



Review of the largest species group of the New World seed beetle genus *Sennius* Bridwell (Coleoptera: Chrysomelidae), with host plant associations

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Abstract

Sennius Bridwell is a New World genus of Bruchinae. Most species are placed in eight groups. In this study the species of the *S. abbreviatus* group are reviewed based on characters of the external morphology and the male genitalia. The group includes 14 species, two of which are new: *Sennius abbreviatus* (Say, 1824), *S. bondari* (Pic, 1929), *S. durangensis* Johnson & Kingsolver, 1973, *S. lawrencei* Johnson, 1977, *S. lebasi* (Fåhraeus, 1839), *S. leucostauros* Johnson & Kingsolver, 1973, *S. lojaensis* (Pic, 1933), *S. medialis* (Sharp, 1885), *S. nappi* Ribeiro-Costa & Reynaud, 1998, *S. rufomaculatus* (Motschulsky, 1874), *S. transversesignatus* (Fåhraeus, 1839), *S. trinotaticollis* (Pic, 1930), *S. vivi* sp. nov. and *S. flinte* sp. nov. The *S. abbreviatus* group differs from other groups by the pattern of sclerites and the shape of the internal sac of the male genitalia, and has three subgroups, defined here. The lectotype of *S. lebasi* is designated. New host plant records are presented for *S. lojaensis* and *S. transversesignatus*, and new distribution records for *S. lawrencei*, *S. lojaensis* and *S. trinotaticollis*.

Key words: Bruchinae, *Sennius abbreviatus* group, Nearctic, Neotropical

E.STO. \ BRASIL 9–15/XII/70 \ C. Elias leg. ”(Light brown) and same paratype label (1, DZUP; 1, CEAM); **Distrito Federal:** 1, “Brasília-DF \ 14/4/89 \ C. A. D. Teixeira”(Light brown) “162-Ce \ Fedegoso”(Light brown) and same paratype label (CEAM); 1, “Brasília-DF \ 14/4/89 \ C. A. D. Teixeira”(Light brown) “163-Ce \ Fedegoso”(Light brown) and same paratype label (MNRJ); 1, “Brasília-DF \ 14/4/89 \ C. A. D. Teixeira”(Light brown) “164-Ce \ Fedegoso”(Light brown) and same paratype label (MZSP); 1, “Brasília-DF \ 14/4/89 \ C. A. D. Teixeira”(Light brown) “171-Ce \ Fedegoso”(Light brown) and same paratype label (TAMU); 1, “Brasília-DF \ 02/5/89 \ C. A. D. Teixeira”(Light brown) “277-Ce \ Fedegoso”(Light brown) “*Senna obtusifolia*”(Light brown) and same paratype label (CNCI); 1, “Brasília-DF \ 10/5/89 \ C. A. D. Teixeira”(Light brown) “297-Ce \ Fedegoso”(Light brown) and same paratype label (DZUP); **São Paulo:** 1, “BRASIL-SP BALSAMO \ DATA, 3/V/87 \ SERINGUEIRA \ COL. BERGMANN, E. C. ”(Light brown) “110 \ AL”(Light brown) “*Sennius* sp. 1 \ C.S. Ribeiro-Costa det. 1991”(Light brown) and same paratype label (FSCA); 1, “BRASIL-SP BALSAMO \ DATA, 3/IX/87 \ SERINGUEIRA \ COL. BERGMANN, E. C. ”(Light brown) “438 \ BA”(Light brown) and same paratype label (DZUP); 2, “BRASIL-SP BALSAMO \ DATA, 17/IX/87 \ SERINGUEIRA \ COL. BERGMANN, E. C. ”(Light brown) “320 \ AL”(Light brown) and same paratype label at the same pin (USNM); 1, “BRASIL-SP BALSAMO \ DATA, 17/IX/87 \ SERINGUEIRA \ COL. BERGMANN, E. C. ”(Light brown) “352 \ AL”(Light brown) and same paratype label (CNCI); 1, “BRASIL-SP BALSAMO \ DATA, 21/IX/88 \ SERINGUEIRA \ COL. BERGMANN, E. C. ”(Light brown) “2783 \ BB”(Light brown) “*Sennius* sp. 4 \ C.S. Ribeiro-Costa det. 1991”(Light brown) and same paratype label (DZUP).

Distribution. BRA (Ceará, Pernambuco, Goiás, Distrito Federal, Espírito Santo, São Paulo).

Host plant. FABACEAE: **Caesalpinioideae:** *Senna obtusifolia* (Sicklepod).

Diagnosis. *Sennius vivi* sp. nov. (subgroup 1) is easily distinguished from all other species of the *S. abbreviatus* group by the color and the pattern of pubescence on the dorsum. The male genitalia is most similar to *S. nappi* (subgroup 1) in having hinge sclerites long and narrow and a group of spicules on the subapical region of similar size. *Sennius vivi* sp. nov. differs by the two groups of spicules on the basal region of the internal sac, which is slightly dense, with few shorter spicules, while in *S. nappi* the spicules of this group are denser and longer.

Etymology. The specific name “vivi” is in honor of Dra. Viviane Grenha, for her great professional and personal contribution in instructing J. H. Viana. This is a noun in apposition, gender feminine.

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