CBGP
Centre de Biologie pour la Gestion des Populations

Mardi 19 décembre 2017, 11:00
Salle de réunion

COMBINING GENETIC AND DISTRIBUTIONAL DATA FOR A BETTER UNDERSTANDING OF THE DRIVERS THAT SHAPE THE DISTRIBUTION OF PLANT PESTS

par
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The geographic ranges of species are shaped by many factors including e.g. climate, biotic interactions, dispersal abilities, phenology, past climatic and geological events as well as dynamics of niche evolution.

My research addresses the effect of these different factors on the distribution of several phytophagous pests, which provides crucial information for the design of cost-efficient and environment friendly biodiversity management and pest control strategies.

This talk will be divided into three parts. In the first part, I will present ongoing research on the evolutionary and biogeographic history of *Dendroctonus* bark beetles genus, which encompasses some of the most aggressive and damaging conifer pests. In the second part, I will address the question of potential intraspecific divergence of the climatic niche of two sympatric populations of pine processionary moth *Thaumetopoea pityocampa* that exhibit a shift in their phenology and are thus subjected to very contrasted ecological constraints. In the third part, I will present an overview of my research activities about invasive species risk assessment (*Dendroctonus* genus, Tephritidae family, *Thaumetopo*ea genus, the bacterium *Xylella fastidiosa*, etc.).