Eawag
Überlandstrasse 133
P.O. Box 611
8600 Dübendorf
Switzerland
Phone +41 (0)58 765 53 61
Fax +41 (0)58 765 53 75
info@eawag.ch
www.eawag.ch

eawag
aquatic research

Eawag Seminar Invitation

Plant-animal Mutualistic Networks: The Architecture of Biodiversity

Speaker

Professor Jordi Bascompte
Institute of Evolutionary Biology and Environmental Studies
University of Zurich, Switzerland

When **November 13, 11.00 – 12.00 a.m.**

Where **Forum Chriesbach, room C20, Eawag Dübendorf**

Abstract

The mutualistic interactions between plants and the animals that pollinate them or disperse their seeds can form complex networks involving hundreds of species. These coevolutionary networks are highly heterogeneous, nested, and built upon weak and asymmetric links among species. Such general architectural patterns maximize the number of coexisting species and increase the range of variability that these mutualistic networks can withstand before one or more species goes extinct. Therefore, mutualistic networks can be viewed as the architecture of biodiversity. However, because phylogenetically similar species tend to play similar roles in the network, extinction events trigger non-random coextinction cascades. This implies that taxonomic diversity is lost faster than expected if there was no relationship between phylogeny and network structure