Bachelor or Master thesis BIOVIT 2022/23

Topic/Title (Norwegian):
Analyse av historiske vær- og spiretreghetsdata

Topic/Title (English):
 Analysing historical weather and pre-harvest sprouting data

Summary Pre-harvest sprouting (PHS) is a serious quality issue in the wheat production and occurs when seeds of cultivars with insufficient seed dormancy starts to germinate in the heads before harvest due to rainy weather. Different cultivars vary in dormancy level, and also in how dormancy is maintained under unfavorable weather conditions. Dormancy data is available for Norwegian cultivars from the 1960s until today. We are looking for a master student who can conduct analysis of this historical data, together with meteorological records. The aim of the project is to understand the roles of weather parameters like precipitation and temperature on PHS, to inform the breeding strategies under predicted climate change.

Subject area (keywords) genetics, seed dormancy, historical data, climate change

Language thesis: Norwegian or English

Bachelor or Master thesis: Master thesis

Credits 60 ECTS

Project/company SproutResist (NFR 321436): Genomic-based breeding technology for the improvement of pre-harvest sprouting resistance in spring wheat under Norwegian climate

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