

Paradox of the Mediterranean basin: an environment determined by heavy climatic and human factors, yet, with a remarkable biodiversity - The BIODIVMEX program

Principal organizers

[Virginie BALDY](#) (IMBE)

[Yildiz THOMAS](#) (CEFE)

Session description

The Mediterranean region is characterized by an exceptionally high biodiversity that may be attributed to paleoclimatic and biophysical contexts, as well as interactions with human practices since the Neolithic. This region is one of the world's 34 biodiversity hot spots with an area covering 2% of the Earth's surface. It contains 20% of the plants of the world besides being one of the world's center of origin of agriculture comprising a vast range of domesticated plants and animals. Domestication has lead concomitantly to the emergence of all major European civilizations. Mediterranean landscapes and traditional agroecosystems are the result of long-term transformations and host a very high level of biodiversity. Marine environment host 12 to 15,000 species, representing 4 to 18% of the world biodiversity for some taxonomic groups, on 0.8% of the surface of the global ocean. The high proportion of endemic species illustrates long lasting and contemporaneous evolutionary history. Widely distributed species including domesticates are also found. They structure terrestrial and marine environments, have a high patrimonial value and in some cases interact with rare species. Common species become rare when they are located at the margin of their geographic area or in historical isolates. The convergence of a remarkable biodiversity associated with long term human pressure has been termed by BIODIVMEX as the "Mediterranean Paradox". However, increasing and rapid changes make of this region, an ecoregion under a situation of crisis with major threats regarding the conservation status of its biodiversity.

Speakers

- [Amy Bogard](#) (Oxford university) The functional ecology of arable weeds: Reconstructing prehistoric farming practices through comparison with present-day 'traditional' agrosystems'
- [Franck Richard](#) (CEFE) Connectivity and fragmentation in the Mediterranean - How are mosaics of diversity (at gene, species and community levels) connected in the socio-ecological systems of the Mediterranean?
- [Charles-François Boudouresque](#) (MOI) Assessing the vulnerability and the socio-ecological resilience of biodiversity and functioning of Mediterranean ecosystem
- [Pierre Batteau](#) (Aix-Marseille Graduate School of Management) Mediterranean biodiversity values and conservation, ecosystem services
- [Ilham Bentaleb](#) (ISEM) Historical construction of landscapes along a gradient from natural to anthropogenic era