

Bachelor or Master thesis BIOVIT 2022/23

Norsk tittel: Dyrkingsegenskaper hos sorter av åkerbønne og/eller erter for dyrking i Norge

Engelsk tittel: Plant traits in varieties of faba beans and/or peas important for cultivation in Norway



Summary: The main objective is to identify plant traits in varieties in faba beans and peas that are important for cultivation in Norway. Field trials with varieties from breeding companies in Europe will be the basis for the thesis. These will be laid out at locations at NMBU (Ås), Graminor (Hamar) and NIBIO (Kapp) in the season 2023. The experimental work will include recordings of plant development during the season, build-up of canopy and light interception, as well as other factors (i.e. disease infestations) that can affect the yield. The increase in biomass will be followed by taking samples (sub-plots) to different time points, and that can be analyzed for leaf area, biomass from different plant morphological parts (leaves, stems, pods, seeds). This can be also include study of the increase and partitioning of nitrogen (N) during development. Genetic variation between varieties will be studied, as well as important plant traits that are associated with high and stable yield and protein content in varieties.

Key words: Faba bean, peas, protein crops, plant development, yield build-up, crop physiology

Language thesis: Norwegian and/or English

Bachelor or Master thesis: The topic can be adapted to Bachelor level as well as Master level (30 or 60 credits)

Project: FutureProteinCrops - Increased and market-adapted production of grain legumes in Norway to increase self-sufficiency of plant proteins for food and feed

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