

A NEW SPECIES OF *TURNERA* FROM PARÁ, BRAZIL

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SUMMARY

Turnera tapajoensis Moura (ser. *Capitatae*), a new species from Brazil, is described and illustrated. It shows affinities with *Turnera stipularis* Urban and *Turnera venosa* Urban.

RESUMO

Turnera tapajoensis Moura (ser. *Capitatae*), uma nova espécie do Brasil, é descrita e ilustrada. Ela tem afinidades com *Turnera stipularis* Urban e *Turnera venosa* Urban.

Turnera tapajoensis Moura sp. nov. Frutex (ex Ducke, cf. *fig. 11*), hornotini teretes, 1.5-3 mm diam., tomentosi. Stipulae lineares, 2.5-3 mm longae, 0.3-0.5 mm latae, pilosae. Folia petiolata (*fig. 2*), petiolo 4-6 mm longo, 1 + 1 v. 2 + 2 glandulis instructo, lamina ovata v. ovato-lanceolata, 8-13.5 cm longa, 4-5 cm lata, ca. 2-2½-plo longiora quam lata, basi obtusa v. rotundata, eglandulosa, apice acuta v. acutissima, supra sparse et tenuiter pilosula, subtus tomentosula, marginibus ultra medium leviter crenata v. subintegra, ceterum integra, venis supra paulo impressis, subtus prominentibus, dense pilosis, 9-11 lateralibus. Inflorescentiae capitatae (*fig. 1*), axillares, sessiles, 3-5-florae. Flores dolichostyli (tantum visi). Bractee concavae (*fig. 3*), 8-10 mm longae, 5-6.5 mm latae, ad medium bidentatae, ad incisuras dentum 1 + 1 glandulis ornatae, extus pilosae, intus glabrae v. subglabrae; bracteolae binae (*fig. 4, 5*), oppositae, lanceolatae, 6-7 mm longae, 1.5-2 mm latae, apice acutae v. acutissimae, extus pilosae, intus glabrae, marginibus integrae, eglandulosae. Calyx (*fig. 6*) 13-14 mm longus, ca. ¾ gamosepalus, basi leviter gibbosus, extus leviter pilosus basi excepta, tubo subcylindrico, ca. 3 mm diam., intus solum ad faucem tenuiter pubescente, lobis anguste ovatis, trinervatis, costa ultra apicem producta. Petala (*fig. 7*) flava (ex Ducke), anguste obovata, 9-11 mm longa, 1.5-2 mm lata, basi acutissima, unguiculata, apice rotundata v. obtusa, apiculata, extus praeter ad basin pubescentia, intus a basi fere ultra medium dense albido-pubescentia. Filamenta (*fig. 8*) 10-11 mm longa, cum marginibus 6-7 mm longe venis calycis commissuralibus adnata, glabra, parte libera ad apicem angustata et pilosula; antherae (*fig. 9*) glabrae, lanceolatae, 1.8-2 mm longae, apice apiculatae, dorso in ca. ¼ alt. in concavitate connectivi affixae. Ovarium (*fig. 10*) anguste obovoideum, leviter curvatum, 3-4 mm longum, 1.5-2 mm diam., dense pilosum basi exceptum. Styli recti, 10-11 mm longi, fere

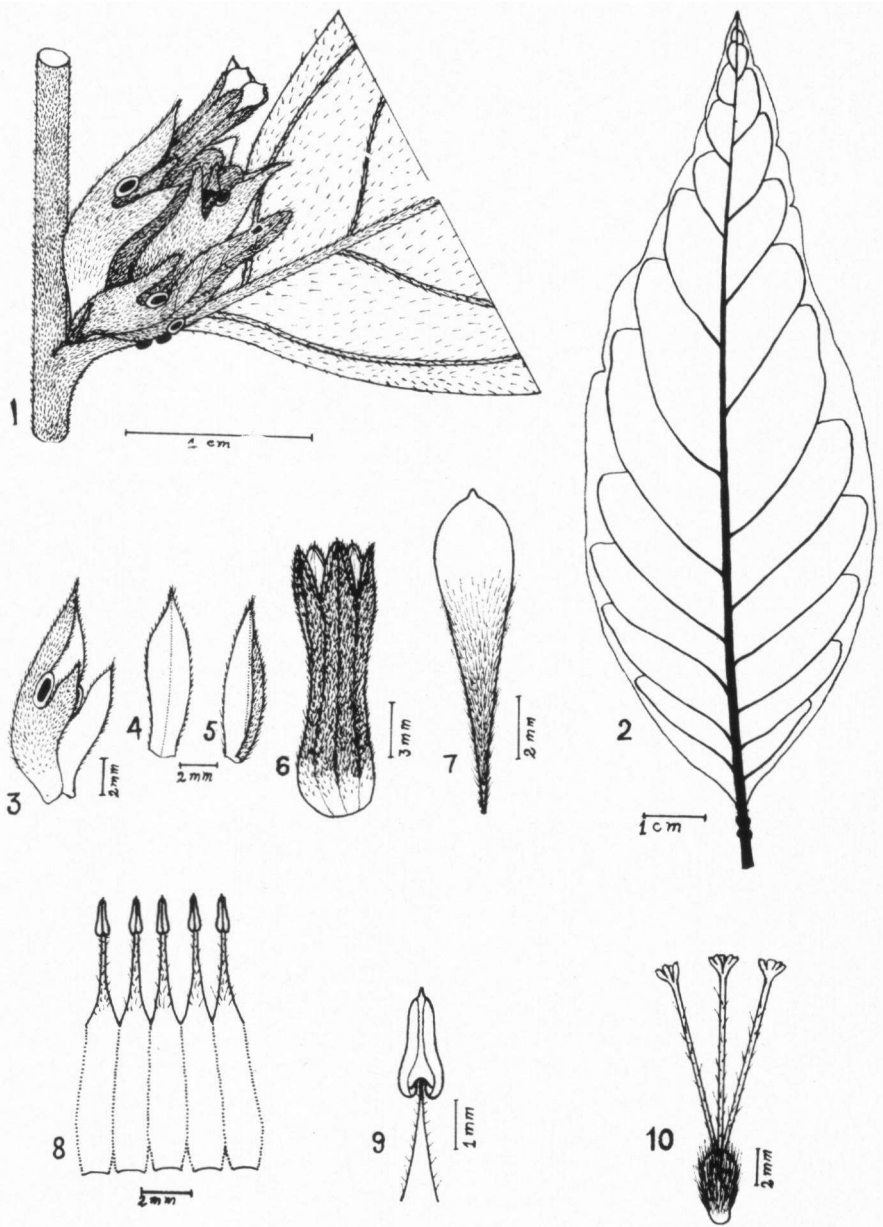


Fig. 1-10. *Turnera tapajoensis* Moura.

Fig. 1. Detail of a branch with inflorescence;
 Fig. 2. Lower side of the leaf showing the venation;
 Fig. 3. Bract with glands;
 Figs. 4-5. Bracteoles;

Fig. 6. Calyx;
 Fig. 7. Petal, ventral side;
 Fig. 8. Androecium, ventral side;
 Fig. 9. Anther, dorsal side;
 Fig. 10. Gynoecium.

usque ad apicem sparse pilosi; stigmata flabellata, ca. 0.4 mm longa, breviter lobulata. Fructus obovatus, 8–9 mm longus, 7–8 mm diam., dorso tuberculatus, pilosus. Semina glabra, obovata v. oblonga, 2.5–3 mm longa, ca. 1.3 mm diam., leviter curvata, profunde longitudinaliter canaliculata; strophiole amplo, lacerato, pallido-flavescente, supra usque ad apicem ascendente.

Typus: Brazil, State of Pará, Rio Tapajós, estrada da Cachoeira Inferior. Arbusto; flor côr de laranja; 5.2.1917; *A. Ducke s.n.* (INPA 12582 holotypus cf. *fig. 11*; SP isotypus).

Turnera tapajoensis Moura sp. nov. Shrub (ex Ducke, cf. *fig. 11*), young branches cylindrical, tomentose, 1.3–3 mm diam. Stipules linear, pilose, 2.5–3 mm long, 0.3–0.5 mm wide. Leaves petiolate; petiole 4–6 mm long, provided with one or two pairs of glands; blade ovate or ovate-lanceolate, 8–13.5 cm long, 4–5 cm wide, base obtuse or rounded, without any glands, apex acute, above obsoletely puberulous, below tomentulose, margin above the middle minutely crenate or nearly entire, at base entire; veins somewhat prominent above, more prominent below and densely pilose, secondary veins 9–11. Inflorescence capitate, axillary, sessile, 3–5-flowered. Flowers long-styled (as far as observed). Bracts concave, 8–10 mm long, 5–6.5 mm wide, toothed and provided with glands in the middle, on the dorsal side pilose, on the ventral side glabrous or nearly so; bracteoles paired (*fig. 4,5*) opposite, lanceolate, 6–7 mm long, 1.5–2 mm wide, with acute apex, pilose on the dorsal side and glabrous on the ventral side, with entire margin and without glands. Calyx (*fig. 6*) 13–14 mm long, with sepals united up to 3/4, base gibbous, outside obsoletely pilose with the exception of the base; calyx-tube subcylindrical, about 3 mm in diam., inside obsoletely pubescent only at the rim, lobes narrowly ovate, 3-veined, the costa extending to the tip. Petals yellow (ex Ducke), narrowly obovate, 9–11 mm long, 1.5–2 mm wide, with very acute base, clawed, apex rounded or obtuse, apiculate, dorsal side pubescent only at the base, ventral side densely white-pubescent from the base to the middle. Filaments (*fig. 8*) 10–11 mm long, 6–7 mm high, slightly adnate to the veins of the calyx and glabrous, the rest free, puberulous and narrowed at the apex; anthers glabrous, lanceolate, 1.8–2 mm long, with apiculate apex, dorsifixed at about 1/4. Ovary narrowly obovoid, shortly curved, 3–4 mm long, 1.5–2 mm diam., densely pilose except at the base. Styles erect, 10–11 mm long, obsoletely pilose nearly up to the apex; stigmas flabellate, c. 0.4 mm long, shortly lobed. Fruits obovoid, 8–9 mm long, 7–8 mm diam., dorsal side tuberculate, pilose. Seeds glabrous, obovate or oblong, 2.5–3 mm long, c. 1.3 mm diam., slightly curved, deeply longitudinally canaliculate; strophiole ample, lacerate, yellowish, extending to the apex.

The specimen collected by Ducke in 1917 was determined as *Turnera brasiliensis* Willd. However, detailed studies revealed marked differences and I decided to describe it as a new species.

According to the keys to series given by URBAN (1883a: 109–110, 112–113, 151–152; 1883b: 83–84, 87, 131–132) and GILG (1925: 465), the new species falls between series *Salicifoliae* Urban and *Capitatae* Urban. It is related to the first series in having sessile lateral flower heads, large leaves without glands at

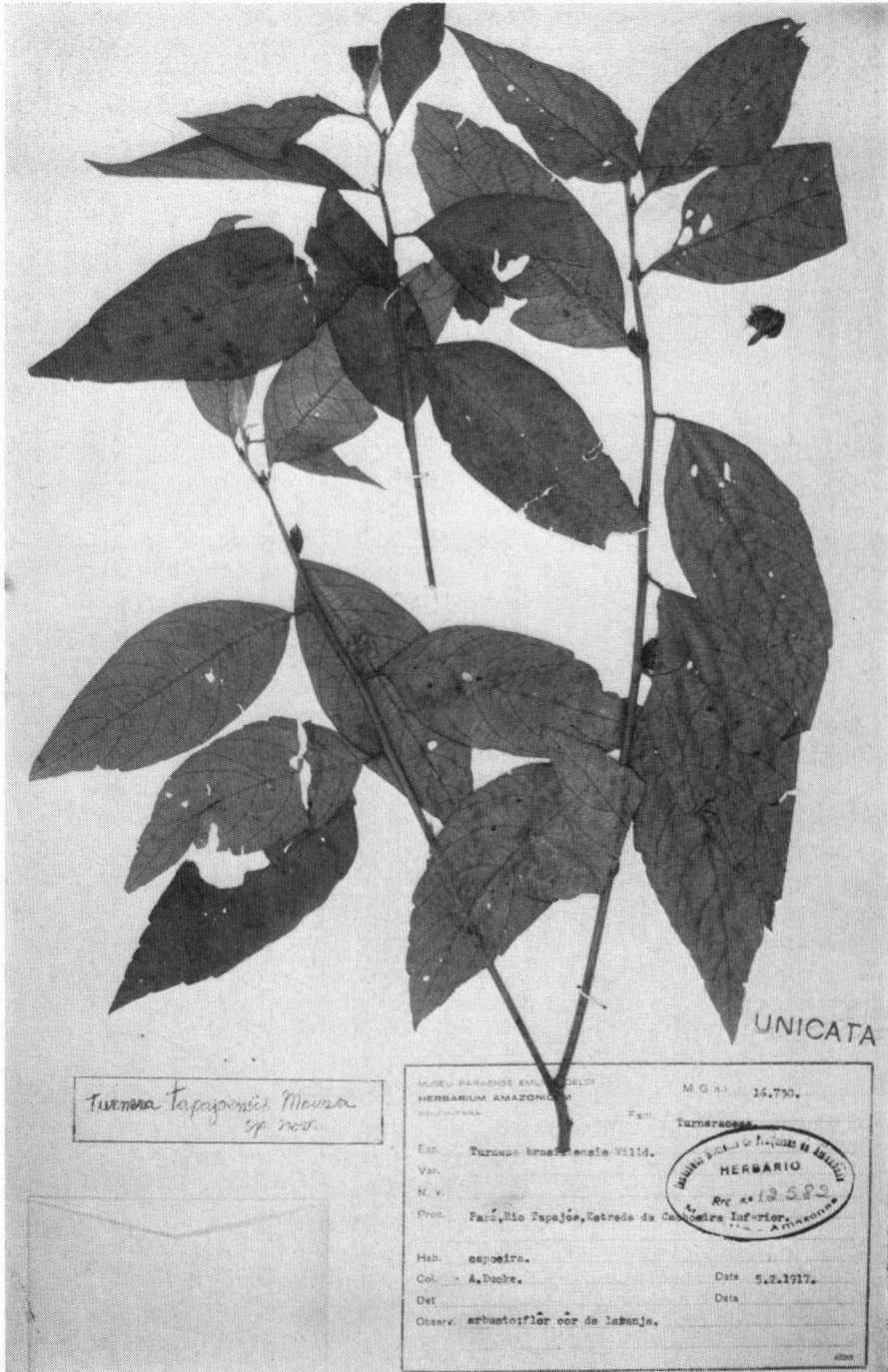


Fig. 11 *Turnera tapajoensis* Moura. Photograph of the holotype.

the base, and petioles with glands. However, in the morphology of the inflorescence and the flower the new species resembles *Turnera stipularis* Urban and *Turnera venosa* Urban (1898), both of ser. *Capitatae*. Therefore, I decided to include it in the latter series. *Turnera stipularis* differs from *Turnera tapajoensis* in having glandular leaves half the size of those of the new species, glandless petioles, stipules half the size, pedunculate or sessile flower heads, glandless bracts, petals pilose internally only at the base, and non-apiculate anthers. On the other hand, *T. venosa* differs from the new species in having coriaceous leaves twice as narrow, with the base acute and glandular, glandless petioles, pedunculate flower heads, glandless bracts, almost free filaments, fruit with the dorsal side granulate (not tuberculate) and pilose seeds.

The new species is named after the place in which it was collected.

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