

4127: Incursions of exotic pests into European rice areas — detection and management

Friday, September 30, 2016

02:15 PM - 02:30 PM

♥ Convention Center - Room W230 C

Introduction: The total area under rice cultivation in the EU is about 450,000 ha and the main producers are Italy, Spain, Portugal, Greece and France. Due to the position of Europe in northern latitudes and its associated temperate climate, endemic local insect pests cause few problems to European rice production. In contrast, Invasive alien species (IAS) pose a significant threat to biodiversity in the EU, as they often have to be controlled with chemicals.

Methods: The key IAS affecting rice in the EU, the damage they cause and the control measures that are required for their management are reviewed. The potential impact of these measures on aquatic biodiversity is examined,

Results/Conclusion: Key IAS affecting EU rice are Chilo suppressalis which is well established in Spain, Portugal and France, and Lissorhoptrus oryzophilus which was introduced to Italy in 2004 and France in 2015. Recently the polyphagous Halyomorpha halys was detected in rice areas in France (2012) and Italy (2014), but its role in rice paddies has yet to be evaluated. Rice crop management is focused on maximizing yield, however rice paddies also have conservation value, acting as surrogates for natural wetlands. Agricultural practices often include chemical applications aimed at controlling pest species, with adverse side effects on non-target aquatic invertebrates. There are potential alternatives to this approach which combine biological and agroecological control methods to optimize pest control, but with a reduced impact on the environment.

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