

Phytotelmata in Switzerland – Importance of insect colonization and detritus input for plant performance in *Dipsacus fullonum*



Short description

Many plants hold water in their leaf axils such as bromeliads or provide organs to catch insects such as pitcher plants. While these phenomena are common in the tropics the occurrence of phytotelmata in Central Europe is rare. The teasel *Dipsacus fullonum* is one example of such a plant that collects water in its leaf axils. These ephemeral water bodies accumulate dead insects and are actively colonised by a few invertebrate decomposer species that develop in these microhabitats. This has been described by a few studies, but a detailed understanding of the processes in these systems is still lacking.

This project aims at (1) studying the spatial and interannual variability in the water-level, the detritus amount and the colonization by invertebrates in leaf axils of *Dipsacus fullonum* in the canton Zurich and its underlying drivers, and (2) manipulating water, detritus and invertebrates to measure the importance of these factors for plant performance and seed production.

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Major

Ecology and Evolution

Forest and landscape management

Group work

possible

Season

Spring, Summer