## Curculionidae (Coleoptera) in Chayote (Sechium edule) in Eastern São Paulo, Brazil

## Miguel F. Souza Filho<sup>1</sup>; Jean C.P. Silva<sup>2</sup>; Luana S. Covre<sup>2</sup>; Carlos A.H. Flechtmann<sup>2</sup>

<sup>1</sup>Instituto Biológico, Caixa Postal 70, 13001-970 Campinas/SP. <sup>2</sup>FEIS/UNESP, Av. Brasil 56, 15385-000 Ilha Solteira/SP. Email: flechtma@bio.feis.unesp.br

Chayote is a climbing vine, native to Mexico and Guatemala. In Brazil, the state of São Paulo is its largest producer. It is mainly cultivated in the hills of the Serra da Mantiqueira, and usually in small areas. In the last few years, growers were facing constant problems caused by beetle borers. The objective of this research was to determine the species associated with damage to chayote. We examined material from three properties (P). P1 was in Amparo (22°44'41.93"S 46°43'22.23"W), with a planted area of 1.25 ha, plants were 4-yr old, attacks started in the summer of 2012, and with losses topping 40% plants. P2 was in Monte Alegre do Sul (22°44'19.31"S 46°39'06.80"W), cropped area was 5.12 ha, plants were 6-yr old and attacks also started the summer of 2012. P3 was also in Amparo (22°43'55.69"S 46°44'17.34"W), area of 1.5 ha, 4-yr old plants, and that over the years experienced frequent and intense attacks. We collected attacked stem material from the properties in January 2013, March 2013 and April 2014, respectively. In all properties the chayote conduction system is the pergola. In P1 we found Hypothenemus sp., Dendrocranulus spp. (Curculionidae, Scolytinae), Phymatophosus squameus (Curculionidae, Cryptorhynchini) and two Cerambycidae species, in P2 one Cerambycidae and Theoborus villosulus (Scolytinae), while in P3 Hypothenemus spp. (3 species), one Cerambycidae species and P. squameus were identified. Dendrocranulus were the most abundant beetles, seconded by *P. squameus*, and responsible for the reported damage. There were six morphotypes of Dendrocranulus, where it appears that D. major, D. costalimai and D. melaenus were represented. Cerambycidae species were already reported causing damage to chayote, and S. squameus was already reported in this plant, in Brazil. Even though there are reports of Dendrocranulus causing damage to chayote in Central America, this is the first report of these beetles causing economic damage in Brazil, same as for S. squameus.

Keywords: Cerambycidae, economic damage, Scolytinae.