

OFFICIAL PROGRAM FOR DETECTION AND CONTROL OF *SIREX NOCTILIO* (HYMENOPTERA: SIRICIDAE) IN CHILE

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In 1990 a National Official Program was started for the early detection of the woodwasp, *Sirex noctilio* in Chile. The objective of this surveillance program was to detect the introduction of the pest early and the possibility of an opportune control. In the beginning of 2001, *S. noctilio* was detected for the first time in Chile, in the central region of the country, at Los Andes/Guardia Vieja, infesting a radiata pine forest and many small groups of trees and urban pines. At the end of the same year, the pest was detected in the south of Chile in radiata pine plantations close to an international road linking with Argentina. When the pest was detected, the Ministry of Agriculture of Chile, through of Servicio Agrícola y Ganadero (SAG) started an official control program for the pest.

As result of this program, the introduction of *S. noctilio* in Central Chile was eradicated during 2004 and the one in southern Chile is at this moment still under the official control program with the objective to suppress it. The main components of this National program are the following:

1. Surveillance Program: Using a net of trap trees at national level; Funnel traps and annual surveys of the radiata pine plantations in Central and Southern Chile. This program is developed in coordination with Chilean forestry companies.
2. Quarantine Program: Developed through the implementation of plant protection regulations and inspections of imported lumber and wood packaging material.
3. Biological Control Program: Using a complex of natural enemies of *S. noctilio* produced in SAG Laboratories: (*Megarhyssa nortoni*, *Rhyssa persuasoria* and *Beddingia siricidicola*) and through a memorandum of understanding between SAG and CPF companies.
4. Bilateral action: Signing and developing a bilateral agreement with the Argentinean Plant Protection Organization (SENASA) for the biological control of *S. noctilio* in the Patagonian Provinces of Neuquen, Río Negro and Chubut.
5. Biological Research: Oriented for the study of the biological life cycle of *S. noctilio* in Chile and the evaluation of the biological control parameters.

The status of the pest in the area is: Quarantine pest with restricted distribution in areas of the Ninth and Tenth regions of Chile. Furthermore, the nematode, *B. siricidicola*, was successfully established in Southern Argentina and Chile; the parasitoids wasp, *M. nortoni* and *R. persuasoria* were produced, released and established in Southern Argentina and during 2006 *M. nortoni* was released in the Tenth region of Chile.

Marcos Beéche is currently working for the Ministerio de Agricultura de Chile - Servicio Agrícola y Ganadero/SAG, as Forestry Engineer and Head of the Project for Eradication and Suppression of Forest Quarantine Pests. He is also the National Coordinator of the Official Program for Surveillance and Control of *Sirex noctilio*, and Acting Director of the Unit of Forestry Surveillance /SAG. Prior to this he was Professor of Forest Entomology- Universidad Austral de Chile (Valdivia, Chile). His main responsibilities are to study and propose quarantine regulations for the introduction to Chile of forestry products with phytosanitary risks, coordinate and supervise at national level the execution of Emergency Plans for forestry quarantine pests, coordinate and supervise the Program for the Inspection of Wood Packing materials coming from abroad, and coordinate and supervise, at a national level, issues of phytosanitary border control. Marcus is the Chilean representative in the Permanent Working Group on Forest Phytosanitary Issues of COSAVE.