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Short Communication Open Access

# First Record of *Poekilloptera Phalaenoides* (Hemiptera: Flatidae) Hosting *Mimosa Caesalpiniaefolia* (Mimosaceae) in Diamantina, Minas Gerais State, Brazil

**Claubert Wagner Guimarães de Menezes[1], Marcus Alvarenga Soares[2], Sebastião Lourenço de Assis Júnior[3], Arley José Fonseca[1] and José Cola Zanuncio[4]***

[1]Agronomist, M.Sc. in Plant Production, Universidade Federal dos Vales do Jequitinhonha e Mucuri, 39.100-000, Diamantina, Minas Gerais, Brazil
[2]D.Sc. in Entomology, Professor of the Post Graduate Program in Plant Production, Universidade Federal dos Vales do Jequitinhonha e Mucuri, 39100-000, Diamantina, Minas Gerais, Brazil
[3]D.Sc. in Forestry Sciences, Professor of the Department Forestry Engineering, Universidade Federal dos Vales do Jequitinhonha e Mucuri, 39.100-000, Diamantina Minas Gerais, Brazil
[4]Ph.D. in Entomology, Professor of the Department Animal Biology, Universidade Federal de Viçosa, 35.930-000, Viçosa, Minas Gerais, Brazil

## Abstract

*Poekilloptera phalaenoides* (Hemiptera: Flatidae) was reported on *Mimosa caesalpiniaefolia* (Fabaceae) in Diamantina, Minas Gerais State, Brazil. Immature and adults of *P. phalaenoides* were collected for identification on *M. caesalpiniaefolia*, which represents the first report of this insect on this plant. This preliminary study showed that *M. caesalpiniaefolia* is a potential host of *P. phalaenoides*.

**Keywords:** Host plant; Pests; Planthoppers

*Mimosa caesalpinieaefolia* Benth (Mimosaceae), native to northeastern Brazil, is a pioneer and deciduous ornamental plant. Its timber is useful as stakes, poles, firewood and charcoal. It is also used as living barrier against strong winds in restoring degraded areas and in urban regions. In addition, this plant is used as food for cattle due to its rapid growth, resistance to prolonged droughts and high protein content in its leaves [1,2]. Sap-sucking insects can damage this plant including death of terminal buds, dried up and deformation of leaves, losses of apical dominance and depreciating plant quality [2].

Immature and adults of *P. phalaenoides* were found on *M. caesalpiniaefolia* (Figure 1) in October 2011 in the city of Diamantina (18° 18 'S and 43º 36' W, mean annual rainfall of 1082 mm, average temperature of 19.4°C and 1250 m altitude), Minas Gerais State, Brazil. This species of insect was identified by Dr. Stephen W. Wilson of the Department of Agriculture at the University of Central Missouri, USA.

**Figure 1:** Nymphs (white arrow) and adults (black arrow) of Poekilloptera phalaenoides (Hemiptera: Flatidae) on Mimosa caesalpiniaefolia (Mimosaceae). Insect: Lateral view, showing black dots (black arrow) on the insect wing.

Insects were observed and collected on plants from a living barrier in an urban area and they were feeding on plant twigs and branches with wet and sticky excretions. It suggests that *M. caesalpiniaefolia* could be a breeding site for *P. phalaenoides*, besides being a source of shelter and food and, therefore, a potential host for this leafhopper.

*Poekilloptera phalaenoides* (Linnaeus 1758) (Auchenorrhyncha: Flatidae) has been reported in several Brazilian States such as Bahia, Goiás, Mato Grosso, Minas Gerais, Pará, Paraíba, Rio de Janeiro, Rio Grande do Sul, Roraima, São Paulo and Sergipe [3-5]. It is pale yellow in color with black spots and marks on the wings (Figure 1). This insect also feeds on sap and excretes a substance rich in sugars that can favor fungi growth, known as sooty mold, which affects respiration, transpiration and photosynthesis of host plants [3,5,6]. Several plants, such as those of the genera *Acacia* and *Albizia* (*A. mangium* and *A. podalyriaefolia*) (Mimosaceae), *Annona* (Annonaceae), *Cajanus* and *Dipteryx* (Fabaceae), *Cassia* and *Delonix* (Caesalpiniaceae), *Citrus* (Rutaceae), *Coffea* (Rubiaceae), *Enterolobium* (Mimosaceae), *Eucalyptus* and *Psidium* (Myrtaceae), *Inga* (Mimosaceae), *Mangifera* (Anacardiaceae), *Pithecelobium* (Mimosaceae), *Rosa* and *Prunus* (Rosaceae) and *Theobroma* (Sterculiaceae) are hosts of *P. phalaenoides* [3,5,6].

This work represents the first report of the *P. phalaenoides* hosting *M. caesalpiniaefolia* in Diamantina, Minas Gerais State, Brazil. This

***Corresponding author:** José Cola Zanuncio , Ph.D. in Entomology, Professor of the Department Animal Biology, Universidade Federal de Viçosa, 35.930-000, Viçosa, Minas Gerais, Brazil, Tel: 0XX 3138992534/2920; Fax: 0XX 3138992864; E-mail: zanuncio@ufv.br

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preliminary study showed that this plant is a potential host for *P. phalaenoides*.

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