

Genetic basis of plant adaptation and speciation

Welcome to homepage of the plant genetics research in the University of Oulu!

We study the genetic basis of adaptation in *Arabidopsis lyrata* and Scots pine (*Pinus sylvestris*). Some studies have also included *Arabidopsis thaliana*. Especially, we are interested in the timing of flowering in *Arabidopsis* and cessation of growth in the fall (timing of budset) in *Pinus sylvestris*. We also study the genetics of incipient reproductive isolation between highly diverged populations of two *Arabidopsis lyrata* subspecies. We also examine patterns of incipient speciation in pines, partly in a collaboration with Langzhou University, China. In addition, we are developing basic genetic tools, comparative maps and markers and biological resources for the two species.

Within the University of Oulu, we are members of [BIOCENTER OULU](#), an umbrella organization consisting of groups in various fields of biomedicine- and biology-related modern biosciences.

Our PhD students participate in the national [Graduate school for Population Genetics](#), led ted by Outi Savolainen.

Scots pine adaptation is studied in the context of EU funded research projects NOVELTREE (2008-2012), FORESTTrack (2010-2012) and Promoting conifer genomic resources (PROCOGEN (2012-2016)), and *Arabidopsis lyrata* in Arelatives. Otherwise the Biosciences and Environment Research Council of Finland has been funding our research.



Flowering *Arabidopsis lyrata* and Scots Pine (*Pinus sylvestris*).