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Notes and Comments

First report of infestation by *Planococcus citri* (Risso, 1813) (Hemiptera: Pseudococcidae) on *Cyperus esculentus* (Poales: Cyperaceae)

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Planococcus citri (Risso, 1813) (Hemiptera: Pseudococcidae) is an agricultural pest with the ability to develop on fruits, leaves, branches, trunk, and roots of various host plants, including vineyards, orchards (Daane et al., 2008, 2012; Pacheco da Silva et al., 2017), coffee (Santa-Cecília et al., 2009), and other crops. The diversity of *Planococcus* species is considerable, with 148 species recorded on grapevines, 69 on persimmons, 28 on strawberries, and 26 on apple trees (Pacheco da Silva et al., 2017; García Morales et al., 2016). Generally, adult females and nymphs feed on organic compounds from the phloem, excreting excess water and sugar in the honeydew form (Gullan and Martin, 2009).

Although *Planococcus* sp. is recognized as a pest in several globally important agricultural crops, it is important to note that, in the specialized literature, there are no records of infestation on *Cyperus esculentus* (Poales: Cyperaceae), especially on the roots. Therefore, our aim was to report, for the first time, the occurrence of *P. citri* attacking tubers of *C. esculentus*. Observations were conducted in an experimental area of the Universidade Federal de Viçosa (UFV), in the Zona da Mata region of Minas Gerais, Brazil, over two cycles in 2023. In this area, experiments were being conducted to evaluate the development of technologies for the cultivation of *C. esculentus* in the Zona da Mata region of Minas Gerais.

The attacks were observed on all tubers of the plants (Figure 1A, 1B, 1D). Additionally, significant damage was found on the *C. esculentus* tubers (Figure 1C). The *P. citri*

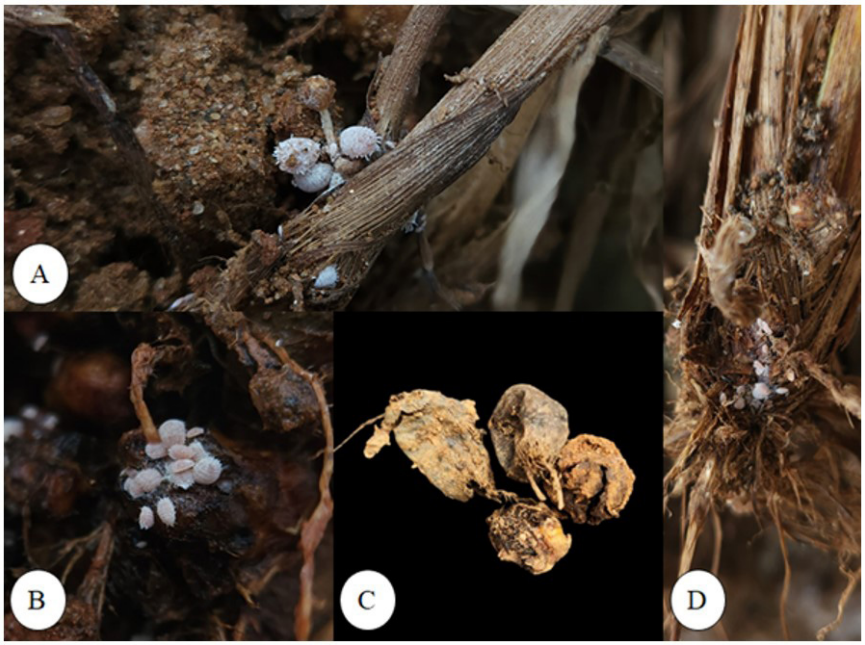

Figure 1. *Planococcus citri* (Risso, 1813) (Hemiptera: Pseudococcidae) attacking *Cyperus esculentus* (Poales: Cyperaceae) tubers.

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insects had normal mobility and were identified by the crop science graduate student Márcio Antônio Godoi Junior and professor Wellington Souto Ribeiro, both from UFV. As a result, direct damage to the tubers was verified; the sucking insects feeding on reserve organic compounds may weaken the plant, making it vulnerable to opportunistic biological agents.

Although *P. citri* is not considered a primary pest of *C. esculentus*, it is crucial to thoroughly investigate infestations to understand their extent, magnitude, and potential damage to this crop and others. Such attacks represent a new threat to the production of *C. esculentus* tubers, which can result in significant losses and reduced yields. The crop itself may release volatile compounds that make it attractive to insects, turning it into an alternative host for feeding and reproduction in an exotic environment (Clavijo McCormick et al., 2023), increasing the risk to other agricultural crops. It is worth noting that this crop occurs in various regions and, being a host, may endanger other agricultural crops susceptible to this pest. However, it is important to emphasize that these infestations may be related to climate change or human activity, increasingly common in agricultural areas (Skendžić et al., 2021).

In summary, the discovery of *P. citri* attacking tubers of *C. esculentus* presents a new challenge for producers of this exotic crop and for the scientific community, given that it is a polyphagous insect, making its control difficult. Preventive monitoring of this pest and its spread should be disseminated and studied to deepen the understanding of *P. citri* behavior in *C. esculentus* and develop control strategies that minimize potential damage.

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