

**Topic/Title (Norwegian):**

Jordhelse og bærekraftig fruktproduksjon: Effekt av kompost på fruktkvalitet i epler og moreller

**Topic/Title (English):**

Soil health and sustainable fruit production: Effect of compost on fruit quality of apples and cherries



**Summary**

The main purpose of this project is to develop a comprehensive solution for sustainable fruit production by linking the quality of the soil (soil health) to plant health, crop levels and fruit quality. To improve soil health, the project will use a compost-based fertilizer with a controlled composition of microorganisms. The compost will be tested on several fields for production of apples and sweet cherries in Telemark. The student's task will be to investigate how the compost affects fruit quality compared to the current cultivation regime, and whether the impact is positive or negative.

The thesis will include both fieldwork and laboratory work. The student will gain experience with experimental design, sample harvesting and handling, quality analyses and chemical analyses (e.g., polyphenols, antioxidant capacity, sugars, acids). The content of the thesis can be adapted in terms of scope, types of analyses and fruit variety (apple, sweet cherry, or both).

**Subject area (key words):**

Soil health, sweet cherries, apples, fruit quality, texture, health and sensory related phytochemicals

**Language thesis:** Norwegian or English

**Bachelor or Master thesis:** Preferably Master

**Credits:** 60 sp

**Project/company:**

Nofima AS, Norsk Landbruksrådgiving (NLR)

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