up to apex, obscuring the gynostegium.
 2. Corolla urceolate or campanulate; corpusculum 0.15-0.16 mm long; caudicles not articulate; pollinia 0.12-0.14 mm long *O. urceolata*
 2. Corolla rotate; corpusculum 0.33-0.36 mm long; caudicles articulate; pollinia 0.23-0.30 mm long *O. hatschbachii*
1. Corona lobes, fused only up to middle or only at base, not obscuring the gynostegium.
 3. Petiole flat or laminate; leaves 28-40mm breadth; peduncle with scars by falling of flowers *O. latipes*
 3. Petiole cylindrical; leaves 3-16mm breadth; peduncle destitute of scars by falling of flowers.
 4. Leaves 8-13 mm long; corona lobes lower than the gynostegium *O. dusenii*
 4. Leaves 16-45 mm long; corona lobes higher than the gynostegium.
 5. Petiole 1-2 mm long; leaves oblong or linear-lanceolate.
 6. Inflorescence 4-5-flowered; corona lobes entire; dorsum of the anthers not swollen *O. loandensis*
 6. Inflorescences 9-15-flowered; corona lobes trilobate; dorsum of the anthers swollen *O. congesta*
 5. Petiole 5-11 mm long; leaves oval-acuminate *O. virgata*

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