

## SCIENTIFIC NOTE

### First Record of *Sinoxylon anale* Lesne and *Sinoxylon senegalensis* (Karsch) (Coleoptera: Bostrichidae) in Brazil

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#### Primeiro Registro de *Sinoxylon anale* Lesne e *Sinoxylon senegalensis* (Karsch) (Coleoptera: Bostrichidae) no Brasil

**RESUMO** - É registrada pela primeira vez a presença de *Sinoxylon anale* Lesne e *Sinoxylon senegalensis* (Karsch) no Brasil, em madeira importada da Índia e da China.

**PALAVRAS-CHAVE:** Insecta, coleobroca

**ABSTRACT** - *Sinoxylon anale* Lesne and *Sinoxylon senegalensis* (Karsch) are registered for the first time in Brazil in wood imported from India and China.

**KEY WORD:** Insecta, wood borer

Bostrichidae is one of the families of Coleoptera with species of economic importance as agricultural, forestry and forest product pests. Some species of *Sinoxylon* are very harmful to trees, bamboos and wood. *Sinoxylon anale* Lesne is considered one of the most destructive wood borers in India, attacking great variety of plants (Fisher 1950).

According to the "Comitê de Sanidade Vegetal do Cone Sul (2001)", *S. anale* is a quarantine pest to Brazil, Argentina, Uruguay and Paraguay, on host plants such as *Acacia* spp., *Hevea brasiliensis* and fruit trees. However, this species is not considered a quarantine pest by the "Normative Instructions SDA n. 38/1999" (Brasil 1999).

The first record of *S. anale* occurring in South America was reported by Joly *et al.* (1994) in Venezuela, in packing box used for exporting fruits to the United States of America.

In the beginning of 2001, we identified specimens of *S. anale* collected in wood pallets imported from India, in Americana County ( $22^{\circ} 44' S$   $47^{\circ} 20' W$ ), State of São Paulo, and from wood pallets from China, intercepted at the port of Santos ( $23^{\circ} 56' S$   $46^{\circ} 22' W$ ), State of São Paulo. Pinned specimens of this species and *Sinoxylon senegalensis* (Karsch) are deposited in the Collection of the Museum of Zoology, University of São Paulo, and the labels indicate that the insects were collected, in Natal, State of Rio Grande do Norte, Brazil, in airplanes coming from Africa, in 1942/43. Apparently these data were never published.

If established in Brazil, where many of its host plants occur, this insect may become an important pest, causing economic damage in wood of fruit trees, ornamental and industrial trees, as rubber tree, jacaranda, cashew, flamboyant.

Described from India, *S. anale* is also found in Sri Lanka,

Iraq, Saudi Arabia, Asian Southeast, South of China, Malay Archipelago, Philippines, Australia, Indonesia and New Zealand, and has been introduced to various parts of the world by trading activities. It was registered in wood packing and in roots of *Derris* in the ports of New York, Detroit, Philadelphia, San Francisco, Miami and Columbus (Lesne 1906, Fisher 1950).

Sliwa (1971) and Skalski (1971) registered the occurrence of *S. anale* in Poland, in material coming from Pakistan. Argaman (1987) reported its occurrence in Tel Aviv (Israel). Joly *et al.* (1994) registered the occurrence of the species in Venezuela in packing box of fruits. Lesne (1906) reported *S. senegalensis* in Senegal, Mali, Nigeria, Sierra Leone, Egypt, Chade, Sudan and Ghana.

Stebbing & Bell, *apud* Lesne 1906, registered *S. anale* in dead wood of *Dalbergia latifolia* Roxb. and *D. sissao* Roxb. (Leguminosae), *Xylia dolabriformis* Benth. (Mimosaceae), *Shorea robusta* Gaertn. (Dipterocarpaceae) and bamboo. Lesne (1906) reported *Terminalia belerica* Roxb. (Combretaceae) and *Mallotus roxburghianus* Mueil. (Euphorbiaceae) as hosts of *Sinoxylon*. Cotes (1889), *apud* Lesne (1906), observed the attack of *S. anale* in bamboo, cardamom capsules and grains of *Dolichos uniflorus* Lam. and *D. lablab* L. Beeson & Bhatia (1937), *apud* Fisher (1950), registered 67 botanical species as hosts of *S. anale* in India. It is a common species in the forests, timber depots, sawmills and furniture industries, and is a primary borer in the sapwood of logs, and timbers used in house building, boxes, and packing cases. Bhot & Lila (1978) studied the biology and habits of *S. anale* Lesne, 1897 in kampas (*Koompassia melaccensis*), in Thailand. Gnanaharan *et al.* (1983) registered its occurrence attacking logs and rubber

tree boards (*Hevea brasiliensis*). Gnanaharan *et al.* (1985) indicated *S. anale* as the second most important pest of stored wood of cashew (*Anacardium occidentale*). Pratap & Bhandari (1987) registered the occurrence of *S. anale* attacking wood of *Acacia tortilis*.

Argaman (1987) reported a severe outbreak of *S. anale* in *Delonix regia*, in Tel Aviv (Israel), in 1984, and although the trees were burned, this did not prevent the establishment of the insect in Israel. The author pointed out that the species is one of the most destructive wood borers.

Hutacharern & Choldumrongkul (1989) surveying insects on *Acacia mangium*, *A. auriculiformis*, *Leucaena diversifolia* and *L. leucocephala* x *L. diversifolia* (K743) in Thailand, registered *S. anale* and *Sinoxylon* spp. as key pests, causing more than 30% of damage. Joly *et al.* (1994) registered the species in dry branches of acacia (*Delonix regia*). Ho & Hashim (1997) observed the occurrence of six Bostrichidae species, among them *S. anale* and *Sinoxylon conigerum* Gerstaecker, under field conditions in rubber wood (*Hevea brasiliensis*).

According to Lesne (1906), *S. senegalensis* attacks wood and live Leguminosae trees of the genera *Acacia* (*A. albida* Delile and *A. disapparetis* Turez) and *Albizia*. Bushara (1981) mentioned *Acacia seyal* and *A. nilotica* as hosts of *S. senegalensis* in Sudan.

The material is deposited in the Collection of the "Instituto Agronômico de Campinas" (IACC), under numbers 7363 and 7456, respectively.

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