## 16-043

WOODWASP NATIONAL CONTROL PROGRAM IN BRAZIL

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Brazil has about 6 million ha of forest plantations of which 2 million ha consist of Pinus spp. Most of these stands were planted with a small number of species at high density and inadequate forest management. In 1988 an outbreak of Sirex noctilio Fabricius was recorded in Rio Grande do Sul State. It is present in 200,000ha, and is also advancing on Santa Catarina and Paraná States. The use of biological control is the best measure to control S. noctilio. The most effective agent is Deladenus siricidicola Bedding, a nematode that sterilizes the females. In 1989, it was bred by the PROGRAMA NACIONAL DE CONTROLE A VESPA-DA-MADEIRA (PNCVM). This programme is broad in scope and also includes: the early detection and monitoring of the spread through the use of trap trees and ground inspections, and the adoption of preventative measures, through adequate forest management. Plans for the future include the introduction of the parasitoid wasps Rhyssa persuasoria (L.) and Megarhyssa nortoni (Cresson) to compliment the nematode and the parasitoid <u>Ibalia</u> leucospoides (Hochenworth).