

SHORT COMMUNICATION

A NEW BROMELIAD-DWELLING JUMPING SPIDER (ARANEAE, SALTICIDAE) FROM BRAZIL

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ABSTRACT. *Eustiromastix nativo* new species is described and illustrated based on specimens collected from bromeliads in northeastern and southeastern Brazil.

Keywords: Salticidae, *Eustiromastix*, Bromeliaceae, new species

The spider genus *Eustiromastix* Simon 1902 has 10 species distributed all over South America and the southern West Indies (Bauab & Soares 1978; Galiano 1979, 1981). Although relatively well known taxonomically, and widely distributed, nothing is known about the natural history of this group. Recently, during a study on bromeliad-inhabiting spiders in northeastern and southeastern Brazil, the second author collected several specimens of a new species. The males of this species present a characteristic apically curved cymbium, like several species of the genus *Eustiromastix*. The females resemble other species of *Eustiromastix* by the wide, flattened and folded copulatory ducts, which are as wide as the spermathecae.

All specimens examined in this study were collected only on bromeliads with which they apparently maintain a specific relationship (Romero & Vasconcellos-Neto pers. obs.). This observation is reinforced by the fact that at the type locality, this species was not collected outside bromeliads during an extensive spider diversity inventory (Santos 1999). In this paper, this new species is described and illustrated.

The female genitalia were removed and examined immersed in clove oil. All measurements are in mm. All the specimens are deposited in the collection of the Instituto Butantan, São Paulo, Brazil (IBSP).

Eustiromastix nativo new species
Figs. 1–4

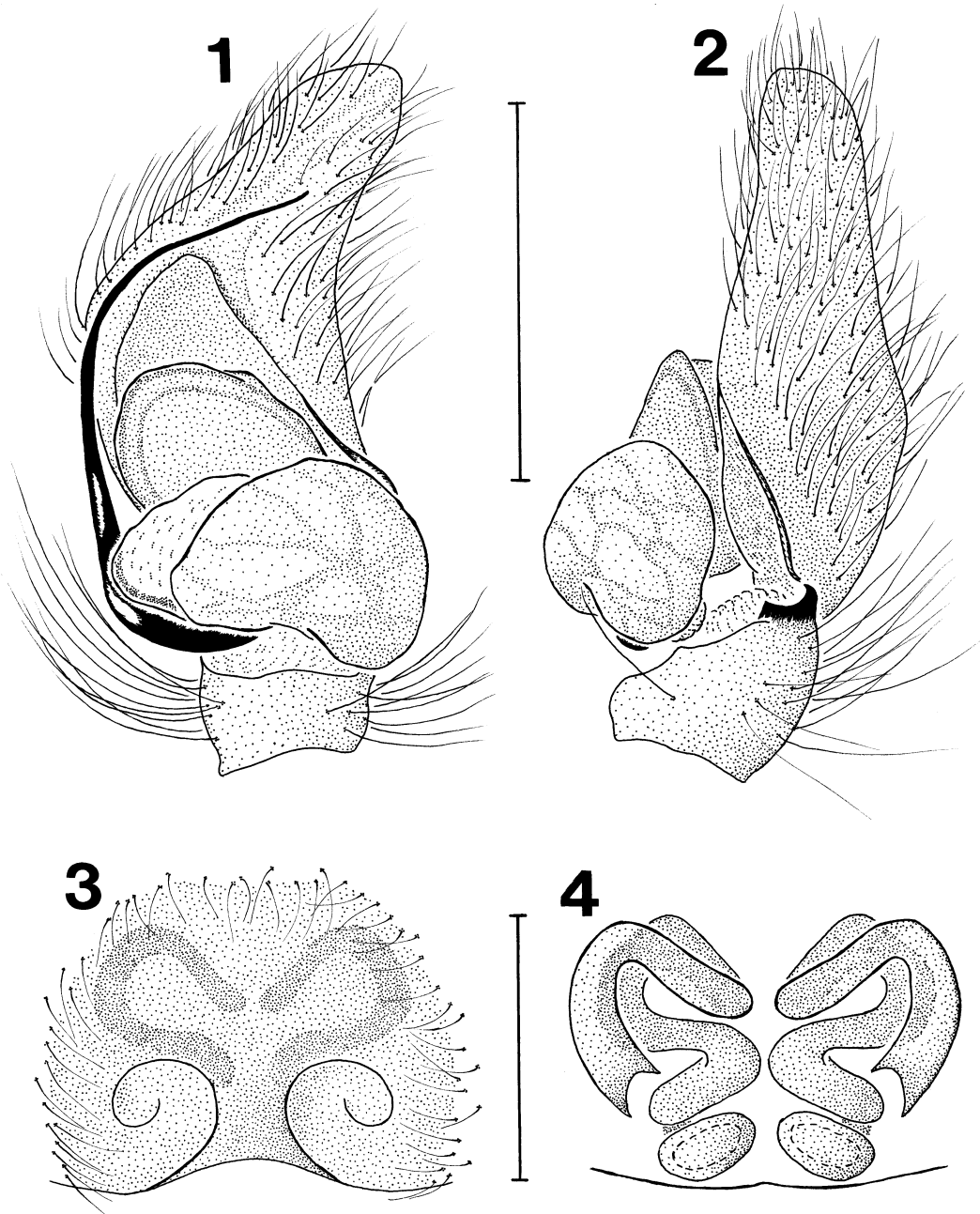
Type specimens.—Male holotype and female paratype from Brazil, *Espírito Santo*, São Mateus,

Reserva Florestal da Companhia Vale do Rio Doce (19°06'S, 39°45'W), G. Q. Romero & J. Vasconcellos-Neto, 25–30 August 2002 (deposited in IBSP 34769 and IBSP 34770 respectively).

Etymology.—The specific epithet is a noun in apposition taken from the vegetation formation where the type specimens were collected (campos nativos).

Diagnosis.—*Eustiromastix nativo* males shares with *E. obscurus* (Peckham & Peckham 1893) and *E. macropalpus* Galiano 1979 an expanded, soft area in the tegulum, close to the embolus base. It can be distinguished from that species by that shape of the soft tegular area, which is large and spherical; and by a large hyaline retrolateral tegular process (Figs. 1–2). Female resembles those of *E. vincenti* (Peckham & Peckham 1893) by the lateral, spiral shaped copulatory openings (Galiano 1979, fig. 14), and differ by the copulatory openings closer to the epigastric sulcus (Fig. 3) and by the differently folded trajectory of the copulatory ducts (Fig. 4).

Description.—Male (holotype): Carapace black with a median triangular patch of white cuticular scales, close to posterior lateral eyes; another median spot of white scales close to anterior median eyes, and a lateral band of white scales from the posterior border to the area between posterior median and anterior lateral eyes. Clypeus black, chelicerae black and iridescent. Labium, endites and sternum dark brown, covered with white hairs. Endites with a small antero-lateral pointed cusp. Palps dark brown, with an apical cream spot on the venter of the femur. Venter of palpal patella cream. Coxae and trochanter I faint brown, yellow on other legs.



Figures 1–4.—*Eustiromastix nativo* new species. 1. Male palp, ventral view. 2. Lateral. 3. Female epigynum, ventral. 4. Dorsal. Scale bars: Figs. 1–2 = 1.0 mm, 3–4 = 0.5 mm.

Femur brown, patella and tibia cream with irregular brown spots. Metatarsus I red brown, orange on other legs. Tarsi yellow. Dorsum of abdomen with two anterior orange spots covered with white scales and with a median cream band separated from anterior spots and laterally delimited by dark spots.

Sides and venter gray, with dark irregular spots. Venter with a red brown spot on posterior third. Spinnerets dark brown. Total length 6.4, carapace 3.4 long, 2.5 wide. Tibia I length 2.5, II 1.4, III 1.5, IV 1.7. Abdomen 3.1 long, 1.6 wide.

Female (paratype): Carapace dark brown, ocular

area black and iridescent. Cephalic region with scattered white scales. Clypeus and chelicerae dark brown. Labium, endites and sternum red brown, labium darker and sternum with a large central brown spot. Palpus cream, with orange tarsus. Legs cream. Dorsum of abdomen cream, with a lateral dark band covering the posterior 80% of abdominal length. Sides and venter gray. Spinnerets gray, dark brown laterally. Total length 7.9, carapace 3.4 long, 2.6 wide. Tibia I length 1.6, II 1.6, III 1.6, IV 1.7. Abdomen 4.1 long, 2.4 wide.

Variation.—*Males* ($n = 3$): total length 6.1–8.6, carapace length 3.0–4.0, carapace width 2.5–3.1. *Females* ($n = 5$): total length 6.5–9.1, carapace length 3.4–3.7, carapace width 2.5–2.7.

Natural history.—All specimens examined were collected from two species of bromeliads (*Vriesea neoglutinosa* Mez. in São Mateus and *Aechmea blanchetiana* (Baker) L.B. Sm., in Trancoso) in two vegetation formations, respectively campos nativos and restingas. Both formations are similar, presenting a low, scattered vegetation over a sandy soil (Jesus 1988; Lacerda et al. 1984).

Distribution.—Northeastern and southeastern Brazil.

Additional material examined.—BRAZIL: *Bahia*: Trancoso, 7–12 October 2001, G.Q. Romero, 1 ♂, 1 ♀ (IBSP 34772); *Espírito Santo*: same data as types, 1 ♂, 3 ♀ (IBSP 34771).

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LITERATURE CITED

- Bauab V., M.J. & B.A.M. Soares. 1978. Contribuição ao estudo dos Salticidae do Brasil. III. (Araneae). *Revista Brasileira de Biologia* 38:359–361.
- Galiano, M.E. 1979. Revision del genero *Eustiro-mastix* Simon, 1902 (Araneae, Salticidae). *Journal of Arachnology* 7:169–186.
- Galiano, M.E. 1981. Three new species of Salticidae (Araneae). *Bulletin of the American Museum of Natural History* 170:216–218.
- Jesus, R.M. 1988. A reserva florestal da CVRD. Pp. 59–112. *In* Anais do VI Congresso Florestal Estadual, vol. 1.
- Lacerda, L.D., D.S.D. Araujo, R. Cerqueira & B. Turcq. 1984. Restingas: origem, estrutura e processos. Centro Editorial da Universidade Federal Fluminense, Niterói.
- Santos, A.J. 1999. Diversidade e composição em espécies de aranhas da Reserva Florestal da Companhia Vale do Rio Doce (Linhares, ES). Masters Thesis, Universidade Estadual de Campinas, Campinas.

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