

The holotype, allotype and 19 paratypes are from BRASIL: Goiás, Santa Isabel, Ilha do Banana, Rio Araguaia, 15–22 July 1957, Borys Malkin (California Academy of Sciences, San Francisco, CA, U.S.A.).

LITERATURE CITED

YOUNG, F. N. 1980. Predaceous water beetles of the genus *Desmopachria* Babington: The subgenera with descriptions of new taxa (Coleoptera: Dytiscidae). *Rev. Biol. Trop.* 28(2):305–321, 51 figs.

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SCIENTIFIC NOTE

NEW HOST RECORDS FOR *STATOR SORDIDUS* AND *S. LIMBATUS*
(COLEOPTERA: BRUCHIDAE), WITH COMMENTS ON BRUCHID FEEDING GUILDS

Recently, G. P. Lewis, C. E. Hughes and J. L. Contreras Jimenez collected seeds from two species of *Caesalpinia* (Leguminosae: Caesalpinioideae) in Mexico from which many *Stator sordidus* (Horn) emerged (Table 1). The seeds of both *Caesalpinia* show eggs glued to the seed surface and exit holes of the adults (Figs. 1, 2), typical for *S. sordidus*.

These records are of interest because this bruchid species has not been reared from seeds collected in nature other than those in the legume subfamily Mimosoideae (Johnson 1981a, b). In laboratory experiments when adult *S. sordidus* were exposed to seeds in the genera *Parkinsonia* and *Caesalpinia* (both Caesalpinioideae, tribe Caesalpinieae), they oviposited on the seeds and some of the larvae were able to complete development to adults in the seeds (Johnson 1981b). Although *S. sordidus* has a reported narrow range of hosts in nature, it can feed and develop in a remarkable 20 nonhosts in the laboratory (Johnson 1981b). Because *S. sordidus* has now been reared from seeds of a caesalpinoid legume in nature, this is an indication that it has a much wider range of hosts than has been found heretofore. More collecting will help to resolve this dilemma.

Table 1. New host plants of *Stator*.

Stator sordidus (Horn):

Caesalpinia sp. nov.: Mexico. Oaxaca: 5 km W of Rio Grande on highway to Pinotepa Nacional, 16°01'N, 97°30'W, Alt. 100 m, 25-III-1989 (G. P. Lewis, C. E. Hughes & J. L. Contreras Jimenez #1795).

C. eriostachys Benth.: Mexico. Oaxaca: Highway 200, from Rio Grande to Puerto Escondido, km 110 at San Isidro Llano Grande, 15°58'N, 97°12'W. Alt. 130 m, 26-III-1989 (G. P. Lewis, C. E. Hughes & J. L. Contreras Jimenez #1799).

Stator limbatus (Horn):

Calliandra calothyrsus Meissn.: Nicaragua. Matagalpa, 12°50'N, 85°46'W, Alt. 800 m, 15-I-91 (C. E. Hughes, collector).



Fig. 1. Seeds of *Caesalpinia* sp. nov. with eggs of *Stator sordidus* glued to them and exit holes of adults in them.

Stator sordidus probably was ovipositing on and feeding in seeds of *Caesalpinia* while the seeds were on the ground. Seeds from both pods and the ground were collected and the bruchids emerged several weeks after the seeds were collected. *Caesalpinia eriostachys*, in particular, has a large, woody explosively dehiscent fruit. Thus, most of the seeds would have been on the substrate beneath the parent plants. According to Johnson

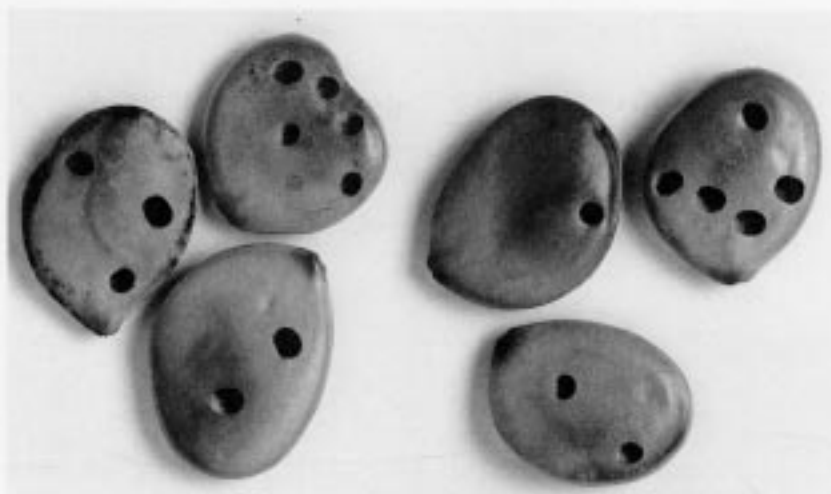


Fig. 2. Seeds of *Caesalpinia eriostachys* with exit holes of adult *Stator sordidus*.

(1981a) *S. sordidus* only oviposits on seeds that have been dispersed, that is, on the substrate usually beneath or near the parent plant. Johnson hypothesized that there were three guilds of bruchids that have different ovipositional behavior. *Stator sordidus* is one of six species of *Stator* that are in the scattered seed guild (Johnson 1981a, Johnson and Siemens 1992).

Stator limbatus (Horn), a member of the mature seed guild (Johnson 1981a), was reared from a previously unreported host, *Calliandra calothyrsus* (Leguminosae: Mimosoideae: Ingeae) from Nicaragua (Table 1).

All records reported here are needed for evolutionary studies currently underway on *Stator*-host interactions.

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LITERATURE CITED

- JOHNSON, C. D. 1981a. Interactions between bruchid (Coleoptera) feeding guilds and behavioral patterns of pods of the Leguminosae. *Environ. Entomol.* 10:249-253.
- . 1981b. Host preferences of *Stator* (Coleoptera: Bruchidae) in non-host seeds. *Environ. Entomol.* 10:857-863.
- , AND D. H. SIEMENS. 1992. Observations on host plant and biogeographical differences in bruchid beetles in southern Ecuador. *Biotropica* 24(2a):195-199.
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