

Área Científica **Sistemas Agrários: Produção e Sustentabilidade**

Código COST Action FA0807 **Início** 2009/05/11 **Termo** 2013/12/31

Título Integrated Management of Phytoplasma Epidemics in Different Crop Systems

Programa

Medida

COST - European Cooperation in the Field of Scientific and Technical Research

Instituição Líder

Investigador Responsável INIAV

Esmeraldina Nascimento Agostinho Sousa

Orçamento Total

Orçamento INIAV 20 000,00€

Parceria

INIAV

Instituto Nacional de Investigação Agrária e Veterinária, I.P.

Nacional

Equipa

Esmeraldina Nascimento Agostinho Sousa

Resumo

The main objective of this Action was the enhancement and exchange of scientific knowledge and technologies related to phytoplasma diseases, through the establishment of a multidisciplinary scientific European Network, aimed at developing strategies to detect and prevent biological invasion, and the spread of phytoplasma diseases of plants. Comparison of detection methods towards production of harmonized protocols for rapid and reliable detection of fruit trees and grapevine phytoplasma-associated diseases were carried out. Establishment of a network for insect vector identification that allow extending the knowledge about phytoplasma disease epidemiology and sharing information about existing management strategies for sustainable phytoplasma disease control was obtained also from several non COST countries. Management practices of the diseases were improved and new methodologies such as to induce resistance either by bioactive compounds (mainly in grapevine) or to screen for resistance inducing endophytes were proposed for practical application. Whole genome sequences of multiple diverse phytoplasmas were obtained through a community-wide sequencing effort, named phytoplasma genome sequencing initiative; this produced new collaborations to develop new diagnostics tools and new molecular tools to understand some of the mechanisms involved in phytoplasma colonization of plants and insects. The numerous STSMs supported by the action led to increased collaboration among the diverse scientific components of the Action and the different working groups activities, several of them were also part of PhD theses and/or publications. The Action increased awareness about phytoplasma associated diseases also in quarantine officers as well as in stake holders such as nursery and growers.