

## **First Record of the Wood-Borer *Hylettus seniculus* (Coleoptera: Cerambycidae) in *Pinus caribaea* var. *Hondrurensis* Plantations in Brazil**

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FIRST RECORD OF THE WOOD-BORER *HYLETTUS SENICULUS*  
(COLEOPTERA: CERAMBYCIDAE) IN *PINUS CARIBAEA* VAR.  
*HONDRURENSIS* PLANTATIONS IN BRAZIL

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Cerambycids commonly affect forest trees and logs in Brazil (Zanuncio et al. 2005, 2010). For example, 13 cerambycid species were collected in a eucalyptus plantation and in the adjacent native cerrado vegetation in Minas Gerais State, Brazil, with 8 of them reported to damage eucalyptus and other Myrtaceae (Santos et al. 2014). *Phoracantha recurva* F., a quarantine pest for Brazil and European countries, damaged *E. citriodora* Hook logs (Wilcken et al. 2002). *Anoplophora glabripennis* Motschulsky damaged the phloem and xylem of *Pinus* spp. trees (Pinaceae) (Cavey et al. 1998). *Oxymerus luteus* Voet and *O. nigricornis* Dupont damaged *E. tereticornis* plants (Berti-Filho 1997). Adults and larvae of *O. basalis* were collected on trunks and branches of eucalypt clone plants (*E. urophylla* x *E. grandis*) (Zanuncio et al. 2009). Here, we report a wood-borer damaging *Pinus caribaea* var. *hondurensis* logs in the municipalities of Prata (S 19° 17' W 48° 54') and Uberlândia (S 18° 54' W 48° 15'), Minas Gerais State, Brazil.

In 2007 and 2008, we sampled five groups of trap trees one group per local; each group was comprised of five plants treated with herbicide (Dodds et al. 2012). These trees were marked with plastic tape, georeferenced, and the CAP (circumference at breast height) measured. The herbicide Roundup NA (glyphosate) was applied at 1.0 mL per 10 cm CAP with a 20 mL syringe in four cuts on each trunk (north, south, east and west) approximately 1.30 m above ground. This herbicide was applied in Dec 18 and 19, 2007 and Dec 16 and 17, 2008. One tree per group was cut in Aug, Sep, Oct, Nov and Dec 2008 and 2009. The tree length was measured

and the middle third selected and sectioned into 0.80 m long logs. Sign of borer infestation such as splatter resin on trunk and holes of adult emergence were evaluated in these logs.

Wood-borers were observed in trap trees starting with the first evaluation in August until the last in Dec 2008 and 2009. Prepupae, pupae, and adults of a Coleoptera were found under the bark of the trunks, and larvae in *P. caribaea* var. *hondurensis* logs cut with a chain-saw (Figs. 1, 2 and 3). Radial galleries of this larva were also observed. All insects found were collected, packed in 70% ethyl alcohol, and sent to the Department of Crop Protection of UNESP in the municipality of Botucatu, São Paulo State, Brazil. Larvae, prepupae, pupae, and adult images were sent to Dr. Antonio Santos Silva of Museum of Zoology of University of São Paulo for species identification. The insect was identified as *Hylettus seniculus* Germar 1824 (Coleoptera: Cerambycidae).

In Brazil, *H. seniculus* Germar (Coleoptera: Cerambycidae) was reported to develop in branches and trunks of citrus plants in Roraima State, causing leaf wilting, drying, and breaking of branches, and tree death (Moreira et al. 2003). This species also was collected in large numbers in mango cultivation in Piauí State (Paz et al. 2008). Bionomic data for species of this genus are scarce, but *H. coenobita* larvae fed on *Brosimum* sp., *Ficus* sp. and *Perebea* sp. (Moraceae) and *H. spilotus* on *Protium* sp. (Burseraceae) (Tavakilian et al. 1997). However, this is the first report of *P. caribaea* being attached by *H. seniculus* in Brazil.

Larvae and pupae of *H. seniculus* are whitish; adults are about 4.5 cm long, with antennae

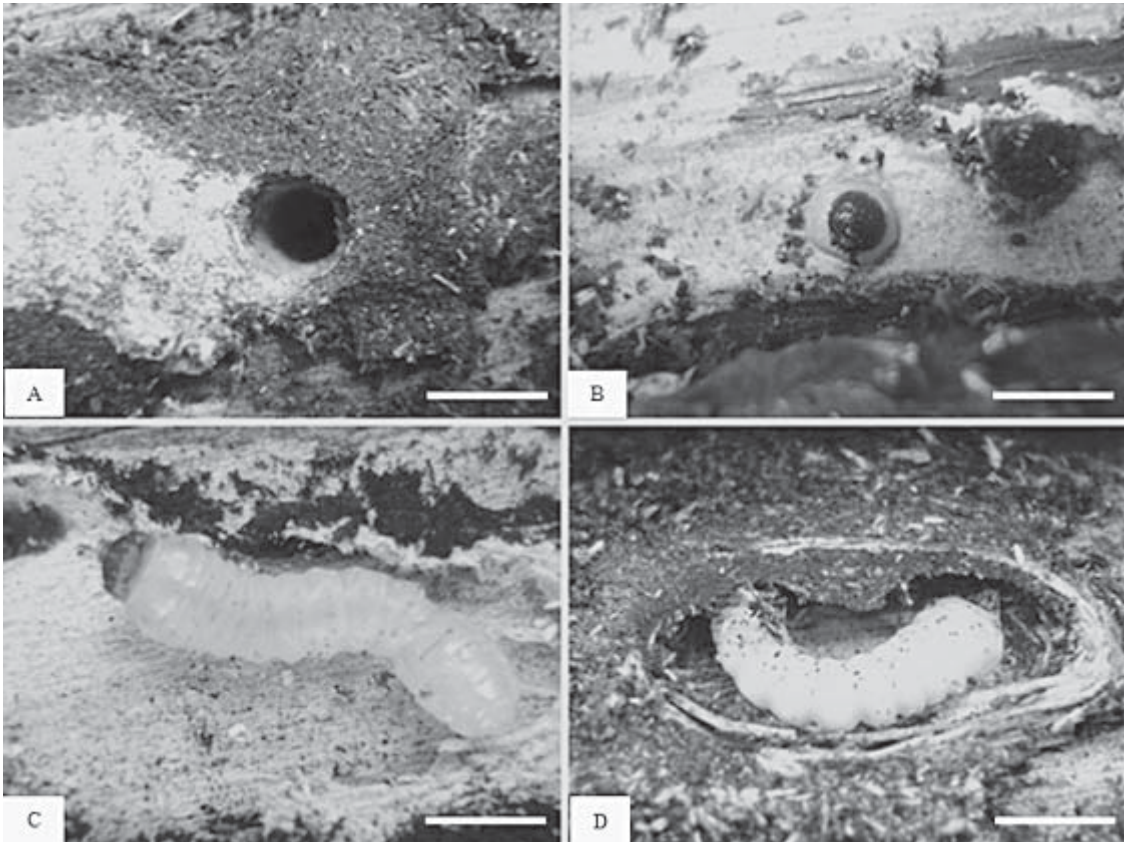


Fig. 1. *Hylettus seniculus* (Coleoptera: Cerambycidae) feeding on *Pinus caribaea* var. *hondurensis* log at Prata, Minas Gerais State, Brazil. Dec 2008 and 2009: A) external view of the hole produced by the larva; B) larva exiting; C and D) prepupa. Scale bar = 5 mm.

reaching half the body length. They nocturnal, and typically found resting on logs or under bark of fallen trees (Costa Lima 1955). Larvae of this species pupate in the cortex region of plants (Moreira et al. 2003).

Forest resources can be maximized if proper management procedures are implemented. Monitoring and understanding the insect fauna and its relationship with forest plantations are important (Moreira et al. 2003). Storage of *P. caribaea* var. *hondurensis* logs should be avoided because of damage by *H. seniculus* can disqualify logs for sawmills.

#### SUMMARY

Here we report for the first time the occurrence of *Hylettus seniculus* Germar 1824 (Coleoptera: Cerambycidae) boring *Pinus caribaea* var. *hondurensis* Morelet (Pinaceae) trunks. Damage by this insect were evaluated from August to Dec 2008 and 2009 by cutting a tree per month from 5 groups of trap trees (5 plants per

group) stressed with systemic herbicide. The damage by *H. seniculus* on trap trees *P. caribaea* var. *hondurensis* indicates that prolonged storage of pine logs in the field should be avoided.

Key Words: biological control, forest pest management, long-horned beetles, monitoring

#### RESUMO

Este trabalho registra, pela primeira vez, a ocorrência de *Hylettus seniculus* Germar 1824 (Coleoptera: Cerambycidae) broqueando plantas de *Pinus caribaea* var. *hondurensis* Morelet (Pinaceae). As avaliações foram realizadas, de agosto a dezembro de 2008 e 2009, com corte de uma árvore por mês de cinco grupos de árvores-armadilha (5 plantas/grupo) estressadas com herbicida sistêmico. Os danos por *H. seniculus* indicam que não se deve armazenar toras de pinus no campo.

Palavras-Chave: controle biológico, manejo de pragas florestais, serra-paus, monitoramento



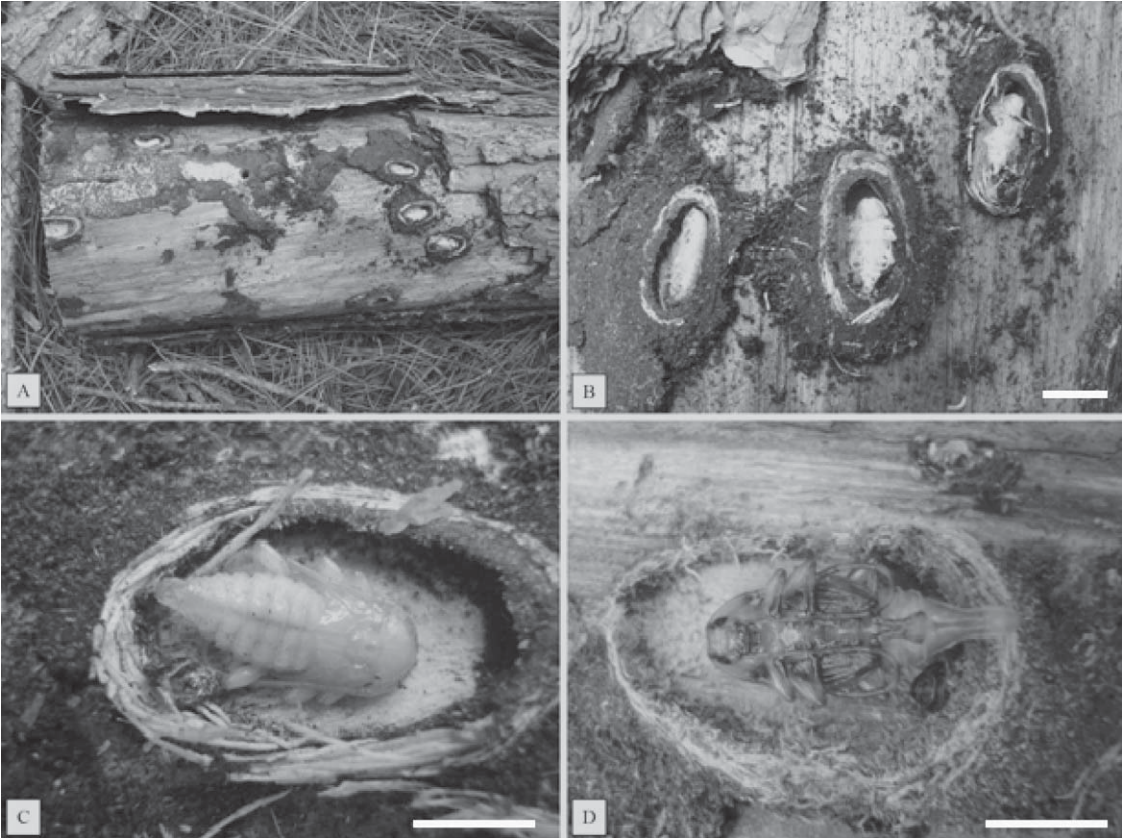


Fig. 2. A) and B) *Hylettus seniculus* (Coleoptera: Cerambycidae) pupae and cocoons in a log; C) dorsal view of pupa within the cocoon; D) ventral view of the pupa within the cocoon in a *Pinus caribaea* var. *hondurensis* log at Prata, Minas Gerais State, Brazil. Dec 2008 and 2009. Scale bars = 10 mm.

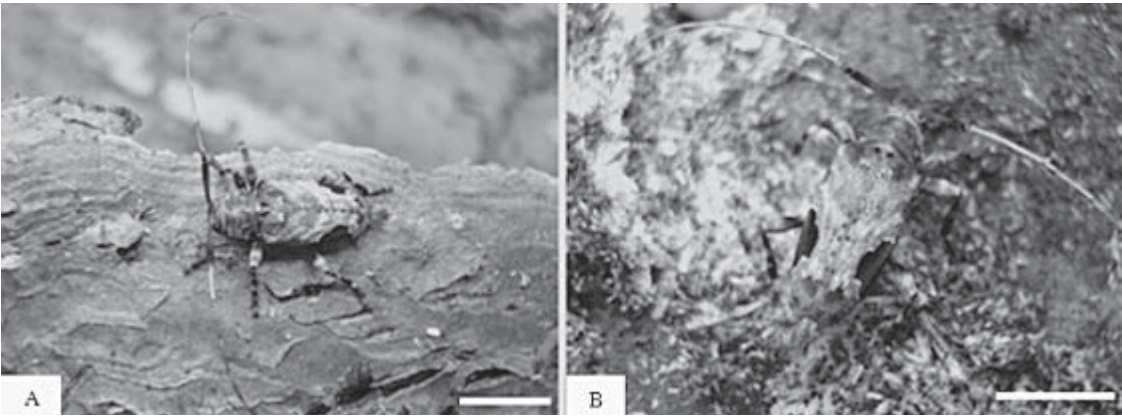


Fig. 3. A) and B) *Hylettus seniculus* (Coleoptera: Cerambycidae) adults preparing for flight on a *Pinus caribaea* var. *hondurensis* log at Prata, Minas Gerais State, Brazil. Dec 2008 and 2009. Scale bars = 10 mm.

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