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SCOLYTINAE (CURCULIONIDAE) PARASITOIDS IN SOUTHERN BRAZIL

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Scolytinae (Curculionidae) are important pests of forests worldwide. Control methods of these beetles are very difficult to implement and most of the times very costly. One environmentally sound alternative is to promote the conservation of natural enemies and manipulate their populations to enhance predation or parasitization. However, the knowledge of the fauna of natural enemies associated with Scolytinae is very poor, especially in the tropics. The objective of this experiment was to contribute to the knowledge of parasitoids associated with Scolytinae beetles in a cerrado biome in southern Brazil. Branches 1.0 m long and ca. 5 cm diameter of *Araucalia angustifolia* (Bertol.) were placed in a well preserved cerradão stand in October 2010, located in Selvíria, state of Mato Grosso do Sul, at the UNESP Research Farm. The branches were remained in the for Scolytinae colonization until December 2010, after which they were removed and taken to the lab. In the lab they were put into emergence cages, and emerging beetles and parasitoids were periodically collected until February 2011. Nine Scolytinae species were found, in the genera *Premnobius*, *Xyleborinus*, *Xyleborus* (Xyleborini), *Coccotrypes* (Dryocoetini) and *Hypothenemus* (Cryphalini). *Xyleborus affinis* Eichh. and *Xyleborus ferrugineus* (Fab.) predominated, with 73.9% and 10.6% of the specimens, respectively. Only three parasitoids emerged, two *Phymastichus xylebori* LaSalle (Eulophidae) and one *Heterospilus* sp. (Braconidae). *Heterospilus* is a large genus in need of a revision, reason why the specimen was not determined to species. *Phymastichus xylebori* is a parasitoid of adult Scolytinae, a unique feature among tetrastichines. This is the first record of *P. xylebori* for Brazil, a species previously known only from Hawaii, South Carolina (USA) and Costa Rica. In Hawaii it was found attacking *Xyleborus perforans* (Wollaston) in macadamia tree. Although it was not possible to precisely associate the parasitoid to its host, this study reveals that *P. xylebori* is not a monophagous species and it is a candidate for use in biological control programs of scolytines.

Palavras-chaves: Xyleborus, Phymastichus, Heterospilus.