

54. The parasitoid *Psyllaephagus blastopsyllae* as control agent of *Blastopsylla occidentalis* in eucalypt plantations in Brazil.

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A research project was designed for evaluating classical biological control of the eucalypt psyllid *Blastopsylla occidentalis* Taylor, 1985 (Hemiptera: Aphalaridae) by the imported exotic parasitoid *Psyllaephagus blastopsyllae* Tamesse et al., 2014 (Hymenoptera: Encyrtidae). In 2015, the parasitoid was imported from South Africa and kept in the Quarantine Laboratory "Costa Lima" of Embrapa Meio Ambiente to make sure that the sample was pure and for preliminary bioecological studies in view of future release by the Ministry of Agriculture, Livestock and Supply (MAPA) following the request by Embrapa Florestas. The establishment and maintenance of greenhouse cultures of *B. occidentalis* were carried out for future mass rearing of the imported parasitoid. The pest was collected in eucalypt plantations in Minas Gerais State. Before infesting the plants, all the material collected in the field was examined under a microscope, in the laboratory of Embrapa Florestas, to clean the plants and prevent the entry of predators and other undesirable organisms into the colony. New field collections of *B. occidentalis* were carried out regularly to maintain the vigor of the colony. In one of the collections, some parasitised immatures were observed, from which adult parasitoids emerged. Specimens of the parasitoid from the field and the quarantine facility were sent to the specialist John Noyes, Natural History Museum, London, UK, who confirmed that the two populations belong to the same species, and are provisionally referable to *P. blastopsyllae* awaiting the examination of type material. With the presence of this parasitoid in the field, no new imports of *P. blastopsyllae* were requested, redirecting our project to monitoring the evolution of this exotic parasitoid in the field. As we found the parasitoid in the field before the arrival of the first shipment from South Africa, we assume that the parasitoid was introduced accidentally, along with the pest.