

RESEARCH NOTE

***SOUGAMBUS GEORGIENSIS* CHAMBERLIN & IVIE, A JUNIOR SYNONYM OF *GONEATARA PLATYRHINUS* (CROSBY & BISHOP) (ARANEAE, LINYPHIIDAE, ERIGONINAE)**

Sougambus georgiensis Chamberlin & Ivie 1944 has not been collected since it was described from a series of females (Chamberlin & Ivie 1944). After trapping a female at Jackson, South Carolina which matched the description of *S. georgiensis*, I was hopeful that extensive pitfall trapping I was then conducting would turn up the male of the species. However, collecting a female in conjunction with males of *Goneatara platyrhinus* (Crosby & Bishop 1927) in Barnwell County, South Carolina suggested that these specimens could be conspecific.

The most direct method of demonstrating this putative synonymy, comparison of female type material of both species, is unfortunately not possible: the type material of *G. platyrhinus* (originally described as *Oedothorax* by Crosby & Bishop (1927) and subsequently transferred as the type of the new genus *Goneatara* by Bishop & Crosby (1935)) was never entered into the American Museum of Natural History (AMNH) type catalog when the Cornell University Collection was moved there. These types are presumed lost. No material from the type locality has been located at AMNH, although the specimens from the three other records listed in the description (Crosby & Bishop 1927) were found. Unfortunately, the female material in these vials is inadequate for definite comparison. A female was missing from a vial from North Carolina and a vial from Pennsylvania contained only a single female without an abdomen. A third vial referenced in Crosby & Bishop (1927), from Virginia, contained only males. A vial of two females collected in Mississippi by H. Dietrich in 1930 represents the only complete females of *G. platyrhinus* at AMNH. Because Dietrich and C.R. Crosby are sometimes listed as co-collectors of material in the Cornell University Collection, it might be assumed that

Dietrich had access to authoritatively determined specimens of *G. platyrhinus*.

In the absence of female *G. platyrhinus* types, the synonymy of *S. georgiensis* and *G. platyrhinus* relies on several lines of evidence. First, the males and female I collected together appear to be the same species, with identical coloration including a characteristic "dusky short median stripe" (Crosby & Bishop 1927) or "median longitudinal patch of dark gray" (Chamberlin & Ivie 1944) on the abdominal dorsal surface. The males I collected appear identical to the *G. platyrhinus* material discussed above (again, *S. georgiensis* was described only from females). Male *G. platyrhinus* are easily recognized by the distinctive shape of the cephalic portion of the carapace (Crosby & Bishop 1927, figs. 3, 4), and their identity can be confirmed by details of palpal morphology (Crosby & Bishop 1927, figs. 1, 2). The rather simple epigynum figured by Crosby & Bishop 1927 (fig. 5) appears similar in form to the epigynum of *S. georgiensis* in Chamberlin & Ivie 1944 (fig. 114). Minor discrepancies in details of the two epigynal figures may reflect differences in artistic technique or differences in the pigmentation or sclerotization and hence transparency of the exoskeleton of the individual specimens drawn; some internal epigynal structures appear to be more distinctly visible in the Chamberlin & Ivie (1944) figure. The female I collected with the *G. platyrhinus* males appears identical to the holotype of *S. georgiensis* at AMNH and also to another specimen labelled "PARATYPE" but not designated as such in Chamberlin & Ivie (1944). It also matches the two females of *G. platyrhinus* collected and presumably determined by Dietrich, and the above mentioned abdomenless female *G. platyrhinus* listed in the original description (Crosby & Bishop 1927).

The striking similarity of the specimens examined strongly suggests that *Sougambus georgiensis* Chamberlin & Ivie 1944 should be considered a junior synonym of *Goneatara platyrhinus* (Crosby & Bishop 1927), even in the absence of female type material for *G. platyrhinus*. This emendation reduces *Sougambus* to a monotypic genus, with *S. bostoniensis* (Emerton 1882) as the only valid member (Platnick 1989, 1993).

Material examined.—Voucher specimens of males and females collected by the author have been deposited in the American Museum of Natural History. Following is the label data of all specimens examined. Material listed on the labels of some AMNH specimens has been lost. (AMNH) = American Museum of Natural History; (MD) = author's collection.

GEORGIA: Clarke County, Horseshoe Bend experimental area, floodplain forest, ethanol pitfall, 1 ♀, 26–27 February 1991 (M. Draney)(MD); N.E. Lula, 1 ♀, 26 April 1943 (W. Ivie) (AMNH) [PARATYPE (*S. georgiensis*)]. South of Guyton, 1 ♀, 5 April 1943 (W. Ivie) (AMNH) [HOLOTYPE (*S. georgiensis*)]. **MISSISSIPPI:** Richton, 2 ♀, 8 December 1930 (Dietrich) (AMNH) [labelled *Oedothorax platyrhinus*]. **NORTH CAROLINA:** Oteen, 1 ♂ 1 ♀, 16 October 1923 (C.R. Crosby & S.C. Bishop) (AMNH) [labelled *G. platyrhinus*]. **PENNSYLVANIA:** Roxbury, 2 ♀, 30 October 1924 (C.R. Crosby & S.C. Bishop) (AMNH) [labelled *G. platyrhinus*]. **SOUTH CAROLINA:** Aiken County, Jackson, deciduous woods behind 110 Cowden Street, pitfall, 1 ♀, 6–8 March 1995 (M. Draney) (MD). Aiken County, Savannah River Site, young pine stand at Road 2 and M-Line Railroad, formalin pitfalls, 3 ♂, 13–29 December 1995 (M. Draney) (MD). Same site, formalin pitfalls, 2 ♂, 10–24 January 1996 (M. Draney) (MD). Same site, formalin pitfall, 1 ♀, 17 April–4 May 1996 (M. Draney) (MD). Allendale County, Savannah River Site, Set-Aside #18, Boiling Springs Natural Area, riparian old-growth forest, formalin pitfall, 1 ♂, 29 November–13 December 1995 (M. Draney) (AMNH). Same site, formalin pitfalls, 2 ♀, 29 December 1995–10 January 1996 (M. Draney) (AMNH). Barnwell County, Savannah River Site, Set-Aside #29, scrub-oak/pine forest, formalin pitfall, 1 ♀, 1–15 May 1995 (M. Draney) (MD). Same site, formalin pitfalls, 2 ♂ 1 ♀, 11–28 December 1995 (M. Draney) (AMNH). Same site, formalin pitfall, 1 ♂, 22 January–6 February 1996 (M. Draney) (MD). Same site, formalin pitfall, 1 ♀, 4–18 March 1996 (M. Draney) (MD). Same site, formalin pitfall, 1 ♀, 1–16 April 1996 (M. Draney) (MD). Barnwell County, Savannah River Site, timber compartment

30, oak/hickory forest, litter extracted by Berlese funnel, 1 ♂, 4 November 1994 (M. Draney & D. Sanzone) (MD). Same site, formalin pitfall, 1 ♂, 28 December 1995–8 January 1996 (M. Draney) (MD). Same site, formalin pitfall, 1 ♂, 8–22 January 1996 (M. Draney) (MD). Same site, formalin pitfall, 1 ♂, 22 January–6 February 1996 (M. Draney) (MD). Same site, formalin pitfall, 1 ♀, 6–19 February 1996 (M. Draney) MD. Same site, formalin pitfall, 1 ♀, 19 February–4 March 1996 (M. Draney) (MD). Same site, litter sifting, 1 ♂ 4 ♀, 12 December 1996 (M. Draney) (MD) these five specimens were observed alive and reared in the laboratory; 2 ♀ (died 26 February 1997 and 6 April 1997) are preserved in separate vials]. **VIRGINIA:** Anna River, 2 ♂, 28 October 1923 (C.R. Crosby & S.C. Bishop) (AMNH) [labelled *G. platyrhinus*].

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LITERATURE CITED

- Bishop, S.C. & C.R. Crosby. 1935. Studies in American spiders: miscellaneous genera of Erigoneae. Part I. J. New York Entomol. Soc., 43: 217–241, 255–281.
- Chamberlin, R.V. & W. Ivie. 1944. Spiders of the Georgia region of North America. Bull. Univ. Utah, 35:1–267.
- Crosby, C.R. & S.C. Bishop. 1927. New species of Erigoneae and Theridiidae. J. New York Entomol. Soc., 35:147–153.
- Platnick, N.I. 1989. Advances in Spider Taxonomy 1981–1987: A Supplement to Brignoli's Catalogue of the Araneae described between 1940 and 1981. Manchester Univ. Press. 673 pp.
- Platnick, N.I. 1993. Advances in Spider Taxonomy 1988–1991, with Synonymies and Transfers 1940–1980. New York Entomol. Soc. 846 pp.

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