

Project proposals Master or Bachelor thesis



The effect of plant diversity on the temporal stability of consumer communities

Background

In biodiversity experiments it has been shown that plant diversity stabilized ecosystem functioning over time. Asynchrony, the fluctuation across species over time is discussed as one important factor, driving this pattern. Although the role of asynchrony for the stabilizing effect of plant diversity has been shown for aboveground productivity, less attention has been paid to consumers and related functions.

Research question

In an experimental setup we sample aboveground invertebrates over multiple years on plots differing in plant diversity. Here we ask the question, if plant diversity supports the temporal stability of consumer communities, and if asynchrony is one of the underlying mechanisms.

Methods

- Field work at the Jena Experiment possible (May- August 2019)
- Data analyses of existing data