



Notes and Comments

## *Punica granatum* L. (Lythraceae), a new host plant for *Edessa meditabunda* (Fabricius, 1974) (Hemiptera: Pentatomidae) in Mato Grosso, Brazil

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*Edessa meditabunda* is a species of pentatomid popularly known as green and brown stink bug that feeds on plant sap, especially Solanaceae and Leguminosae (Borror and Delong, 1969). Soybean plants are one of the main hosts of this insect (Costa and Link, 1974; Fonseca et al., 2017; Lourenção et al., 1999; Panizzi, 2002, 1997; Stürmer et al., 2014). Other plants, such as dahlia (*Dahlia variabilis*) (Jalmirez Gomes, 1936 cited by Lima, 1940), cotton (Azambuja et al., 2015; Gonçalves et al., 2008; Reay-Jones et al., 2009; Soria et al., 2010), lettuce (Krinski and Pellissari, 2012), chicory (Krinski, 2013); “boldo-brasileiro” (*Plectranthus barbatus*) (Gonçalves et al., 2008), crotalaria (Golin et al., 2011), tobacco, orange (Lima, 1940); “camapu” (*Physalis angulata* and *Physalis peruviana*) (Krinski, 2013; Bado et al., 2005; Soares et al., 2021), “salicornia” (*Salicornia* sp.), tomato (Rizzo, 1971), sunflower (Panizzi and Machado-Neto, 1992), mulberry (*Morus nigra*) (Pasini and Lucio, 2014); and alfafa, pumpkin, potato, pea, bean, corn and bell pepper (Buzzi and Miyazaki, 1999, 1993; Lima and Racca Filho, 1996; Lopes et al., 1974; Lourenção et al., 1999), may also be hosts for this insect species, mainly during the soybean off-season, being attacked and damaged by this pentatomid.

In Brazil, *E. meditabunda* has been reported in the states of Amazonas (Rizzo, 1971), Espírito Santo (Rizzo, 1971),

Goiás (Medeiros et al., 1998), Maranhão (Panizzi, 2002), Mato Grosso (Golin et al., 2011; Krinski et al., 2012), Mato Grosso do Sul (Silva et al., 2021; Silva et al., 2004), Minas Gerais (Rizzo, 1971; Soares et al., 2021), Pará (Krinski, 2013), Paraná (Husch et al., 2014; Rodrigues and Smith, 1976), Rio Grande do Sul (Galileo et al., 1977; Lopes et al., 1974), Santa Catarina (Chiardadia, 2010), São Paulo (Lima, 1940; Rizzo, 1971) and Rio de Janeiro (Gonçalves et al., 2008).

The municipality of Sinop situated in the Mato Grosso State is considered one of the most important area in Brazil for the cultivation of plants like soybean, corn, cotton etc. In the urban area of this city adults and immatures were found colonizing *Punica granatum* plants (pomegranate) (coordinates 11°51'11.0"S; 55°32'12.2"W) from the middle of August until the middle of November 2021. Throughout this period the monitoring of the presence/absence of this insect was performed daily.

*Edessa meditabunda* specimens were mostly observed on young stems (branches). These insects were seen feeding on the leaves (abaxial surface) during the hottest part of the day, always near the ends of the branches and in the upper third of the canopy (Figures 1A-B). None was observed feeding on the fruits.

The *E. meditabunda* egg masses were observed on *P. granatum* leaves on the abaxial part (Figure 1C). The leaves



**Figure 1.** (A and B) *Edessa meditabunda* (Hemiptera: Pentatomidae) feeding on stem and leaves on branches of *Punica granatum* (Lythraceae); (C) Egg mass of *E. meditabunda* on the abaxial part of the leaves of *P. granatum*; (D) First instar nymphs of *E. meditabunda* kept in plastic pots with capacity of 100 mL. (Images: Evaldo Pires).

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containing the egg masses were collected and placed in 100 mL plastic pots to avoid parasitoid insect attacks, protect the eggs and ensure the nymphs' hatching (Figure 1D).

The occurrence of *E. mediatubunda* in Sinop coincides with the dry season where there are no agricultural plantations. Insects occurred after days of irregular rain, using the *P. granatum* plant as an alternative food source in the absence of original hosts. During all periods in which this stink bug was observed in the *P. granatum* plant, no trace of damage or injury was observed on parts such as leaves, stems, flowers and fruits. The presence of all stages of *E. mediatubunda* in *P. granatum* characterizes this plant as a new host for this insect.

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