

Ecological and biogeographical consequences of global change on insular biodiversity

Principal organizers

<u>Frédéric Médail</u> (Aix-Marseille Université / IMBE, Aix-en-Provence)

Session description

The biotic originality of islands can be explained by complex interactions between a highly heterogeneous historical biogeography and unique ecological processes linked to various insular conditions. But most of the ups and downs of this unique biodiversity are now closely linked with human population pressures, which have changed many times through the long history of insular systems. These impacts will be probably exacerbated on islands because of no (or highly limited) adjacent areas of expansion.

This symposium will propose some key issues for future researches in insular ecology and biogeography: drivers of species richness on islands, nestedness in insular communities, phylogenetic island disequilibrium and population dynamics, long-term consequences of island invasion by vertebrates, climate change and species persistance, island life on shifts in functional traits.

Speakers

François Guilhaumon (IRD / MARBEC, Sète) Diversity regulation of species richness on islands.

<u>Emi Martín-Queller</u> (Aix-Marseille Université / IMBE, Marseille) *Islands, mainland and terrestrial fragments:* how isolation shapes plant diversity.

<u>Arthur Sanguet</u> (IRD Bolivie) *Salar de Uyuni (Bolivia): Unique island biodiversity challenged by tourism and agriculture.*

<u>Pierre-Alexandre Rastorgueff, Claudine Montgelard, Bettine Jansen van Vuuren</u> (University of Johannesburg) On the influence of scale, landscape features and environmental factors on the dynamic and structure of the Collembola Cryptopygus antarcticus travei on the sub-Antarctic Marion Island.

<u>Céline Bellard, Tim Blackburn, Piero Genovesi, Phil Cassey, Jonathan Jeschke</u> (University College London / CBER) *Global patterns in extinction and threats to vertebrates by biological invasions in islands.*

<u>Lise Ruffino</u> (University of Aberdeen) *Spatio-temporal resource fluctuations on insular rat population dynamics.*

<u>Bertrand Schatz</u> (CNRS / CEFE, Montpellier) *Contrasted populations dynamics of Orchid species between insular and continental situations.*