

Taxonomic remarks on the genus *Cupiennius* Simon (Araneae, Ctenidae) and description of *C. vodou* sp. nov. from Haiti

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ABSTRACT. *Ctenus bimaculatus* Taczanowski, 1874, is removed from the synonymy of *Ancylometes rufus* (Walkenaer, 1837) and transferred to the genus *Cupiennius* Simon, 1891, in which it is placed as a senior synonym of *Cupiennius celerrimus* Simon, 1891. New records are presented for *C. bimaculatus* (TACZANOWSKI 1874) and a new species, *C. vodou*, is described from Haiti.

KEY WORDS. Brazil, *Ctenus*, *Ancylometes*, spiders, taxonomy.

RESUMO. Notas taxonômicas sobre o gênero *Cupiennius* Simon (Araneae, Ctenidae) e descrição de *C. vodou* sp. nov. do Haiti. *Ctenus bimaculatus* Taczanowski, 1874, é removido da sinonímia de *Ancylometes rufus* (Walkenaer, 1837) e transferido para o gênero *Cupiennius* Simon, 1891, no qual é considerado sinônimo sênior de *Cupiennius celerrimus* SIMON, 1891. São apresentados novos registros para *C. bimaculatus* (Taczanowski, 1874) e uma nova espécie, *C. vodou*, é descrita para o Haiti.

PALAVRAS CHAVE. Aranhas, Brasil, *Ctenus*, *Ancylometes*, taxonomia.

Through the courtesy of Dr. Jacek Swedo of the Polska Academy of Sciences, we have recently had the opportunity to examine the type-specimen of *Ctenus bimaculatus* described by TACZANOWSKI (1874), based on a female from Uassa, French Guyana. This species was synonymized with *Ancylometes rufus* (Walkenaer, 1837) by HÖFER & BRESCOVIT (2000).

To our surprise, the examination of the type revealed that the specimen is an immature female, in the penultimate instar, of *Cupiennius celerrimus* SIMON, and not a synonym of *A. rufus* as published in HÖFER & BRESCOVIT (2000). Thus, in this paper *Ctenus bimaculatus* TACZANOWSKI is removed from the synonymy of *Ancylometes rufus* and transferred to the genus *Cupiennius* in which it is placed as a senior synonym of *Cupiennius celerrimus* SIMON. New records are presented from Brazil, Guyana and Ecuador and a new species is described from Haiti, based on material deposited in the collection of the Instituto Butantan. This is the second record of a *Cupiennius* species in Haiti, the first being *C. salei* (KEYSERLING), a widespread species also known from USA and Central America (LACHMUTH *et al.* 1985).

The material examined belongs to the following institutions (abbreviation and curators in parenthesis): Instituto Butantan, São Paulo (IBSP, A.D. Brescovit); Museu Nacional do Rio de Janeiro, Rio de Janeiro (MNRJ, A.B. Kury); Museu Paraense

Emílio Goeldi, Belém (MPEG, A.B. Bonaldo); Polska Academy of Sciences, Warsaw (PAN, J. Swedo). The format of descriptions basically follow HÖFER *et al.* (1994). All measurements are in millimeters. The epigynum was dissected and immersed in clove oil to study internal structures (LEVI 1965).

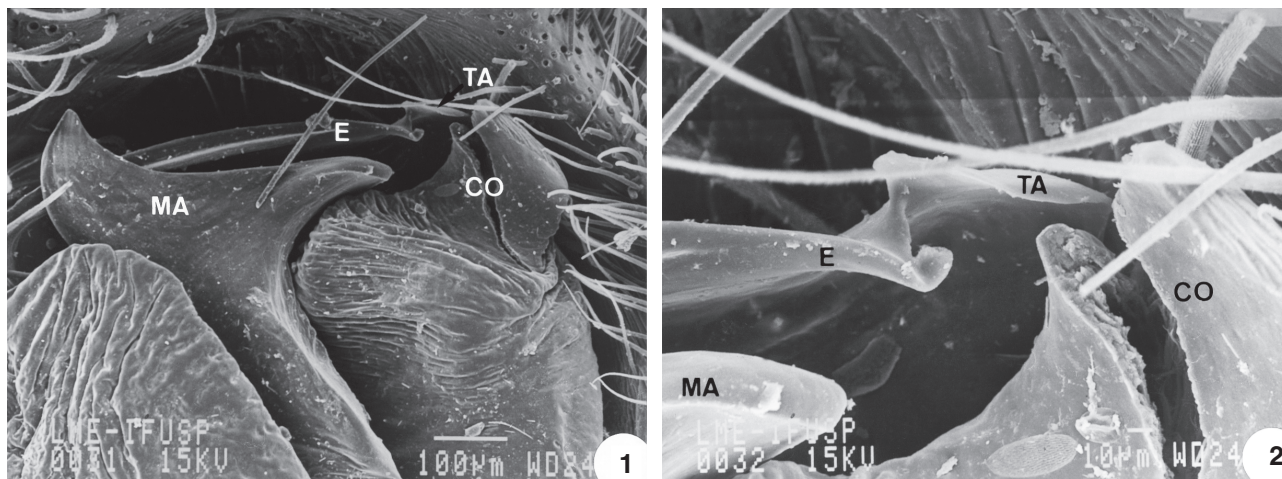
RESULTS

Cupiennius bimaculatus (Taczanowski, 1874), sp. reval.

Ctenus bimaculatus Taczanowski, 1874: 92 (Immature female, penultimate instar, holotype from Uassa, French Guiana, Jelski *leg.*, deposited in PAN, examined); Platnick, 2005.

Cupiennius celerrimus Simon, 1891: 111 (Syntypes male and female from Tefé, Amazonas, Brazil, should be in the Muséum National d'Histoire Naturelle, Paris, not found, probably lost); Mello-Leitão, 1936: 600; Roewer, 1955: 625; Bonnet, 1956: 1293; Lucas, 1964: 127, 133; Lachmuth *et al.*, 1985: 361; Brescovit & Eickstedt, 1995; Barth & Cordes, 1998: 137-140; Platnick, 2005. **Syn. nov.**

Ctenus cuminaensis Mello-Leitão, 1930: 64, figs 24-25 (holotype female from Cuminá, Amazonas, Brazil, deposited in MNRJ number 144, not re-examined); Roewer, 1955: 649; Bonnet, 1956: 1279; Brescovit & Eickstedt, 1995: 642 (Syn.); Platnick, 2005.



Figures 1-2. *Cupiennius vodou* sp. nov.: (1) male, left palp, ventral view; (2) terminal apophysis of the embolus, detail, ventral view. Scale lines: 0.25 mm. (CO) Conductor, (E) embolus, (MA) median apophysis, (TA) terminal apophysis of the embolus.

Ctenus cuminaensis [sic]: Mello-Leitão, 1936: 7, Fig. 5 (lapsus).
Ancylometes bimaculatus: Höfer & Brescovit, 2000: 337; Platnick, 2005.

Synonymy. The type specimen of *C. bimaculatus* is an immature female in the penultimate instar and, although nothing can be said on the genitalia, presents the same basic coloration pattern observed in *C. celerrimus*. As described by BRESCOVIT & EICKSTEDT (1995: 644) the coloration pattern of the abdomen is dorsally (brownish-green) green-brown, with almost black transversal bands in the anal tubercle. Ventrally it is yellow with a narrow median longitudinal dark gray band.

New records. ECUADOR, *Morona-Santiago*: Los Tayos, 1 male, 1 female, 1-14.VII.1976, P. Ashmole leg. (IBSP 4314; 4315); BRAZIL, *Roraima*: Posto Xitei/Xidia, Área Indígena Yanomami, (02°36'25"S, 63°52'18"W), 1 male, 5-13.XII.1998, P. Torres leg. (IBSP 23521); *Rondônia*: Rio Jamari, Usina Hidrelétrica de Samuel, 1 female 1 immature, XII.1980, Equipe Butantan leg. (IBSP 5670; 7181); Ouro Preto do Oeste, 1 female, 4-22.X.1986, J. Becker leg. (MNRJ 13436); *Amazonas*: Manicoré, Barreira do Matupiri, 1 female, 18.IV.1996, Equipe IBSP/SMNK leg. (IBSP 8871); *Pará*: Almeirin, Reserva do Quaruba, 2 females, 5.XII.2002, A.L. Prudente leg. (MPEG 1162); Novo Progresso, Serra do Cachimbo, Campo de Provas Brigadeiro Veloso (09°22'02,9"S, 55°01'11,9"W), 1 female, 8.IV-25.V.2003, A.B. Bonaldo et al. leg. (MPEG 1413; 1416; 1406); Vitória do Xingu, 1 male, 28.XI.2000 (MPEG); Belém, 1 female, VII.1984, A. Cerrutti leg. (MNRJ); *Paraíba*: Mamanguape, APA de Mamanguape, 6 males, 11 females, 2001, C. Arzabe leg. (IBSP 39317-39322; 39324-39326; 39328); *Pernambuco*: Tamandaré, Reserva Biológica de Saltinho, 1 male, 27.IV.1999, M.F. da Silva leg. (IBSP 39592); Goiana, Usina Maravilha, 2 females, 16.VI. 2003, S.C. Dias leg. (IBSP 41389); *Alagoas*: Murici, Estação Ecológica de Murici (09°15'S, 35°51'W), 4 males, 2 females, 13-22. IX.2003,

Equipe Biota leg. (IBSP 52226-52231); *Mato Grosso*: Vila Bela da Santíssima Trindade, 1 female, 07-22.IX.1997, M. Calleffo leg. (IBSP 13325); Diamantina, Alto Rio Arinos, 1 female, X.1983, A. Cerrutti leg. (MNRJ 13439).

Distribution. The distribution range of this species, known from Venezuela and Brazil, is amplified to Guyana and Ecuador.

Cupiennius vodou sp. nov.

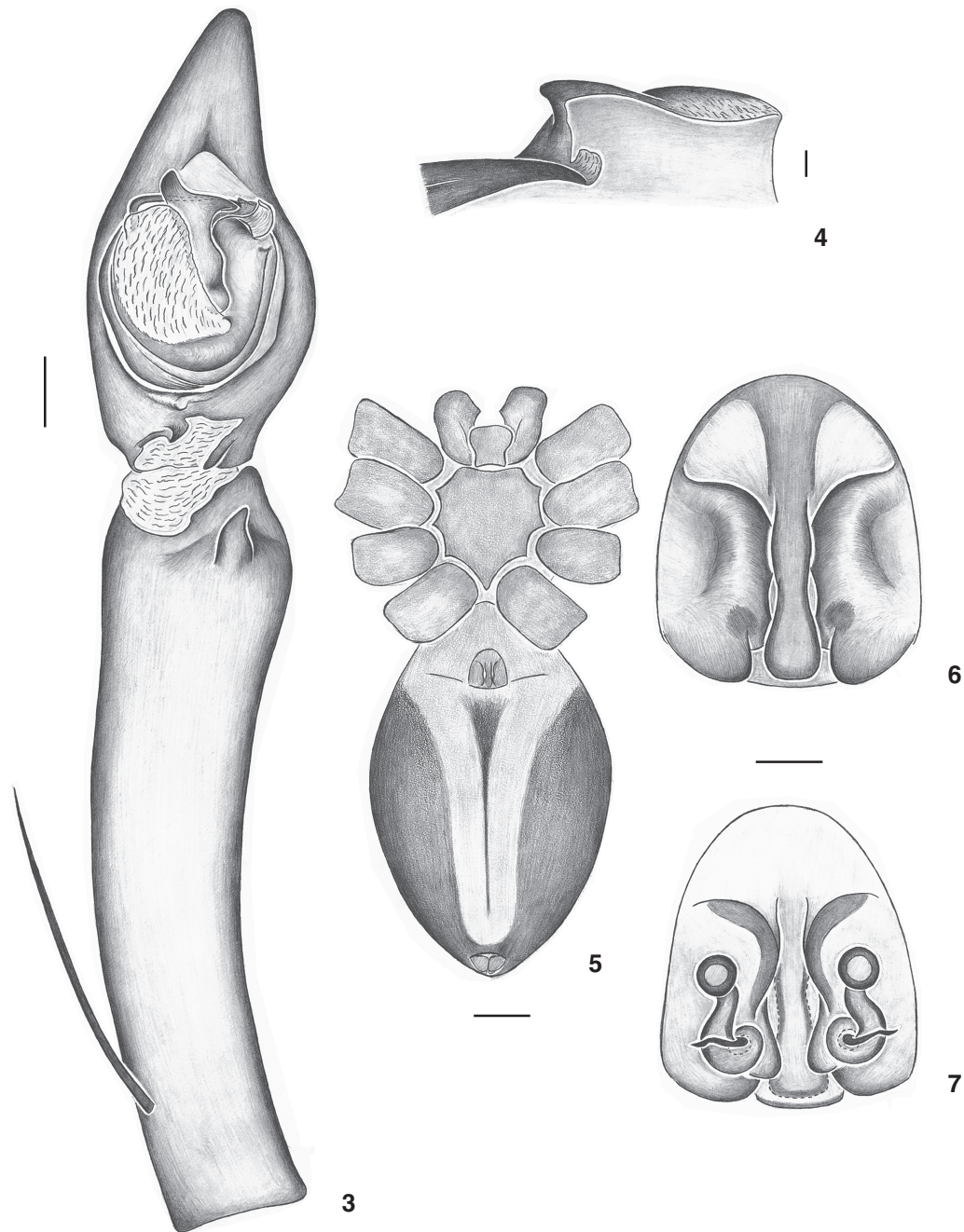
Figs 1-7

Types. Male holotype from Miragoane, Centre, Haiti, Jan.1974, R. Bell leg., deposited in IBSP 47611; 1 male and 1 female paratypes, from Derivieux, near Miragoane, Centre, Haiti, 19.XII.1976, M. Langworthy leg., deposited in IBSP 47610 and 47612, respectively.

Etymology. The specific name "vodou" originates from the term "vodun" of the fon's (an African tribe brought to Haiti during the French colonization) language and means "god" or "spirit" and is a name of a popular religious cult in the countryside community of the Haiti.

Diagnosis. Males of *Cupiennius vodou* sp. nov. resemble those of *C. salei* (KEYSERLING) by the morphology of the palpus bulb with similar median apophysis (LACHMUTH et al. 1985: 349, fig. 20), but are distinguished by the shorter conductor and narrow terminal apophysis of the embolus (Figs 1-4). Females resemble those of *C. bimaculatus* by the narrowed median septum (see BARTH & CORDES, 1998, fig. 14, as in *C. celerrimus*) but differs from this species by the median constriction and rounded distal area of the median septum (Fig. 6); and, internally, by the large copulatory ducts and smaller spermathecae (Fig. 7). The coloration of the ventral abdomen (Fig. 5) distinguish *C. vodou* sp. nov. from other *Cupiennius* species (see BARTH & CORDES 1998: figs 6-12 to comparison).

Description. Holotype male. Carapace with light brown



Figures 3-7. *Cupiennius vodou* sp. nov. (3-4) Male, left palp: (3) ventral view; (4) terminal apophysis of the embolus, detail, ventral view; (5) body, ventral view; (6-7) epigynum: (6) ventral view; (7) dorsal view. Scale lines: 0.25 mm.

cephalic area. Chelicerae brown with longitudinal ventral dark brown bands. Labium, endites, sternum and legs light brown. Abdomen dorsally brown, with a median longitudinal lighter band, and two proximal black spots on the beside the dorsal band. Ventrally with a narrow longitudinal gray band and light

brown lateral borders. Total length 23.68; carapace: 10.80 long, 9.40 wide. Clypeus 0.66 high, slightly wider than the AME diameter. Eye diameters and interdistances: AME 0.60; ALE 0.34; PME 0.78; PLE 0.78; AME-AME 0.38; AME-ALE 0.46; PME-PME 0.34; PME-PLE 0.50; ALE-PLE 0.50, AME-PME 0.26. Chelicerae

with 3 promarginal teeth and 4 retromarginal denticles. Leg measurements: I – femur 13.30/patella 5.20/tibia 12.30/metatarsus 13.90/tarsus 4.70/total 49.40/II – 13.70/5.10/11.90/14.20/4.40/49.30/III – 12.05/4.50/8.20/12.00/3.60/40.35/IV – 13.70/4.70/11.50/16.00/4.30/50.20. Leg spination: tibia I v2-2-2-2, p1-1-0, r1-1-1, II v2-2-2-2, p1-1-0, r1-1-0, III v2-2-2, p1-1-0, r1-1-0, IV v2-2-2, p1-1-0, r1-1-0; metatarsus I v2-0-1m, p1-1-0, r1-1-1, II v2-2-1m, p1-1-0, r1-1-1, III v2-2-1m, p1-1-2, r1-1-2, IV v2-2-1m, p1-1-2, r1-1-2. Metatarsus and tarsus I-II-III with thick ventral scopulae, reduced in the articles of leg IV. Male palp long, curved and presenting a short distal tibial apophysis (Fig. 3). Bulb with prominent median apophysis with elongated and conical terminal process. Conductor flattened with curved apex. Embolic apophysis curved and twist and presents a terminal apophysis (Figs 1-4).

Female (Paratype, IBSP 47612). Coloration pattern as in male, except carapace with dorsal longitudinal orange-brown band. Abdomen without the two black spots and ventral area slightly brown as shown on figure 5. Total length 18.30; carapace: 7.40 long, 6.50 wide; Clypeus 0.40 high, as in male. Eye diameters and measurements: AME 0.44; ALE 0.16; PME 0.63; PLE 0.64; AME-AME 0.30; AME-ALE 0.50; PME-PME 0.48; PME-PL 0.58; ALE-PL 0.32; AME-PME 0.24. Chelicerae as in male. Leg measurements: I – femur 7.90/patella 3.30/tibia 8.50/metatarsus 8.20/tarsus 3.10/total 31.00/II – 8.30/3.30/8.10/7.90/3.10/30.70/III – 7.50/2.50/6.00/6.10/2.50/24.60/IV – 8.30/2.90/7.40/8.80/3.10/30.30. Leg spination: tibia I-II v2-2-2-2, p1-1, r1-1, III v2-2-2, p1-1, r1-1, IV v2-2-2, p1-1, r1-1-1; metatarsus I v2-2-2, p1-1-1, r1-1-1, II v2-2-2, p1-1-0, r1-1-0, III v2-2-2, p1-1-1, r1-1-1, IV v2-2-2, p1-1, r1-1-1. Metatarsus and tarsus I-II-III with thick scopulae as in male. Epigynal plate oval. Median septum narrow, with a median constriction and rounded at tip. Lateral plate distally directly, connected to the median septum forming a loop (as in “group b” from BARTH & CORDES 1998: 137, fig. 14) and basally with rounded borders (Fig. 6). Internally with small spermathecae, larger copulatory ducts and narrow and sinuous fertilization ducts (Fig. 7).

Other material examined. None.

Distribution. Known only from Haiti.

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