

**Topic/Title (Norwegian)** Effekt av landskap og frukthage på skadedyr og deres naturlige fiender

**Topic/Title (English)** Landscape and orchard effects on apple pests and their natural enemies

**Picture**



**Summary**

Apples are the most important fruit crop in Norway. Insect pests can reduce yield and quality by 20% or more. Two important pest groups are tortricids and true bugs. To produce fruit with minimum use of pesticides, natural enemies of pests living in and around orchards are important. Surrounding landscape as well orchard size and semi-natural habitats such as hedgerows can affect pests and their natural enemies. Better understanding of the role of landscape elements can be an important tool in designing future orchards.

In a pilot project in 2023, we have studied a) the effect of landscape and orchard fragmentation on pests and b) the effect of a seminatural habitat (hedgerows) on pests and their natural enemies, and a report will be available by end of the year 2024

Specific study and approach can be decided based on the student's field of interest. Examples of thesis topics within this area of research:

Assessment of density of a selected apple pest (species can be decided dependent of site(s)) and natural enemies in response to distance from hedgerow. Field work May/June-August/September

Effect of landscape on orchard pests. A theoretical study. May include analysis of existing data.

**Project:** Landskapsperspektiv på plantevern for bærekraftig utvikling i norsk fruktproduksjon. Lead Gunnhild Jaastad, NIBIO

**Subject area:** agricultural entomology, ecology, plant protection, pests on horticultural crops

**Language thesis:** Norwegian and/or English

**Master thesis or bachelor thesis**

**Credits:** 30 or 60

**Please contact:** Lene Sigsgaard [lene.sigsgaard@nmbu.no](mailto:lene.sigsgaard@nmbu.no)