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HYPERCHIRIA INCISA INCISA (LEPIDOPTERA: SATURNIIDAE) ON PLANTS OF *CLITORIA FAIRCHILDIANA* IN VIÇOSA, MINAS GERAIS STATE, BRAZIL

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ABSTRACT. *Clitoria fairchildiana* Howard (Fabaceae) is a rustic and rapidly growing species with a broad leafy crown. This species naturally occurs in secondary forest of the Amazon region. In Brazil, this plant is also used in landscaping of streets, squares, roads and parking lots. This study identified a lepidopteran defoliator of *C. fairchildiana* at the Federal University of Viçosa in Viçosa, Minas Gerais State, Brazil. This species was identified as *Hyperchiria incisa incisa* Walker, 1855 (Lepidoptera: Saturniidae: Hemileucinae). Larvae of this insect are yellowish-brown at early instars and pale green in the last ones with its body almost completely covered with stinging spines at all stages. *Hyperchiria incisa incisa* should be included in pest monitoring programs of *C. fairchildiana*.

Additional key words: caterpillar, herbivory, pest management, urban afforestation

Clitoria fairchildiana Howard (Fabaceae) is a fast-growing tropical tree that naturally grows in secondary forests in the Amazon region. This plant has a large canopy, so it is also considered an important species for urban shading in several regions in Brazil. The present study identified an important Lepidoptera defoliator of *C. fairchildiana* in Viçosa, Minas Gerais State, Brazil.

Approximately three hundred larvae of an insect were found under leaves of *C. fairchildiana* from December 2010 to April 2011 by the campus of the Federal University of Brazil (UFV) (20° 45'S, 42° 52'W and 648 m above sea level). Leaves with early instar larvae were detached from the plant, placed in plastic containers and brought to the Laboratory of Biological Control of Insects in the Institute of Biotechnology Applied to Agriculture (BIOAGRO) where they were maintained at 25 ± 2°C, 70 ± 5% RH and 12 h photophase in screened wooden cages (30 × 30 × 30 cm). Branches containing leaves of *C. fairchildiana* were changed daily to feed larva until the adult stage.

Adults were sent and deposited in the Department of Zoology (UFPR) and identified by comparison with material deposited in the collection as *Hyperchiria incisa incisa* Walker, 1855 (Lepidoptera: Saturniidae, Fig. 1a) by Dr. Olaf Hermann Hendrik Mielke, and this is the first report of this species feeding on *C. fairchildiana* in Brazil.

Females of *H. incisa incisa* lay eggs in double, parallel rows on the adaxial surface of the *C. fairchildiana* leaves (Fig. 1b). Eggs are white with a

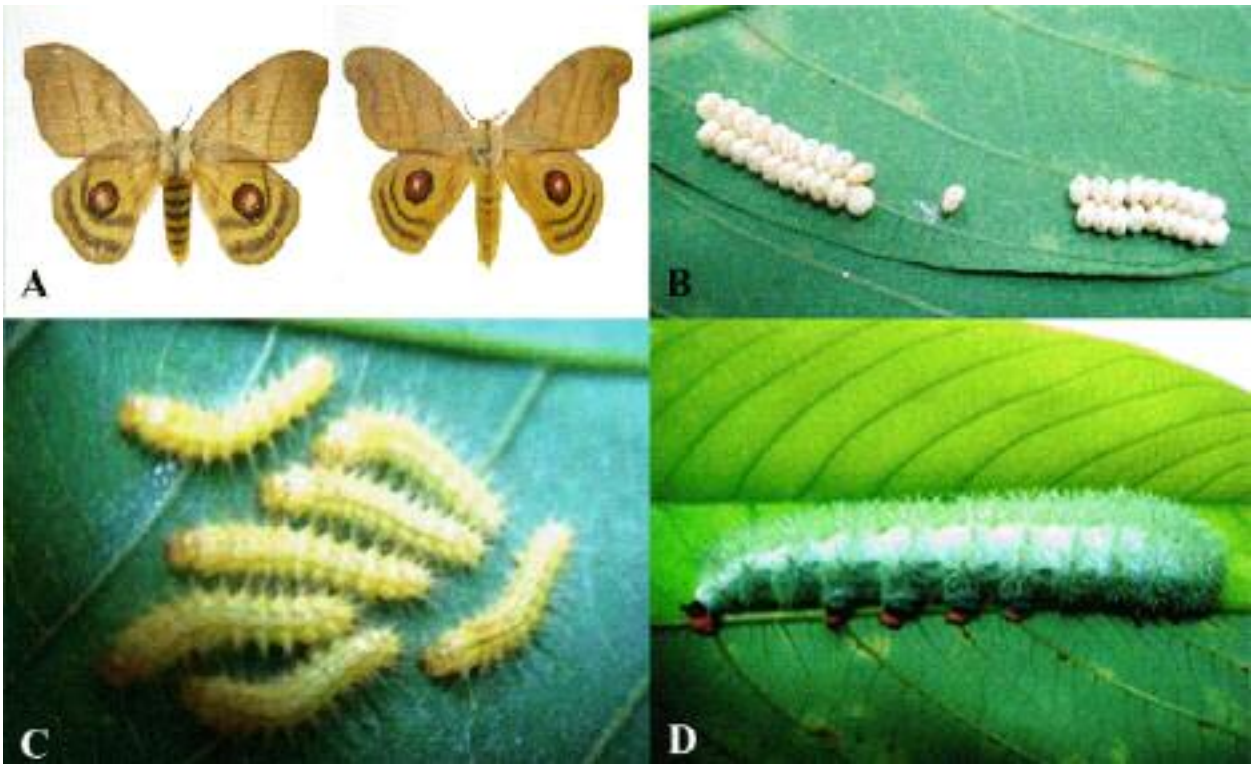

FIG. 1. Female and male (**A**), egg masses (**B**) and caterpillars of first (**C**) and last (**D**) instars of *Hyperchiria incisa* (Lepidoptera: Saturniidae).

sub-conical shape and flat sides. First instars are yellowish-brown with about 5 mm long (Fig. 1c) becoming pale green after few days (Fig. 1d). Caterpillars are gregarious at all stages and usually walk in lines on the leaves, as observed for larvae of *Hyperchiria pamina* Neumoegen, 1882 (Lepidoptera: Saturniidae) (Kunzé, 1900), *Dirphia avicula* Draudt, 1930 and *Dirphia moderata* Bouvier, 1819 (Lepidoptera: Saturniidae) (Pereira et al. 2008), *Euselasia eucerus* (misidentified as *Euselasia apisaon* Dalman 1823) (Lepidoptera: Riodinidae: Euselasiinae) (Zanuncio et al. 2009, Nishida 2010), *Euselasia chrysippe* H. Bates 1866 (Lepidoptera: Riodinidae) (Allen 2010), *Hylesia lineata* Fabricius, 1775 (Fitzgerald & Pescador-Rubio 2002) and *Hylesia paulex* Dognin, 1822 (Lepidoptera: Saturniidae) (Pereira et al. 2009). When fully developed, caterpillars of *H. incisa incisa* form a cocoon on the leaves or in the soil layer at the bottom of the cage and metamorphose into pupae.

Spine-like bristles (Figure 1c–1d) cover almost the entire body of *H. incisa incisa* larvae and they are important for protection against natural enemies (Cambridge 1882). They can also produce substances responsible for dermatitis, what can limit the use of *C. fairchildiana* in urban areas. In a personal experience, one of the authors (JCZ) had the misfortune of touching a caterpillar of this species, which left his skin red, swollen and burning. The irritation persisted for a few days.

Although the abundance of *H. incisa incisa* on trees of *C. fairchildiana* in a native planting at the Federal University of Viçosa was high, its impact on this tree species is unknown. Many trees were infested and younger ones were totally defoliated over the course of a few weeks. The high number of *H. incisa incisa* larvae on *C. fairchildiana* plants may be related to the polyphagous feeding habit of the caterpillar. It is known to feed on native species as *Ateleia glazioviana*, *Bauhinia forticata, Caesalpinia peltophoroides, Cassia fistula, Cassia grandis, Cassia javanica, Centrolobium tomentosum, Copaifera sp., Erythrina crest, Laburnum sp., Machaerium opacum, Myroxylon baisamum, Wisteria* sp. (Fabaceae), *Clethra scabra* (Cletraceae), *Fagus sylvatica, Quercus coccifera, Quercus ilex* (Fagaceae), *Ficus* sp. (Moraceae), *Lafoensia glyptocarpa* (Lythraceae), *Maytenus ilicifolia* (Celastraceae), *Nectandra lanceolata* (Lauraceae), *Plantanus acerifolia, Plantanus orientalis, Plantanus* sp. (Platanaceae), *Sapindus divaricatus, Serjania laruotteana* (Sapindaceae) and *Trema micranta* (Cannabaceae) (Mabilde 1896, Biezanko et al. 1978, Biezanko 1986, Corseuil et al. 2002, Nunes et al. 2003).

The migration of insects of the native fauna to exotic plants as found for *H. incisa incisa* on *C. fairchildiana* is common in tropical crops such as cocoa (*Theobroma cacao*), sugarcane (*Saccharum officinarum*) and eucalyptus (*Eucalyptus* spp.) (Strong 1974, Oliveira et al. 2005). *Hyperchiria incisa incisa* have been reported on eucalyptus plantations (Zanuncio et al. 1993, Pereira et al. 2001) and its damage on *C. fairchildiana* indicate that it should be included in monitoring programs of pests of this plant. This species can reach high populations with significant damage to trees in urban areas and its larvae may represent a minor threat to human health.

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