



## Master's thesis position

### How cushion plants facilitate other neighbor species in the Alpine

We seek a Master's student to investigate how alpine cushion plants modulate growing conditions in the harsh alpine environment.

Cushion plants are an impressive example of an adaptation strategy to the alpine environment with its extreme temperatures, winds and radiation. The microclimate inside a plant cushion is quite moderate with benign temperatures. These benign conditions inside a cushion may be beneficial for other plant species. Indeed, positive neighbor interactions (facilitation) among alpine plants increase with stress, i.e. physical harshness of the environment (Callaway et al. 2002).

This study investigates 1) if biodiversity and biomass of non-cushion plants is enhanced inside cushions, 2) if facilitation changes along gradients of stress and 3) if different cushion plant species differ in their facilitative potential.

The Master's students will join a team of researchers at the WSL Swiss Federal Institute for Snow and Avalanche Research (SLF, Christian Rixen, Sonja Wipf). The theses should start in spring/summer 2010. It will also be possible that two students work on related topics. Working place is Davos, Switzerland ([http://www.slf.ch/ueber/organisation/oekosystem/alpine/index\\_EN](http://www.slf.ch/ueber/organisation/oekosystem/alpine/index_EN)). For more information about the position and application procedure, please contact Christian Rixen ([rixen@slf.ch](mailto:rixen@slf.ch), 081-417-02-14) or Sonja Wipf ([wipf@slf.ch](mailto:wipf@slf.ch), 081-417-02-76).



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