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Sclerolobium paniculatum Vogel (Leguminosae: Caesalpinioideae), A New Host Plant for *Poekilloptera phalaenoides* (Linnaeus, 1758) (Hemiptera: Auchenorrhyncha: Flatidae)

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Abstract

Sclerolobium paniculatum Vogel (Leguminosae: Caesalpinioideae) is a plant common in the forests of the Amazon, can still be found in forest fragments and also near to urban area. Adults and nymphs of *Poekilloptera phalaenoides* (Linnaeus, 1758) (Hemiptera: Auchenorrhyncha: Flatidae) were found colonizing *S. paniculatum* in Sinop, Mato Grosso State, Brazil, during the months of June and July 2012. This is the first record of this insect in the municipality of Sinop and on plants of *S. paniculatum* which can be considered a new host plant for this specie, which can be considered as a new host plant for this insect due to the fact been observed all stages of the life cycle of *P. phalaenoides*.

Keywords: Host plant; Adults; Immatures; Gregarious habit

Sclerolobium paniculatum Vogel (Leguminosae: Caesalpinioideae) is a native plant of the Brazilian Amazon, can still be found in Guyana, Peru, Suriname and Venezuela [1]. In Brazil, there is reports to the states of Bahia, Goiás, Mato Grosso and Minas Gerais [2]. In industry, this plant is important because the quality of wood primarily for the production of firewood and charcoal, can be compared to eucalyptus [3].

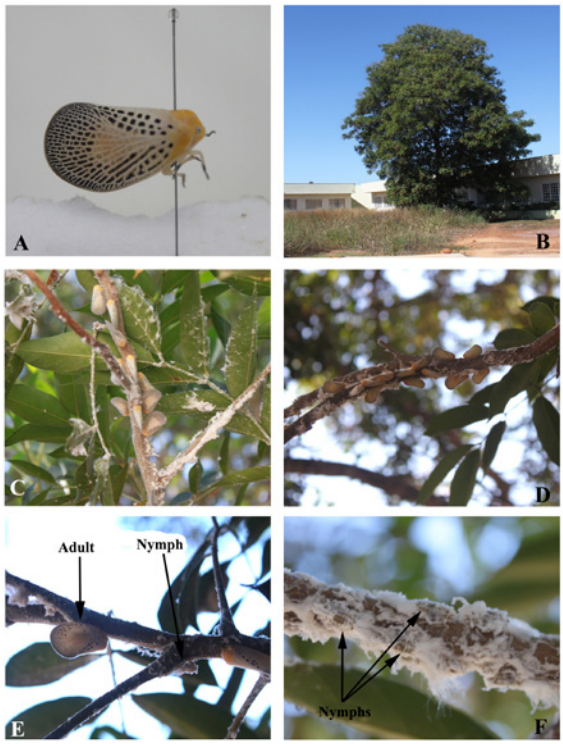

Figure 1: (A) Adult of *Poekilloptera phalaenoides* (Hemiptera: Auchenorrhyncha: Flatidae). **(B)** Plant of *Sclerolobium paniculatum* (Leguminosae: Caesalpinioideae) in University Unit of Sinop of Federal University of Mato Grosso, municipality of Sinop, Mato Grosso State, Brazil. **(C & D)** Detail of *P. phalaenoides* and its gregarious habit distinction for the presence of fumagine. **(E)** Adults e nymphs of *P. phalaenoides*. **(F)** Detail of the nymphs of *P. phalaenoides*.

Poekilloptera phalaenoides (Linnaeus, 1758) (Hemiptera: Auchenorrhyncha: Flatidae) is recorded from Mexico through and Brazil [4]. In Brazil it has been reported in the States of Bahia, Goiás, Mato Grosso, Minas Gerais, Pará, Paraíba, Rio de Janeiro, Rio Grande do Sul, Roraima, São Paulo and Sergipe [5-10].

This flatid is characterized by having general pale yellowish color with black spots on the tegmina and wings (Figure 1 A) [11]. It is phytophagous [4] and excretes a sticky substance that causes honeydew to grow on the plant and cover leaves and branches, obstructing to some level the plant breathing, transpiration and photosynthesis [9]. Plants considered as potential hosts for *P. phalaenoides* include species of the genera *Cassia*, *Delonix* (Caesalpiniaceae), *Cajanus*, *Dipteryx* (Fabaceae), *Manguifera* (Anacardiaceae), *Anona* (Anonaceae), *Eucalyptus*, *Psidium* (Myrtaceae), *Rosa*, *Prunus* (Rosaceae), *Coffea* (Rubiaceae), *Citrus* (Rutaceae), *Theobroma* (Sterculiaceae), *Enterolobium*, *Pithecelobium*, *Inga*, *Albizia, Mimosa Caesalpiniaefolia* and *Acacia* (species *A. mangium* and *A. podalyraefolia*) (Mimosaceae) [4,7-9].

Adults and immatures stages of *P. phalaenoides* were found colonizing plants of *S. paniculatum* (Figure 1 B, C, D, E and F) in University Unit of Sinop of Federal University of Mato Grosso (coordinates 11°51'48"S; 55°28'51"W and 377 meters of altitude) in Sinop, Mato Grosso State, Brazil, from second half of June and

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during the month of July 2012. Some specimens were collected and identified through consultation and comparison of morphological traits of specimens deposited in the private collection of the first author which was identified by Dr. Stephen W. Wilson from Department of Agriculture of the University of Central Missouri, USA. The plant was identified by Professor Juliano de Paulo dos Santos from Institute of Sciences Agricultural and environmental of the Federal University of Mato Gosso. After this observation, it was concluded that *S. paniculatum* can be a potential host for *P. phalaenoides*, because this plant can provide favorable conditions of shelter and also a suitable place for reproduction and development of this Flatidae.

Poekilloptera phalaenoides can affect *S. paniculatum* development and wood production in reforestations, competing with plants for photoassimilates and reducing photosynthetic area, due to the honeydew. Thus, *P. phalaenoides* should be monitored in *S. paniculatum* crops, aiming to develop the Integrated Pest Management–IPM of this species.

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