

Entomological Research in Mediterranean Forest Ecosystems

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The MEDINSECT 3 conference took place in Hammamet, Tunisia, from May 8 to 11, 2012. About 60 participants gathered to give 38 oral presentations and show 23 posters. Two invited keynote presentations were devoted to “The Tunisian forest” and “The vulnerability assessment of forest ecosystems to climate change in Tunisia”. The meeting was organized into four sessions:

a) Population genetics and insect biodiversity

A group of papers dealt with the genetic structure of pine processionary moth populations in relation to their ecology. Other defoliators as well as seed insects were also addressed in a population genetic approach. A series of papers discussed insect biodiversity in various North African forests, especially in relation with effects of fire.

b) Emerging and exotic pests

General papers dealt with monitoring of alien invasive species in Mediterranean harbours or with management of invasive pests of Eucalyptus. More specific papers focused on preferences and performances of *Phoracantha* in North Africa and on inventory of pests associated with particular tree species (cypress, stone pine). An update of the pine wilt disease situation in Portugal was also presented.

c) Population dynamics and relations with host trees

A large amount of information was provided regarding life cycles and population dynamics of various pests in Algeria and Tunisia (processionary moth, *Orgyia*, gypsy moth, *Platypus*). Relations with host trees dealt with the effect of phenological coincidence on bark beetles, host chemical effect on aphids, and indirect effects of parasitoids on Eucalyptus susceptibility to *Ophelimus maskeli*. A study of the feeding behaviour of the southern red wood ant in Turkey was also presented.

d) Forest decline, insect survey and control, forestry practice

Several papers presented studies on relationships between pests and parasitoids / predators. A comparison of the effects of biological and chemical pesticides on aphids was also made. Characteristics of and possible explanations for forest diebacks were discussed. Modelling and mapping geographical distributions were presented for *Tomicus destruens* and the pine processionary moth.



A large amount of data has been accumulated in the three North-West African countries (Morocco, Algeria and Tunisia) regarding general biology, life cycles and natural enemies of several pests, and regarding insect inventories in various types of forests. This amount of information now constitutes a solid basis for syntheses, which could be developed through comparisons among Mediterranean regions and through exhibiting regional competences. However the development of these aspects will be possible only by increasing cooperation among North African countries, as well as between North African and European countries.

It was discussed that it would be desirable to re-stimulate the dynamism of the group, by increasing the participation of scientists from outside the Mediterranean basin, possibly by organizing a future meeting outside of the Mediterranean basin. For the near future, however, and in order to increase the participation of scientists from the eastern Mediterranean region, it has been decided that the next meeting will be organized in Turkey (Antalya) in spring 2014. South Africa or California were mentioned as possible venues after that.

Proceedings of the meeting will be published in the “Annales de l’INRGREF”, Tunisia.

*Photo provided by F. Lieutier:
Participants of the 7.03.14 - Entomological Research in Mediterranean Forest Ecosystems (MEDINSECT 3) meeting in Tunisia during the field trip to Cap Bon, with visits of pine and oak stands damaged by insects or other pests.*