

# Occurrence of *Phidotricha erigens* Raganot, 1889 (Lepidoptera: Pyralidae) in corn in Brazil

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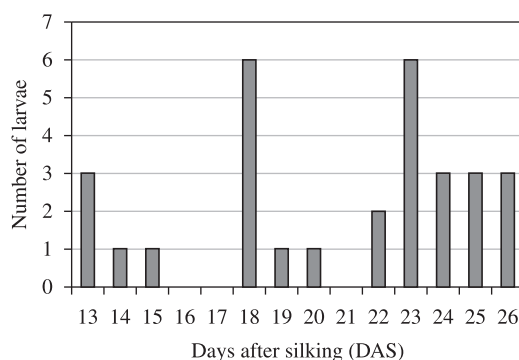
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Among the factors that affect corn yields in Brazil is the occurrence of insect pests during the crop growth, especially during the reproductive phase, such as those that occur on ears. In other Latin America countries, among secondary insects is *Phidotricha erigens* Raganot, 1889 (Lepidoptera: Pyralidae), described to be attacking ears of corn in Peru and Colombia (Wille, 1943 *apud* Costa Lima, 1950, p. 83; Cajiao et al., 1984). In Brazil, it was misidentified as *Pococera atramentalis* Lederer, 1863 (Lepidoptera: Pyralidae) by Costa Lima (1950) (Vitor Osmar Becker, personal information) and it is reported in other cultivated species (Costa Lima, 1950; Nava et al., 2006), but there is no mention of any occurrence in corn. This work reports the first occurrence of *P. erigens* feeding on corn in Santa Maria, Rio Grande do Sul, Brazil.

An experiment of 680 m<sup>2</sup> (34 m × 20 m) at an experimental area of “Universidade Federal de Santa Maria” (UFSM), in Santa Maria (29° 43’ S and 53° 43’ W, 95 m asl) was carried out from January to May, 2011. The central crop area was divided into 20 plots of 24 square meters each (6 m × 4 m), and the remaining area was used as side boundaries. Sampling was performed by taking two ears randomly per plot (40 ears/sample), on a daily basis, during almost all the reproductive subperiod, from the seventh day after silking (DAS) until the 26<sup>th</sup> DAS, with a total of 20 samples and 800 evaluated ears. Collected material was identified and sent to a laboratory, where an occurrence of larvae was observed on each ear. Afterwards, insects were counted, separated and kept individually in 100 mL plastic cups having an artificial diet until adult emergence for proper identification. A total of 30 *P. erigens* larvae were found, distributed in three different body size ranges: <0.5cm (22 larvae), 0.6 – 1cm (3 larvae) and >1 cm (5 larvae) and represented the second lowest rate among lepidopteran insects. Earworm, *Helicoverpa zea* Boddie, 1850; Fall armyworm *Spodoptera frugiperda* (J. E. Smith, 1797) (Lepidoptera: Noctuidae), and *Dichomeris famulata* Meyrick, 1914 (Lepidoptera: Gelechiidae) were also found, with a total of 308, 90 and 26 insects, respectively. *P. erigens* larvae occurred from the 13<sup>th</sup> to 26<sup>th</sup> DAS, which corresponded to 27.03.2011 to 09.04.2011 dates (last sample), during the R3 and R4 corn reproductive stages. The highest infestation was on the 18<sup>th</sup> and 23<sup>rd</sup> DAS, with six larvae (Figure 1), totaling 15% and 12.5%



**Figure 1.** Number of *Phidotricha erigens* Raganot, 1889 larvae collected during the corn reproductive phase. Santa Maria, Rio Grande do Sul State, March/April 2011.

of evaluated corn ears infested, respectively. Likewise on the 23<sup>rd</sup> DAS, it was the only sample in which more than one larva per ear was found (two larvae).

The record of *P. erigens* feeding on corn in Brazil demonstrates the adaptability of this insect to Brazilian subtropical conditions. This characteristic added to the diversity of host crops leads to a concern for monitoring this species even as a secondary insect pest.

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