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Scientific note

Oxymerus aculeatus (Coleoptera: Cerambycidae) causing damage on corn plants (*Zea mays*) in Brazil

Oxymerus aculeatus (Coleoptera: Cerambycidae) causando daños en plantas de maíz (*Zea mays*) en Brasil

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Resumen: Los adultos y las larvas de Cerambycidae son responsables de daños en especies vegetales. Los insectos de esta família son conocidos vulgarmente como brocas, coleobrocas, serradores, serrapaus, siendo fácilmente reconocidos por presentar antenas largas, generalmente más largas que su cuerpo. Se encontraron ejemplares de *Oxymerus aculeatus* (Coleoptera: Cerambycidae) en cultivos de maíz en la Universidade Federal de Viçosa, Minas Gerais estado Brasil, durante el período de floración y causando daños a la parte reproductiva de la planta.

Palabras clave: Escarabajos longicornios. Viçosa.

Abstract: The adults and larvae of Cerambycidae are responsible for damage to plant species. The insects of this family are commonly known as wood borers, being easily recognized by the presence of long antennae, usually longer than the body. Specimens of *Oxymerus aculeatus* (Coleoptera: Cerambycidae) were found in corn fields at the Federal University of Viçosa, Minas Gerais State, Brazil, during the flowering period and damaging the reproductive part of the plant.

Key words: Longhorned beetles. Viçosa.

Introduction

The Cerambycidae family is composed by eight subfamilies and most of the species are in three of them (Cerambycinae, Lamiinae and Prioninae) (Crownson 1991). The Neotropical region has approximately 5000 species of this family distributed in 1500 genera and in Brazil 4000 species from 1000 genera can be found (Costa 2000). Cerambycidae beetles can cause extensive damages such as opening mines, wholes and spots on the wood, besides the attacks on branches and stems that can promote the development of some microorganisms such as bacteria, fungi, and virus (Hosking 1977; Berti Filho *et al*. 1995; Carvalho *et al*. 1995; Zanuncio *et al*. 2009).

Individuals of Cerambycidae were recorded causing damage on forest crops with economical importance (Iturre *et al*. 1995; BertiFilho 1997; Wilcken *et al*. 2005; Zanuncio *et al*. 2009) and orchards of fruit trees (Garcia and Corseuil 1998/1999; Canettieri and Garcia 2000; Paz *et al*. 2008). The *Oxymerus* genus presents species described in the American continent, including Argentina, Bolivia, Brazil, Guyana, Jamaica, Nicaragua, Paraguay, Peru, Uruguay and Venezuela (Monné *et al*. 2006) and specifically *Oxymerus aculeatus* Dupont, 1838 (Coleoptera: Cerambycidae) has been recorded in the States of Goiás, Mato Grosso, Minas Gerais, and São Paulo in Brazil (Monné *et al*. 2006). This is the first report of *O. aculeatus* causing damage on corn plants (*Zea mays*

Figure 1. A. *Oxymerus aculeatus* (Coleoptera: Cerambycidae) adult feeding on the male flower of corn plants, Federal University of Viçosa, Viçosa, Minas Gerais State, Brazil. **B.** Detail of Oxymerus aculeatus (Coleoptera: Cerambycidae) on the inflorescense.

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L.) during the reproduction period of the plant at the Federal University of Viçosa (20º45'14"S, 42º52'55"W) Viçosa, Minas Gerais State, Brazil (Fig. 1).

These insects were recorded feeding and causing damages on the tissue of male flowers of the corn plants. Black spots were observed because of the feeding behavior of the insects. Cerambycidae species has been cited in the literature feeding on the flowers, nectar, pollen and wood of different long cycle plants species (Crownson 1981; Martins 1997; Lawrence *et al*. 1999); however, there is no record or literature about this species feeding and damaging *Z. mays*. The presence of *O. aculeatus* on plants with annual cycle can result in an adjustment of the insect to this new ecosystem that is not desirable because this insect species can reduce the reproductive capacity of the corn plants by attacking the reproductive system of them and, consequently, reducing the seed production. These observations can encourage future research and works about the establishment of *O. aculeatus* on this new host plant.

Cited Literature

BERTI FILHO, E.; CERIGNONI, J. A.; SOUZA JÚNIOR, C. N. 1995. *Phoracantha semipunctata* (Fabricius) (Coleoptera, Cerambycidae) broca de *Eucalyptus* spp. nativa da Austrália, já ocorre no estado de São Paulo. Instituto de Pesquisas e Estudos Florestais (IPEF), 48/49 (1): 142143.

BERTI FILHO, E. 1997. Impacto de Coleoptera: Cerambycidae em florestas de *Eucalyptus* no Brasil. Scientia Forestalis 52 (1): 53-56.

CANETTIERI, E. R. P. S.; GARCIA, A. H. 2000. Abundância relativa das espécies de Cerambycidae (Insecta, Coleoptera) em pomar de frutíferas misto. Pesquisa Agropecuária Tropical 30 (2): 4350.

CARVALHO, A. G.; RESENDE, A. S.; SILVA, C. A. M. 1995. Avaliação de danos de *Onciders dejanei* Thonsom, 1868 (Coleoptera, Cerambycidae) em *Albizia lebbeck* Benth. (Leguminosae, Mimosoidae) na região de Seropédica, RJ. Floresta e Ambiente 2 (2): 6-8.

COSTA LIMA, A. M. 1955. Insetos do Brasil. 9º tomo (Coleópteros). Rio de Janeiro. Escola Nacional de Agronomia. 289 p.

COSTA, C. 2000. Estado de conocimiento de los Coleoptera Neotropicales. p. 99 – 114. In: Martín-Piera, F.; Morrone, J.J.; Melic, A. (Org.). Hacia un proyecto CYTED para el inventario y estimación de la diversidad entomológica en Iberoamérica. Zaragoza, Sociedad Entomológica Aragonesa. Madri. España. 319 p.

CROWSON, R. A. 1981. The Biology of Coleoptera. London. Academic Press, London. 745 p.

GARCIA, F. R. M. & CORSEUIL, E. 1998/1999. Flutuação populacional de cerambicídeos e escarabaeídeos (Coleoptera) em pomares de pessegueiro no município de Porto Alegre, Rio Grande do Sul. Revista da Faculdade de Zootecnia, Veterinária e Agronomia 5/6 (1): 69-81.

HOSKING, G. P. 1977. *Xyleborus saxeseni*, its life- history and flight behaviour in New Zealand. New Zealand Journal of Forestry Science 3 (1): 37-53.

ITURRE, M.; DARCHUCK, E.; DIODATO, L. 1995. Relevamiento y fluctuación de coleópteros presentes en plantación experimental de *Eucalyptus tereticornis* en Santiago del Estero. Quebracho 3(1): 58-64.

LAWRENCE, F. A.; HASTING, A. M.; DALLWITZ, M. J.; PAINE, T. A.; ZURCHER, E. J. 1999. Beetles of the world. A key and information system for families and subfamilies. Version 1.0 for MS Windows. CSIRO Publishing. Melbourne. Australia.

MARTINS, U. R. 1997. Cerambycidae Sul - Americanos (Coleoptera). Sociedade Brasileira de Entomologia. São Paulo. Brasil. P. 217.

MONNÉ, M. A.; BEZARK, L. G.; HOVORE, F. T. 2006. Checklist of the Cerambycidae, or longhorned beetles (Coleoptera) of the Western Hemisphere. BioQuip Publications. Rancho Domingues, California. United States. 394 p.

PAZ, J. K. S.; SILVA; P. R. R.; PÁDUA, L. E. M.; IDE, S.; CARVALHO, E. M. S.; FEITOSA, S. S. 2008. Monitoramento de coleobrocas associadas à mangueira no município de José de Freitas, Estado do Piauí. Revista Brasileira de Fruticultura. Jaboticabal 30(2): 348-355.

WILCKEN, C. F.; ORLATO, C.; OTTATI, A. L. T. 2005. Ocorrência de *Migdolus fryanus* (Coleoptera, Cerambycidae) em plantios de *Pinus caribaea* var. *hondurensis*. Revista árvore, Viçosa, 29(1): 171-173.

ZANUNCIO, J. C.; PIRES, E. M.; ALMADO, R. P.; ZANETTI, R.; MONNE, M. A.; PEREIRA, J. M. M.; SERRÃO, J. E. 2009. Damage assessment and host plant records of *Oxymerus basalis* (Dalman, 1823) (Cerambycidae: Cerambycinae: Trachyderini) in Brazil. The Coleopterists Bulletin 63(2): 6871.

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