

Multiplication and release of the imported natural enemy *Selitrichodes neseri* (Hymenoptera: Eulophidae) for the biological control of the wasp, *Leptocybe invasa* (Hymenoptera: Eulophidae) in eucalyptus plantations in Brazil

Luiz Alexandre Nogueira de Sá¹, Bárbara Oliveira Puretz², Carlos Frederico Wilcken², Leonardo Rodrigues Barbosa³, Luis Renato Junqueira⁴, José Cola Zanuncio⁵

¹Laboratório de Quarentena "Costa Lima", Empresa Brasileira de Pesquisa Agropecuária, Ministério da Agricultura, Pecuária e Abastecimento (Embrapa Meio Ambiente), Jaguariúna, Brazil. ²Faculdade de Ciências Agrônomicas, Universidade Estadual Paulista (Unesp), Campus Botucatu, Botucatu, Brazil. ³Brazilian Agricultural Research Corporation, Ministry of Agriculture, Livestock and Food Supply (Embrapa Forestry), Colombo, Brazil. ⁴Ipef - Instituto de Pesquisas e Estudos Florestais, Piracicaba, Brazil. ⁵Departamento de Entomologia/Bioagro, Universidade Federal de Viçosa (UFV), Viçosa, Brazil

High productivity and short rotation have made eucalyptus the most cultivated plant in the world for the production of raw material for various industrial sectors. The exotic wasp, *Leptocybe invasa* (Hymenoptera: Eulophidae) from Australia, has spread rapidly in the world. *Leptocybe invasa* was registered in Brazil in eucalyptus nurseries in the Bahia state in 2007, which made it necessary, in 2015, to import through the Quarantine Laboratory "Costa Lima", Embrapa Meio Ambiente of Jaguariúna, São Paulo, Brazil, the exotic control bioagent, *Selitrichodes neseri* (Hymenoptera: Eulophidae) from the University of Pretoria in Pretoria, South Africa (**Figure 1**). This introduction was requested by FCA/Unesp-Botucatu Campus (University of São Paulo State, Faculty of Agrarian Sciences) and by the Protef/Ipef (Programa Cooperativo em Proteção Florestal/Instituto de Pesquisas e Estudos Florestais/Ipef). Seedlings of hybrid clones of *Eucalyptus grandis* x *Eucalyptus camaldulensis* were planted in 1.7 L pots with soil sterilized with a mixture of soil-sand-manure (1:1:1) and irrigated daily to obtain the parasitoid galls.

These seedlings were kept in an open nursery at FCA/Unesp and infested, naturally, by *L. invasa*. Approximately seventy days after the infestation, the plants with galls were taken to Embrapa and offered to parasitism to multiply *S. neseri* in the laboratory (**Figure 2**). The production of *S. neseri* adults was 3,020 in 2015, 8,616 in 2016/2017 and 4,700 in 2018; which were sent to Unesp and then to forestry companies associated to Protef for releasing in eucalyptus plantations.

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Figura 1. Adult of *Selitrichodes neseri* (Kelly & Salle) (Hymenoptera: Eulophidae)

Photo: Samantha Bush, FABI, University of Pretoria, South Africa



Figure 2. Rearing cages of adults of the parasitoid *Selitrichodes neseri* (Hymenoptera: Eulophidae) in quarantine between 2015 and 2018.

Photo: Luiz A. N. de Sá

