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Authors: De Menezes, Claubert W. G., Soares, Marcus A., De Assis Júnior, Sebastião L., De Menezes, Sady Júnior M. C., Dos Santos, José B., et al.

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**BRONTOCORIS TABIDUS** (HETEROPTERA: PENTATOMIDAE) PREYING ON **PODALIA WALKERI** (LEPIDOPTERA: MEGALOPYGIDAE) ON EUCALYPT PLANTS IN BRAZIL

CLAUBERT W. G. DE MENEZES¹, MARCUS A. SOARES¹,⁎, SEBABÃO L. DE ASSIS JÚNIOR², SADY JÚNIOR M. C. DE MENEZES³, JOSÉ B. DOS SANTOS¹ AND JOSÉ C. ZANUNCIO⁴

¹Departamento de Agronomia, Universidade Federal dos Vales do Jequitinhonha e Mucuri (UFVJM), Diamantina, 39100-000, Minas Gerais State, Brazil

²Departamento de Engenharia Florestal, Universidade Federal dos Vales do Jequitinhonha e Mucuri (UFVJM), Diamantina, 39100-000, Minas Gerais State, Brazil

³Instituto de Três Rios (ITR), Universidade Federal Rural do Rio de Janeiro (UFRRJ), Três Rios, 25802-100, Rio de Janeiro State, Brazil

⁴Departamento de Biologia Animal, Universidade Federal de Viçosa (UFV), Viçosa, 36570-000, Minas Gerais State, Brazil

⁎Corresponding author; E-mail: marcusasoares@yahoo.com.br

**Eucalyptus** spp. (Myrtales: Myrtaceae: Eucalyptae) are intensively cultivated in Brazil to produce raw materials for industry and construction, and products such as wood, coal, cellulose, and oils (Zanuncio et al. 2010). Lepidopteran defoliators are found in eucalypt plantations whose importance is increasing (Soares et al. 2009a). Integrated Pest Management (IPM) can reduce the use of pesticides (Pires et al. 2011a; Souza et al. 2012) and conservation of natural enemies is essential for IPM programs to manage lepidopteran pests in eucalypt plantations (Lacerda et al. 2004).

Caterpillars recorded damaging eucalypt in Brazil includes *Automeris* sp. (Walker), *Eacles imperialis* (Walker) and *Hylesia* sp. Hübner (Lepidoptera: Saturniidae), *Eupseudosoma aberrans* (Schaus) and *Eupseudosoma involuta* (Sepp) (Lepidoptera: Arctiidae), *Oxydia vesulia* (Cramer), *Sabulodes caberata* (Guenée) and *Thyrinteina arnobia* (Stoll) (Lepidoptera: Geometridae), *Euselasia eucerus* (Hewitson) (erroneously reported as *Euselasia ap isoan*) and *Euselasia hygenius* (Stoll) (Lepidoptera: Riodinidae) (Zanuncio et al. 1998; Soares et al. 2009b,c).

*Podalia walkeri* (Berg) (Lepidoptera: Megalopygidae) was reported as a significant defoliator in eucalypt plantations in Minas Gerais State (Zanuncio et al. 1998) and Rio Grande do Sul State (Bernardi et al. 2011). Thus, studies on *Podalia walkeri* caterpillars before eclosion are of great importance for the IPM of this pest in eucalypt plantations. Preliminary studies indicate that nymphs of *B. tabidus* can dominate and kill a caterpillar of *P. walkeri* in 16 min, and may consume several *P. walkeri* caterpillars before eclosing into the adult. Caterpillars of *P. walkeri* have previously been reported to damage this plant in Minas Gerais State (Zanuncio et al. 1998) and Rio Grande do Sul State (Bernardi et al. 2011). This pest is a significant defoliator of eucalypt plants, and there are no effective strategies for its control in commercial plantations. Besides, the stinging hairs of *P. walkeri* caterpillars can cause health problems in humans (Cardoso & Haddad Júnior 2005; De Roold et al. 2000).

**Brontocoris tabidus** is a generalist predator that naturally controls defoliating insects in *Eucalyptus* plantations in Brazil. This species is the first to arrive in areas infested by defoliating caterpillars, followed by other predator species, especially *Podisus nigrispinus* Dallas (Pentatomidae); and these natural enemies build large populations in the field (Zanuncio et al. 2011). Moreover, *B. tabidus* is easily reared in the laboratory and has potential for biological control programs (Pires et al. 2011b; Zanuncio et al. 2011). Thus, studies on the biology and mass rearing of *B. tabidus* and its predation rate on *P. walkeri* both in the laboratory and the field are being conducted in order to allow the use of this natural enemy in biological control programs of *P. walkeri* caterpillars.
This is the first report *B. tabidus* preying on *P. walkeri* in Brazil. Our observations suggest that *B. tabidus* has the potential to suppress *P. walkeri* caterpillars as a component of IPM programs in eucalyptus plantations. This predator appears able to keep populations of *P. walkeri* below the economic injury level, and thereby preclude the excessive use of pesticides, and minimize losses in eucalyptus production as well as accidents involving workers in eucalyptus plantations.

**SUMMARY**

There are many *Eucalyptus* spp. of commercial importance in Brazil. However, plants of this genus can be damaged by lepidopteran defoliators, which necessitates the development of Integrated Pest Management (IPM) programs against these pests. We observed significant levels of predation of *Podalia walkeri* (Berg) (Lepidoptera: Megalopygidae) caterpillars by *Brontocoris tabidus* (Signoret) (Heteroptera: Pentatomidae) on eucalyptus plants in Diamantina, Minas Gerais State, Brazil. Our observations suggest that *B. tabidus* has the potential to suppress *P. walkeri* caterpillars as a component of IPM programs in eucalyptus plantations.

**Key Words:** Asopinae, biological control, caterpillars, IPM, Pentatomidae

**RESUMO**

*Eucalyptus* spp. possui várias espécies de interesse comercial no Brasil. No entanto, plantas desse gênero podem ser danificadas por lepidópteras desfolhadoras, o que torna necessário o Manejo Integrado de Pragas (MIP) para esses insetos. Foi relatada, neste trabalho, a predação da lagarta *Podalia walkeri* (Berg) (Lepidoptera: Megalopygidae) pelo percevejo predador *Brontocoris tabi-
dus (Signoret) (Heteroptera: Pentatomidae), em plantas de eucalipto no município de Diamantina, Minas Gerais, Brasil.

Palavras Chave: Asopinae, controle biológico, lagartas, MIP, Pentatomidae

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