

Department of Evolutionary Biology and Environmental Studies

BEEES (Behavior, Ecology, Environment and Evolution Seminar)

On the astonishing size of community genetic particles

Speaker: Dr. Samuel Wüst

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Date/Time: Tuesday, 2018-05-15

12:15 to 13:00

Place: Y03-G-85/UZH Irchel

Winterthurerstr. 190;8057 Zürich

Access: only intern

Host: Prof. Dr. Frédéric Guillaume

Abstract:

Even though the inheritance of phenotypic variation can be attributed to hereditary "particles" (now termed genes), it has become clear that complex phenotypes of individuals are mostly influenced by genetic variants at many loci, each with very small effect. However, much less is known about the genetic variants underlying inter-individual interactions which then determine group or community properties. In my work, I have found that complex properties of groups of plant individuals, and their extended phenotypes, are influenced by major effect loci that can readily be resolved to single Mendelian factors. I will also discuss the implications of such large "community genetic particles" for advancing our understanding of ecological processes and for the development of new breeding approaches.

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