Área Científica **Florestal**

Código GA nº 265483 - REPHRAME **Início** 2011.01.01 **Termo** 2014/11/30

Título REPHRAME - Development of Improved Methods for Detection, Control and Eradication of Pine Wood Nematode in Support of EU Plant Health Policy

Programa

FP7 - 7º programa Quadro de I&DT

Medida

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Instituição Líder Forestry Commission Research Agency

Investigador Responsável INIAV Edmundo Manuel Rodrigues de Sousa

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Parceria

INIAV	Instituto Nacional de Investigação Agrária e Veterinária, I.P.	Nacional
UV	Universidade de Valladolid	Espanha
BIOFORSK	Norwegian Institute for Agricultural and Environmental Research	Noruega
CASciences	Institute of Zoology, Chinese Academy of Sciences	China
AECSIC	Agencia Estatal Consejo Superior de Investigaciones Cientificas	Espanha
UE	Universidade de Évora	Nacional
JKI	JULIUS KUHN INSTITUT BUNDESFORSCHUNGSINSTITUT FUR KULTURPFLANZEN	Alemanha
INRA	Institut National de la Recherche Agronomique	França
UG	University of Greenwich	UK
Bundesforschungs	Bundesforschungs-und Ausbildungszentrum für Wald, Naturgefahren und Landschaft, Áustria	Áustria

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Resumo

Europe's pine forests are a valuable economic, social and environmental resource under threat from the introduction of the pine wood nematode (PWN), Bursaphelenchus xylophilus. Although not a pest in its native North America, PWN has devastated forests in Asia. Since the arrival of PWN in Portugal, the native maritime pine, Pinus pinaster, has proved to be extremely susceptible, with PWN being spread by the local longhorn beetle Monochamus galloprovincialis. Previous studies have shown that PWN could spread throughout the Iberian peninsula and beyond, making it a major threat to European forests.
Effective containment and eventual eradication of PWN demands a detailed understanding of the behaviour and dynamics of PWN in infested trees, especially because delayed onset of symptoms (latency) reduces survey accuracy and can compromise containment strategies. Research will be carried out into vector dispersal capacity; improved ways to monitor and reduce populations using synthetic chemical lures will be investigated; the potential for PWN transfer between trees in the absence of the Monochamus spp. vectors will be evaluated, as will the introduction of resistant conifers. Crucially, the project will extend the capability of existing models to identify the risk posed by PWN to the rest of Europe and the possible impact of climate change on its spread.
The REPHRAME project brings together Europe's leading experts on PWN, together with colleagues from around the world, to address the key gaps in current knowledge. As well as providing a scientific basis for governmental action to deal with PWN, the results of the project will be synthesised into a user-friendly toolkit so that workers on the ground can put them to immediate use. The project also includes extensive dissemination activities to ensure the uptake and application of results across the EU and world-wide.