

Occurrence of *Selenisa sueroides* (Guenée, 1852) (Lepidoptera: Noctuidae) in soybeans in Brazil

Ocorrência de Selenisa sueroides (Guenée, 1852) (Lepidoptera: Noctuidae) em soja no Brasil

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ABSTRACT: In this study, we report the occurrence of *Selenisa sueroides* (Guenée, 1852) in soybean crops in Brazil. *S. sueroides* worms were observed defoliating soybean crops in the municipality of Itaporã, state of Mato Grosso do Sul. The occurrence of this species has also been reported in the cities of Laguna Carapã, Itaquiraí, Dourados, Aral Moreira, and Chapadão do Sul, all in the same state, and the municipality of Campo Novo do Parecis, in Mato Grosso state.

KEYWORDS: defoliation; first report; soybean looper; *Glycine max* L.

RESUMO: Neste trabalho é relatada a ocorrência de *Selenisa sueroides* (Guenée, 1852) na cultura da soja no Brasil. *S. sueroides* foi observada desfolhando a cultura da soja no município de Itaporã, Mato Grosso do Sul. A ocorrência da espécie vem sendo notada também nas cidades de Laguna Carapã, Itaquiraí, Dourados, Aral Moreira e Chapadão do Sul, no mesmo estado, além do município de Campo Novo do Parecis, no Mato Grosso.

PALAVRAS-CHAVE: desfolha; primeiro registro; lagartapinça; *Glycine max* L.

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Received on: 03/17/2015. Accepted on: 10/04/2016

Selenisa sueroides (Guenée, 1852) (Lepidoptera: Noctuidae) is a polyphagous species that has been reported in legumes (Fabaceae, Mimosaceae, Caesalpiniaceae), Poaceae, and Euphorbiaceae (ZAGATTI et al., 1995), and it is well known feeding others plants. This study reports the occurrence of *S. sueroides* in soybean crops in the state of Mato Grosso do Sul, besides other occurrences of this species in this crop in Brazil.

BRUSHWEIN et al. (1989) and BRUSHWEIN; CHILDERS (1990) reported the appearance of *S. sueroides* in irrigated citrus groves in southwest Florida in 1987. In addition to citrus, this species has been observed in Fabaceae (BRUSHWEIN et al., 1989). FORMENTINI et al. (2009) cite the occurrence of this species associated with soybean crops in Honduras and Nicaragua. According to WAGNER et al. (2011), *S. sueroides* has been found in Acacia, *Pithecellobium*, senna, and other legumes in Florida and Texas, and it is becoming common in subtropical areas, where it is active year-round.

In Brazil, there have been reports of *S. sueroides* moths being collected in light traps in areas of crops and cerrado in Balsas, Maranhão (CAMARGO, 2001). More recently, in Vale dos Vinhedos, in serra gaúcha, a *S. sueroides* moth was collected in grape vines (ZENKER et al., 2010).

Specimens of *S. sueroides* were collected in December 2014, in the municipality of Itaporá (22°4'56"S, 54°47'20"W; 351 m altitude), Mato Grosso do Sul, Brazil. The caterpillar (Fig. 1), initially named "lagarta-pinça", was found in soybean plants, variety NA 5909 RR, vegetative stage V4, in a wet lowland of the Água Boa Farm, property of George Louveira Matoso. Damage was more severe at the field edges, which also was observed visually. All specimens exhibited the habit of defoliating plants.

The caterpillars were sent to the Laboratory of Applied Entomology of Universidade Federal da Grande Dourados (UFGD), maintained in rearing facilities at 25±2°C, 70±10% relative humidity, and photoperiod of 12 hours in order to obtain adults. They were kept in plastic containers (100 mL) and fed soybean leaves variety BMX Potência until reaching the pupal phase (Fig. 2). The adults (Fig. 3) obtained were maintained in cylindrical polyvinyl chloride (PVC) cages (15×22 cm) and fed a 10% honey solution in an attempt to rear the species under laboratory conditions, which was unsuccessful. The duration of the pupal phase was 15 days (n=7 pupae), and adult life span, 16 to 18 days (n=5 individuals).

The specimens were identified in the Laboratory of Applied Entomology of UFGD as *S. sueroides* by Biol. MSc. Ellen P. de Souza, and this is the first report of this species in soybean crops in Brazil.

Due to its remarkable morphological difference in the larval stage of other species of defoliating caterpillars commonly found in the region, supposed the visit reports of the field it the same species, which between 2006 and 2007 in

the city of Chapadão do Sul, Mato Grosso do Sul, in the forage legume *Stylosanthes*. However, the populations were small, without economic importance. In 2013 in a property located in the municipality of Itaquiraí, also in Mato Grosso do Sul, a small population of this species was reported in the soybean variety BMX Potência, reproductive stage R5.2, causing damage due to defoliation.

More recently, in the city of Itaporá species supposedly has also been observed in the cities of Laguna Carapá, Aral Moreira, Itaquiraí and Dourados. Later, adult specimens were captured in a light trap at the UFGD. Caterpillars of *S. sueroides* have also been noticed in soybean crops in the state of Mato



Figure 1. Caterpillar *Selenisa sueroides* (Guenée, 1852) (Lepidoptera: Noctuidae).



Figure 2. Pupae and exuvia of *Selenisa sueroides* (Guenée, 1852) (Lepidoptera: Noctuidae).



Figure 3. Adult of *Selenisa sueroides* (Guenée, 1852) (Lepidoptera: Noctuidae).

Grosso. In the municipality of Campo Novo do Parecis, Mato Grosso, this species was more commonly found at the edge of stands, showing the beginning of the installation on the farm. In this case, no damage was verified or did not require control measures.

It is assumed that *S. sueroides* populations are reduced with the simultaneous control of other caterpillars, where most of the pesticides used is effective to control it.

The recent reports of occurrence of *S. sueroides* in soybean crops of 2014/2015 indicate that studies on this species are

needed, as its defoliating habit might become a problem to soybean crops in Brazil.

ACKNOWLEDGMENTS

The authors thank George Louveira Matoso and Daniel Cesar Nepomuceno for samples, and Thiago Ferreira Bertoncello for additional reports in the field.

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