

First record of *Biclonuncaria deuttera* Razowski & Becker, 1993 (Lepidoptera: Tortricidae) on *Arachis repens* Handro (Fabales: Fabaceae)

Primeiro registro de *Biclonuncaria deuttera* Razowski & Becker, 1993 (Lepidoptera: Tortricidae) em *Arachis repens* Handro (Fabales: Fabaceae)

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ABSTRACT: *Arachis repens* Handro (Fabales: Fabaceae) peanut grass shoots were collected at São Paulo State University, Campus of Registro, São Paulo, Brazil, in March 2017 to record a Lepidoptera that was injuring the plant. The species was identified as *Biclonuncaria deuttera* Razowski & Becker, 1993 (Lepidoptera: Tortricidae).

KEYWORDS: ornamental plants; potential pest; Vale do Ribeira.

RESUMO: Folhas de grama-amendoim *Arachis repens* Handro (Fabales: Fabaceae) foram coletadas no Câmpus da Universidade Estadual Paulista, no município de Registro (SP), no mês de março de 2017, para registrar um Lepidoptera que causava injúrias à planta. A espécie foi identificada como *Biclonuncaria deuttera* Razowski & Becker, 1993 (Lepidoptera: Tortricidae).

PALAVRAS-CHAVE: plantas ornamentais; praga potencial; Vale do Ribeira.

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Arachis repens Handro (Fabales: Fabaceae) (peanut grass) is a species of the family Fabaceae, native to Brazil. Its origin is northern Minas Gerais state, often used as an ornamental plant and forage to prevent soil erosion in gardens, orchards or green roofs (FÁVERO; VALLS, 2018). It is a perennial plant with a fibrous root system, branches with adventitious roots at nodes, tetrafoliate leaves with elliptical to obovate leaflets reaching 20-35 mm long × 8-12 mm wide (KRAPOVICKAS; GREGORY, 2007).

There are only a few works regarding pests to *Arachis* wild species. Reported from Pinto peanut *Arachis pintoi* (KELEMU et al., 1994), they are: leafcutter ants *Atta* spp. (Hymenoptera: Formicidae); lepidopteran larvae, such as the bean-leaf webworm moth *Omiodes indicata* (Lepidoptera: Crambidae), synonym *Hedylepta indicata*; fall armyworm *Spodoptera frugiperda* (Lepidoptera: Noctuidae); lesser cornstalk borer *Elasmopalpus lignosellus* (Lepidoptera: Pyralidae); and, red-necked peanutworm moth *Stegasta bosqueella* (Lepidoptera: Gelechiidae). FAZOLIN et al. (2015) registered arthropods of economic importance to Pinto peanut, emphasizing mites, thrips, beetles and one bug species, but no lepidopterans.

This work presents the first record of *Biclonuncaria deuttera* (Lepidoptera: Tortricidae) on *A. repens*, as well as the description of injuries caused by it.

In March 2017, shoots of *A. repens* with closed leaflets (Fig. 1) were collected in gardens of the São Paulo State University, Campus of Registro (24°30'04.7"S 47°51'07.5"W), in which small larvae measuring around 10 mm (Fig. 2) and pupae around 5 mm in length (Fig. 1b) were found.

The collected material was carried to Unesp Plant Health Laboratory in Registro, placed in Petri plates with humidified filter paper in the bottom and kept in acclimated chambers (25 °C, 14 h photophase) in order to obtain adults for identification to species level. Adults (Fig. 3) were sacrificed with ethyl acetate, mounted on entomological pins and sent to specialist Ph. D. Vitor Osmar Becker, who identified them as *B. deuttera* (Lepidoptera: Tortricidae), described by RAZOWSKI; BECKER (1993) from specimens collected in Nova Lima, Minas Gerais, Brazil, in 1983.

The biology of *Biclonuncaria* is yet unknown. However, *Biclonuncaria dalbergiae* RAZOWSKI; BECKER (1993) host plant is *Dalbergia frutescens* (Fabales: Fabaceae), synonym *Dalbergia variabilis*, from which it has successfully been reared. Distribution of the genus in the Brazilian territory includes the states of São Paulo, Rio de Janeiro, Minas Gerais, Paraná, Santa Catarina and the Federal District (RAZOWSKI; BECKER, 1993).

RAZOWSKI; BECKER (1993) do not describe immature stages of *B. deuttera*. Nevertheless, it seems to be remarkably like those of *B. dalbergiae*, said to have larvae around 10 mm in length, translucent green body, yellow head and brownish pupae around 5 mm in length.



Figure 1. *Biclonuncaria deuttera* injuries on *A. repens* leaves (a); injuries close-up with *B. deuttera* pupae (b).



Figure 2. *Biclonuncaria deuttera* final instar larva.



Figure 3. Dorsal view of an adult *B. deuttera*.

During its larval stage, *B. deuttera* larva spin two to four leaflets together by weaving silk, forming a shelter where it scrapes vegetal tissues for feeding and dwelling inside until the adult emergence (Fig. 1). These injuries resemble those of *O. indicata* on common bean *Phaseolus vulgaris* L., in which young larvae live between leaves spun together, feeding on their mesophyll (QUINTELA; BARBOSA, 2015).

These injuries damage the leaves, compromising the aesthetics of this ornamental plant, turning *B. deuttera* into a potential pest for gardens with *A. repens*.

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