

Cnidoscolorum notulæ
(Euphorbiacæ), 10

Francisco Javier FERNÁNDEZ CASAS

FONTQUERIA 55(16): 81-88
MADRID, 01-V-2003

FONTQUERIA is a series of botanical publications without administrative affiliation. It publishes original works in Botany, particularly those that are of interest to the editors. Its publications are in any language, the only limitation being the ability of the team of editors.

Accredited with the *International Association for Plant Taxonomy* for the purpose of registration or new non-fungal plant names.

PRODUCTION

Database consultant: Guillermo GONZÁLEZ GARCÍA
Typesetting: Ambrosio VALTAJEROS POBAR, Ulpiano SOUTO MANDELOS
Screen operators: Samuel FARENA SUBENULLS, Emilio NESTARES SANTAINÉS
Preprinting: Sonja MALDÍ RESTREPO, Demetrio ONCALA VILLARRASO

DISTRIBUTION

Postal distribution: contact the editor
Mail for electronic distribution: Fontqueria@yahoo.com

EDITOR

Francisco Javier FERNÁNDEZ CASAS. Madrid (MA)

EDITING CONSULTANTS for this fascicle

Íñigo GRANZOW DE LA CERDA y ROCA DE TOGORES. Ann Arbor (MICH)
José María MONTSERRAT MARTÍ. Barcelona (BC)

ISSN: 0212-0623

Depósito legal: M-29282-1982

Cnidoscolorum notulæ (*Euphorbiaceæ*), 10

Francisco Javier FERNÁNDEZ CASAS
Real Jardín Botánico. E-28014 Madrid

Supported by a grant of the Spanish Ministry of
Science and Technology, BOS2002-00680

FERNÁNDEZ CASAS, F. J. (01-v-2003). *Cnidoscolorum notulæ* (*Euphorbiaceæ*), 10. *Fontqueria* 55(16): 81-88.

Keywords. New species, *Cnidoscolus* (*Euphorbiaceæ*), Brazil (Bahia).

Abstract. A new Brazilian species is described in the genus *Cnidoscolus* (*Euphorbiaceæ*): *C. byssinus* Fdez. Casas.

Zusammenfassung. Es wird hier eine neue Art der Gattung *Cnidoscolus* (*Euphorbiaceæ*): *C. byssinus* Fdez. Casas (aus Brasil) beschrieben.

Resumen. Se describe de Brasil una especie nueva en el género *Cnidoscolus* (*Euphorbiaceæ*): *C. byssinus* Fdez. Casas.

Resumé. Une nouvelle espèce est décrite du Brésil dans le genre *Cnidoscolus* (*Euphorbiaceæ*): *C. byssinus* Fdez. Casas.

Resumo. Descreve-se uma nova espécie brasileira no género *Cnidoscolus* (*Euphorbiaceæ*): *C. byssinus* Fdez. Casas.

A new Brazilian species in the type series of the genus *Cnidoscolus* Pohl (*Euphorbiaceæ*) is described in the present paper. The description of the type series is completed, its five serial species are differentiated in a key, and the new one is described.

We continue our series of publications about the genus *Cnidoscolus* (*Euphorbiaceæ*), cf. F. J. FERNÁNDEZ CASAS (2001a; 2001b; 2002a; 2002b), F. J. FERNÁNDEZ CASAS & J. M. PIZARRO DOMÍNGUEZ (2001; 2002a; 2002b).

The subdivisions in the genus *Cnidoscolus* as explained in F. J. FERNÁNDEZ CASAS & J. M. PIZARRO DOMÍNGUEZ (2001) were created by the acceptance of the first typification proposed by J. K. SMALL, in N. L. BRITTON & A. BROWN (1913: 462), who designated the species *Cnidoscolus hamosus* Pohl as the nomenclatural type of the genus; cf. also R. McVAUGH (1944: 462), G. J. BRECKON (1975: 105). Otherwise, the accepted system is in essentially the same as in J. MUELLER ARGOV. (1865; 1866; 1874), F. PAX (1910).

Cnidoscolus Pohl, Pl. bras. icon. descr. 1: 56, v (1827), subg. **Cnidoscolus**, sect. **Cnidoscolus**, subsect. **Cnidoscolus**, series **Cnidoscolus**

SPECIES TYPICA: *Cnidoscolus hamosus* Pohl (1827), cf. J. K. SMALL, in N. L. BRITTON & A. BROWN (1913: 462)

Frutices stimulosi. Folia indivisa, breviter petiolata, glabrescentia vel pubescentia, pinnatinervia. Cymæ plus minusve depauperatæ, sessiles vel subsessiles; flores mediores vel majores; calyx estimulosus vel stimulosus; stamina fertilia 3-6-verticillata; staminodia filiformia vel nulla.

Species quinque, omniæ austroamericanæ.

CLAVIS SPECIERUM SERIEI *CNIDOSCOLUS*

- 1a Folia subtus albo tomentosa vel viridi albicantia 2
 1b Folia subtus glabra vel pilosa, nullo modo albo tomentosa vel viridi albicantia 3
 2a Limbus folii 6-10 cm. Stamina fertilia ad 17, triverticillata. Peru *C. hypoleucus*
 2b Limbus folii 2-4 cm. Stamina fertilia ad 30, sexverticillata. Brasilia *C. byssinus*
 3a Stamina fertilia ad 26, sexverticillata. Peru *C. Liesneri*
 3b Stamina fertilia <20, quadriverticillata. Brasilia 4
 4a Stamina fertilia ad 15. Folia integra. Flores minores, <1,5 cm. Brasilia (Bahia)
 *C. hamosus*
 4b Stamina fertilia 18-20, quadriverticillata. Folia minute crenata. Flores magni, >2 cm. Brasilia
 (Minas Gerais) *C. pubescens*

10 ***Cnidoscolus byssinus*** Fdez. Casas, **spec. nov.**, Fontqueria 55(16): 82-88, n° 10, tab. 1-5 (01-v-2003)

TYPUS: *A. Freire Fierro 1801, J. M. Martins, R. Moraes, P. L. da Rocha, M. Rodrigues, G. Sugliano & J. P. Yvert* (SPF 104901; holo-)

ILLUSTR.: laminæ nostræ 1-5, pagellæ 83-87

DISTR. GEOGR.: Brasil (Bahia)

Sect. *Cnidoscolus*, series *Cnidoscoli*

Sicut collectorum schedula, frutex stimulosus, erectus vel scandens, usque 1,3 m, latex albidus, folia subtus viridi-albicantia, rachidibus rufescentibus, alabastra viridia, flores albi. Trichomata urticantia hyalina, longe atque stricte conica, corpusculo basale fusco dolliformi; ad basim corpusculi crebro collo alborum pilorum alterum radiantium prædita.

Stipulæ parvæ, ad 2 × 3 mm, rufescentes, digitato glandulosæ atque parce hirtopilosæ, præcipue ad margines. Petiolus subnullus vel brevissimus, usque ad 2 mm, supra canaliculatus. Glandulæ acropetiolares duæ ad margines basiales approximatae si vere adsunt. Limbus late ellipticus, ovatus vel subrotundus; ad basim trinervatus; supra estimulosus, parce hirtus vel glabrescens, minutissime albo pusticulatus; pusticulæ saltem coalescentes forman vermis brevem desinentes; subtus dense tomentosus, albicans vel viridi albicans, secus nervos stimulosus; margines eroso dentati, stimulosissimi, pilis pedicellatis 4-6 mm; nervia supra albicantia, subtus hirsuto ferruginea (vel vina-cea); lateralia 6-7 paria.

Inflorescentiæ breviter pedunculatæ, congestæ, 2-4 cm longæ, fere estimulosa. Axes fusci, hirtopilosi. Bracteæ depressæ triangulares, apiculatæ, basi amplectantes, hirtopilosæ, præcipue ad margines, ad margines laterales glandulis sessilibus præditæ; ad apiculum sæpe pilis urticantibus.

Flos masculus ad 15 mm (unicus apertus visus). Alabastra obpyriformia, extus griseo villosa, supra dense stimulosa. Tepala extus villosa, usque ad 2/5-1/3 connata, partibus dorsalibus quæ imbricatæ sunt exceptis. Stamina ad 29-30, sex verticillata; staminodia 4-5, apicalia, stricte fusiformia. Antheræ 28-30, basifixæ; conectivum leviter dilatatum, præcipue ad medium.

Flos fœmineus (tepalum unicum tantum visum). Tepala libera, extus albido grisea, supra raro stimulosa, ad basim et secus lineam mediam atro rubentia. Ovarium trigonum, sexcostatum, griseo viride, apiculo fusco excepto hirtopiloso griseo lutescens atque villosum; apiculus glaber atratus, sexcostatum, quam latus subæquilongus; styli tres,

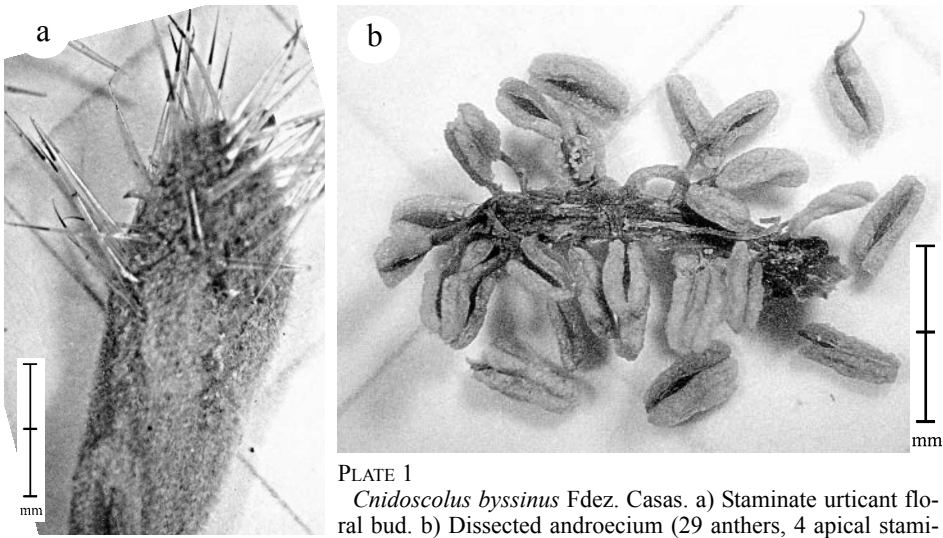
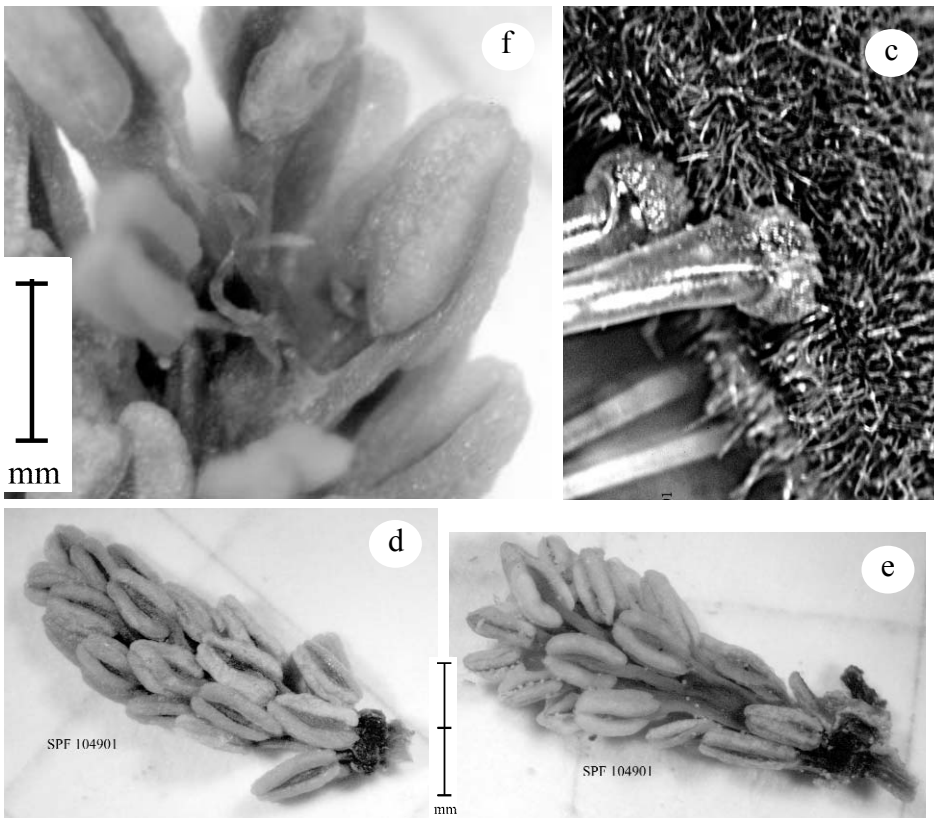


PLATE 1

Cnidoscolus byssinus Fdez. Casas. a) Staminate urticant floral bud. b) Dissected androecium (29 anthers, 4 apical staminodia). c) Base of stimulose pedunculate hairs. d, e) Androecia (29 & 30 stamens). f) Apical male staminodia (5).



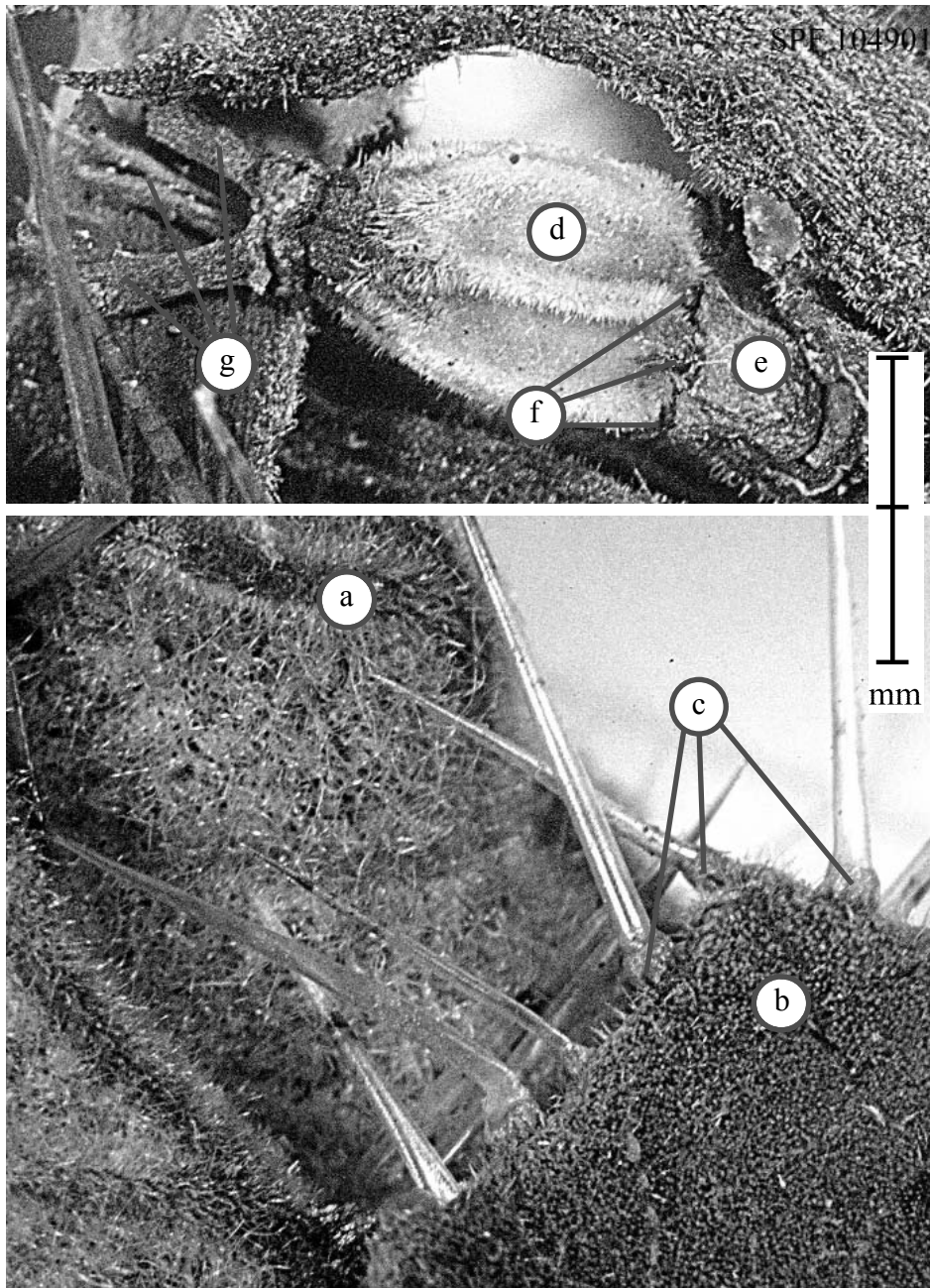


PLATE 2

Cnidoscolus byssinus Fdez. Casas. a) Abaxial villous leaf surface. b) Adaxial hirtous and minutely pustulate leaf surface. c) Stimulose pedunculate hairs on leaf margin. d) Young velutinous fruit with stalk (e), style branches (g) and staminodia (f).

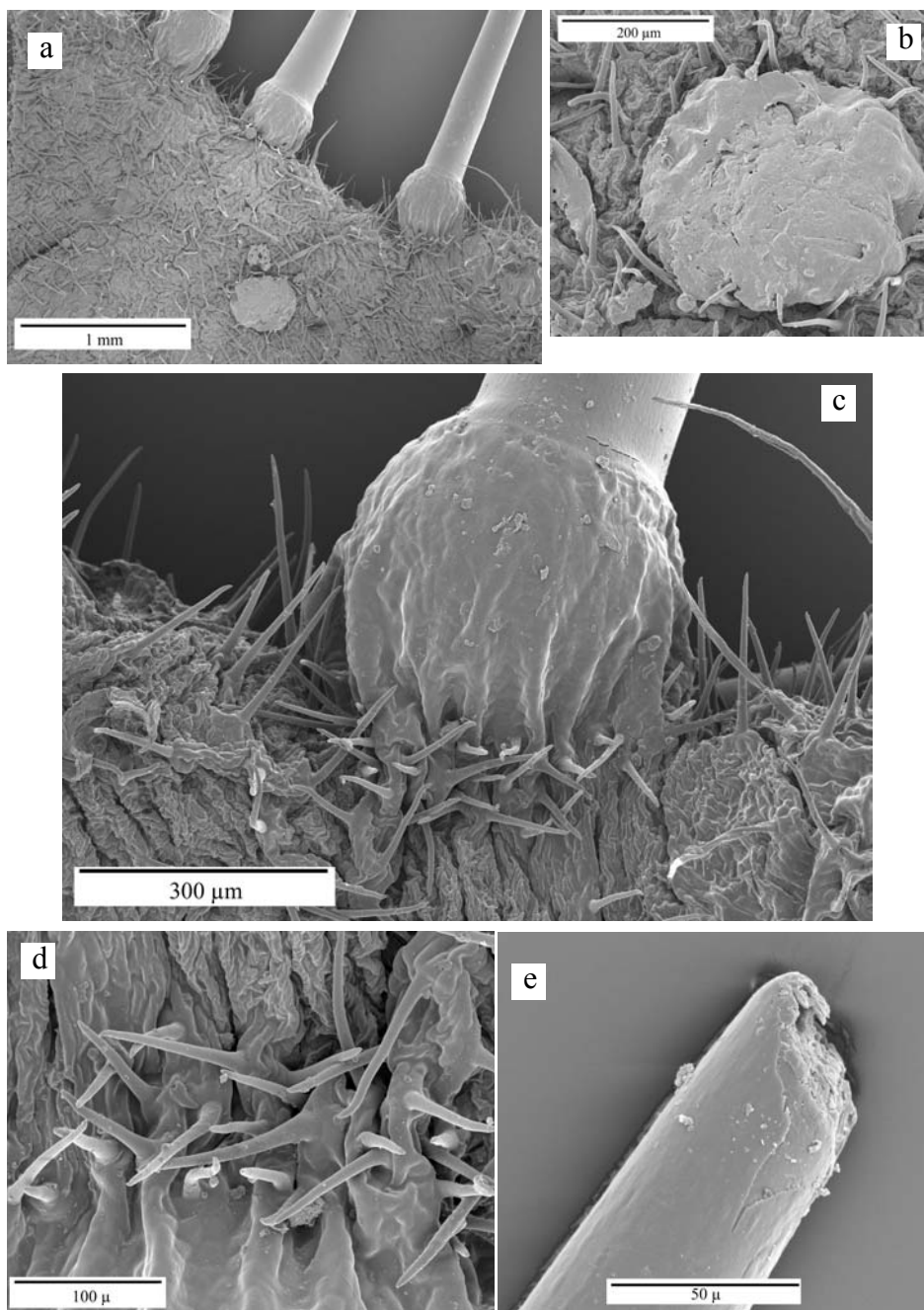


PLATE 3

Cnidoscolus byssinus Fdez. Casas. a) Abaxial hirtous leaf surface with 3 urticating hairs on margin. b) Embryonic urticant hair. c, d) Base of urticating hairs. e) Apex (the tip has fallen out).

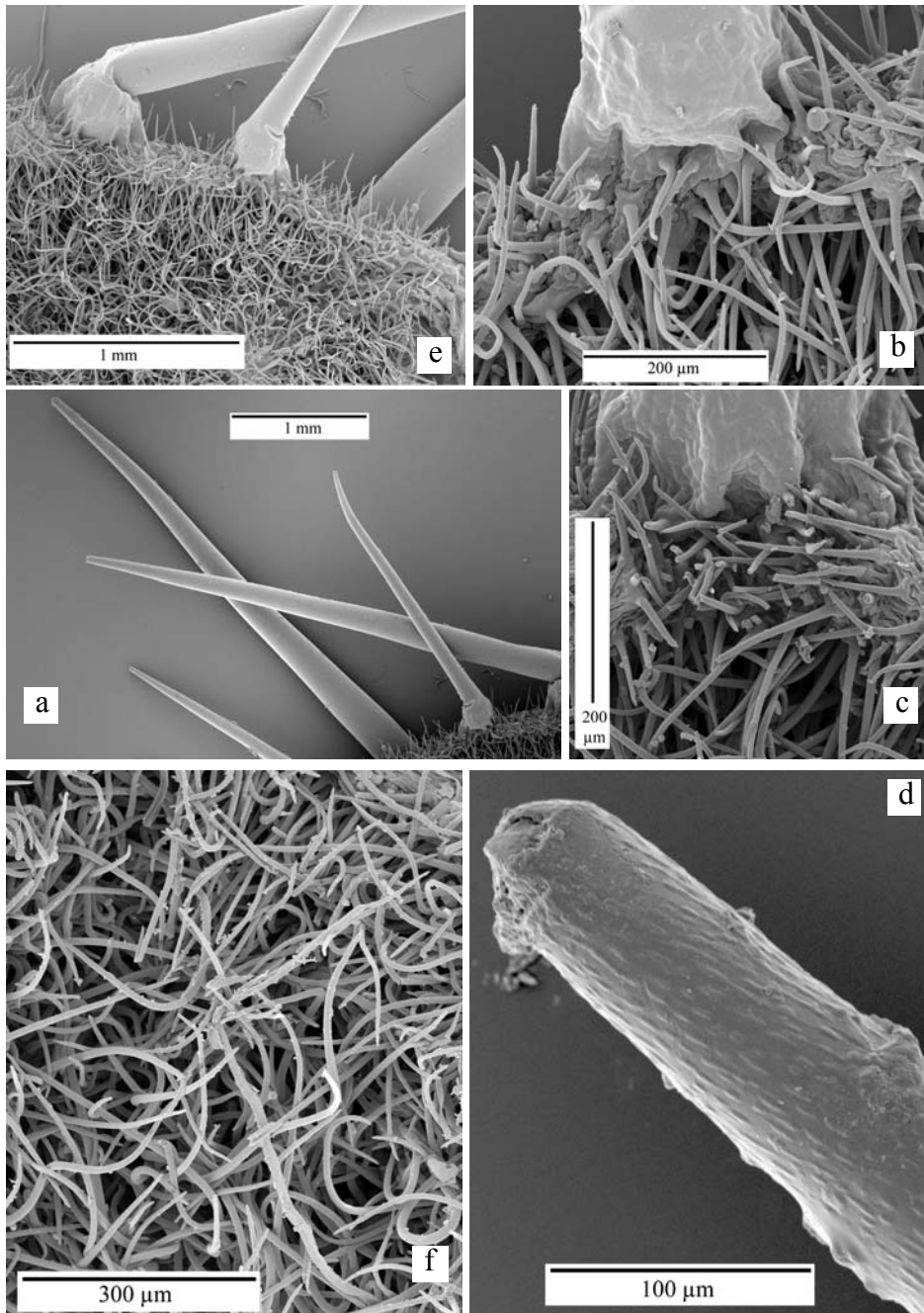


PLATE 4

Cnidocolus byssinus Fdez. Casas. a) Marginal urticatin hairs. b, c) Base of urticating hairs. d) Apex (the globular tip had fallen out). e, f) Villous abaxial leaf surface.

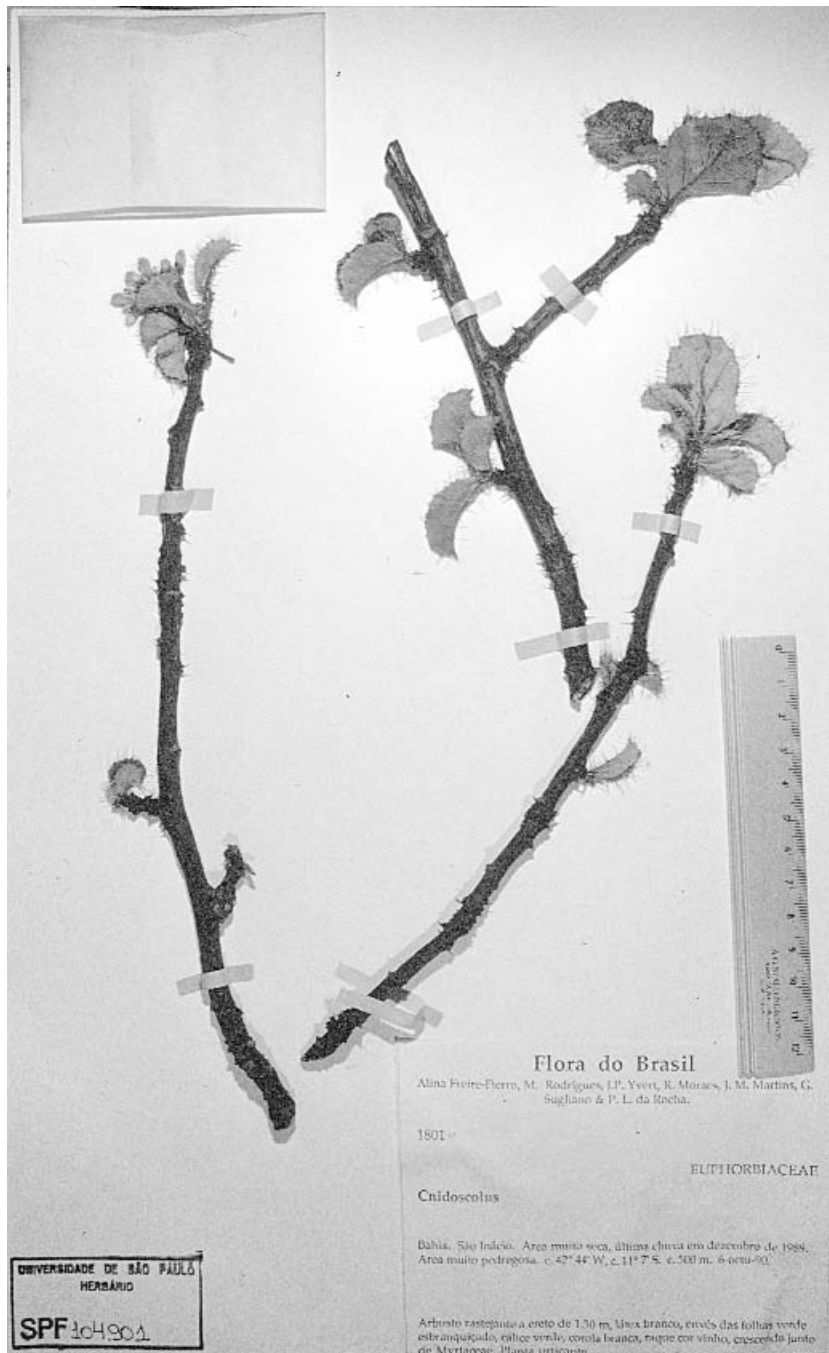


PLATE 5
Cnidoscolus byssinus Fdez. Casas (SPF 104901; holo-)

canaliculati, præcox delapsi; stigmata subinfundibuliformia (?).

Fructus ignotus.

NUNCUPATIONUM CAUSA. *Byssinus* -a -um, latin adjective for cottony. The abaxial leaf surface is remarkably cottony white.

SPECIMEN EXAMINED

BRASIL, (05) BAHIA:

23LQH47 «São Inácio: c. 11°07'S, 042°44'W, 500 m. Area muito pedregosa e muito seca (ultima chuva xii-1983). Arbusto rastejante a erecto, 1,3 m, urticante; látex branco; envés das folhas verde esbranquiçado, raque cor vinho; cálice verde; corola branca», A. Freire Fierro 1801, J. M. Martins, R. Moraes, P. L. da Rocha, M. Rodrigues, G. Sugliano & J. P. Yvert, 06-X-1990 (SPF 104901, holo-; typus C. *byssinus*).

ACKNOWLEDGEMENTS

Miguel Jerez Luna made the photographs on plates 3 and 4. Francisco Javier Sánchez García revised the Latin description. Antonio Manuel Regueiro y González-Barros revised the English text. José Rubens Pirani has assisted me during the recent visit to the SPF herbarium (São Paulo, Brazil).

REFERENCES

- BRECKON, G. J. (1975). *Cnidoscolus*, sect. *Calyptrosolen* (*Euphorbiaceae*) in Mexico and Central America. Ph. dissertation, University of California, Davis. vi + 463 pp.
- BRITTON, N. L. & A. BROWN (1913). *An illustrated flora of the Northern United States, Canada and the British possessions...*, ed. 2, 2: iv + 735 pp.
- FERNÁNDEZ CASAS, F. J. (2001a). Una combinación nueva en *Cnidoscolus* (*Euphorbiaceae*). *Fontqueria* **55**(3): 13-14.
- FERNÁNDEZ CASAS, F. J. (2001b). *Cnidoscolorum* notulæ (*Euphorbiaceae*), 1-5. *Fontqueria* **55**(7): 33-38.
- FERNÁNDEZ CASAS, F. J. (2002a). *Cnidoscolorum* notulæ (*Euphorbiaceae*), 9. *Fontqueria* **55**(13): 67-68.
- FERNÁNDEZ CASAS, F. J. (2002b). Validating old combinations under *Cnidoscolus* (*Euphorbiaceae*). *Fontqueria* **55**(14): 69-74.
- FERNÁNDEZ CASAS, F. J. & J. M. PIZARRO DOMÍNGUEZ (2001). Synopsis of *Cnidoscolus* series *Cnidoscolus* (*Euphorbiaceae*), with description of a new species. *Fontqueria* **55**(8): 39-46.
- FERNÁNDEZ CASAS, F. J. & J. M. PIZARRO DOMÍNGUEZ (2002a). *Cnidoscolorum* notulæ (*Euphorbiaceae*), 6-7. *Fontqueria* **55**(10): 53-58.
- FERNÁNDEZ CASAS, F. J. & J. M. PIZARRO DOMÍNGUEZ (2002b). *Cnidoscolorum* notulæ (*Euphorbiaceae*), 8. *Fontqueria* **55**(11): 62-67.
- MCVAUGH, R. (1944). The genus *Cnidoscolus*: generic limits and intrageneric groups. *Bull. Torrey Bot. Club* **71**(5): 457-474.
- MUELLER ARGOV., J. (1865). *Euphorbiaceae*. Vorläufige Mittheilungen aus dem für DeCandolle's Prodomus bestimmten Manuscript über diese Familie. *Linnaea* **34**: 1-224.
- MUELLER ARGOV., J. (1866). CXXIX. *Jatropha*. In A. P. DE CANDOLLE (ed.) *Prodromus systematis naturalis regni vegetalis* **15**(2): 1075-1105.
- MUELLER ARGOV., J. (1874). XXXVIII. *Jatropha* (Linn. emend.) Muell. Arg. In W. EICHLER & I. URBAN (eds.) *Flora brasiliensis* **11**(2): col. 486-502.
- PAX, F. (1910). *Euphorbiaceae-Jatropheae*. In A. ENGLER (ed.) *Das Pflanzenreich. Regni vegetabilis conspectus*. IV. **147**(Heft 42): [1-3] 4-148.