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Notes and Comments

Erythrina Stem Borer, *Terastia meticulosalis* (Lepidoptera: Crambidae) and reforestation efforts of the Atlantic Forest biome in Brazil with seedlings of mulungu-do-litoral, *Erythrina speciosa*

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A pantropical genus of coral trees, *Erythrina* (Fabaceae), contains approximately 130 species, many of which are of medical importance [e. g., Fahmy et al. (2018), (2020)]. For instance, *E. mulungu* Kuntze has anxiolytic and anti-inflammatory properties, *E. speciosa* Andrews and *E. variegata* L. have analgesic and antiseptic effects (Holetz et al., 2002; Rambo et al., 2019) and *Erythrina suberosa* Roxb has been used to treat leukemia (Kumar et al., 2013). Moreover, these plants are highly valuable horticultural species because of their flame-like flowers. In Brazil, these trees are frequently used for decorating city streets (e. g., Figure 1.1), and they are also used as shade trees. They are favored by hummingbirds and insects [e. g., Vitali-Veiga and Machado (2000)].

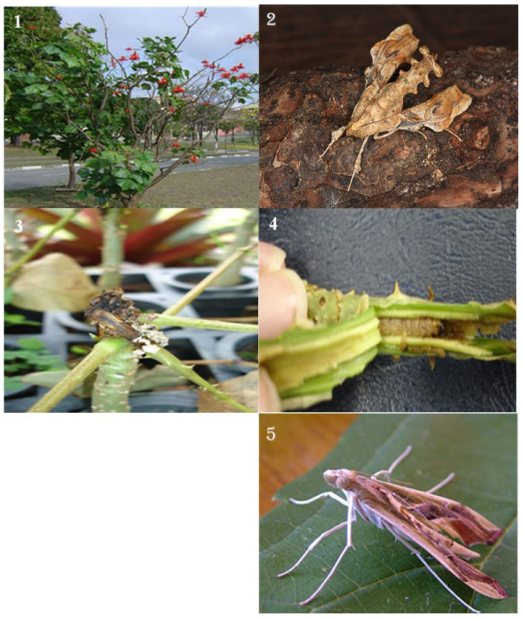

Figure 1. (1) Mature *Erythrina speciosa* (Fabaceae) tree, city of Viçosa, Minas Gerais state, Brazil; (2) Erythrina Stem Borer moth, *Terastia meticulosalis* (Crambidae) (photographed by Andrei Sourakov in Florida); (3)-(4) Damage from the Erythrina Stem Borer caterpillar to the seedling of *E. speciosa* (Engenheiro Paulo de Frontin, Rio de Janeiro State, Brazil); (5) Erythrina Leafroller moth, *Agathodes designalis* (Crambidae) reared from the propagated trees.

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In many places, the cultivation of *Erythrina* is greatly jeopardized by the moth specialist, Erythrina Stem Borer, *Terastia meticulosalis* Guenée (Figure 1.2), which bores into shoots and frequently aborts normal tree development, by damaging their tip or breaking the stem in half by hollowing it out. In southern California, for example, this is a serious problem for the horticultural industry, because many non-natives but highly-prized Erythrina species are grown there (Hodel et al., 2016; Sourakov et al., 2022; Sourakov, 2023).

Here, we report a pest problem that arouse during the attempted propagation of the mulungu-do-litoral trees, *Erythrina speciosa*, in Engenheiro Paulo de Frontin (S 22º 32' 59" W 43º 40' 42", 395 m asl) in the Atlantic biome of the Rio de Janeiro State, Brazil. The plants were grown for replanting but suffered damage from the caterpillars of the Erythrina Stem Borer (Figures 1.3 and 1.4). Additionally, another specialist moth, the Erythrina Leafroller, *Agathodes designalis* Guenée, was also reared from the same plants (Figure 1.5).

While damage from the Erythrina Stem Borer can greatly reduce the production of *Erythrina speciosa* for planting in reforestation projects and for horticultural purposes, we suggest further investigation into the means by which this pest can be controlled until the trees are strong and mature enough to be planted and to sustain moth damage. For instance, in California, nurseries are reportedly growing potted *Erythrina* plants for sale, which is made possible because of periodic pesticide treatment, monitoring, and mechanical removal of infested shoots (Sourakov, 2023).

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