

Alternate mowing in organic orchards as a biodiversity enhancement measure

Problem

Beneficial insects often lack enough food supply and nesting spots in orchards. Most of the measures to enhance biodiversity also require investment for implementation.

Solution

Alternate mowing is a cheap, easy and fast implementable measure to raise food and nesting supply of natural antagonists.

Benefits

The workload decreases, and therefore it saves time and costs. Alternating mulching preserves the driving lanes and increases the diversity of other indifferent plant and animal species in the orchard.

Practical recommendation

- Alternate mowing is an easy-to-implement measure to enhance natural antagonists against relevant pests in fruit growing, such as aphids, summer fruit tortrix etc.
- Apply alternate mowing between April and August, depending on weather conditions. The most important period is spring.
- Mow or roll the driving lanes every 4-6 weeks. Exclude at least every second lane and apply a time-shifted mowing in these, so there are various grass length stages in the orchards.
- Grass cuttings can be mulched into the tree rows to suppress competing weeds.
- Keep caution to vole management. The higher-grown driving lanes can offer better coverage for voles against natural antagonists and can lead to a higher reproduction rate. To lower this risk, consider consistently mulching only the outer lanes of the orchards short.
- Suitable techniques are all commonly used mowing and mulching devices for orchards. Well proven are low-profile sickle mulchers and flail mulchers. Rollers can also be used.

Applicability box

Theme

Crop production, Horticulture, Temperate fruits

Keywords

Plant protection, Pest control, Biological pest control, Biodiversity

Context

Central Europe

Period of impact

Spring-Summer

Equipment

Standard mulching/ mowing or rolling devices



Picture 1: Sickle mower beside orchards (Photo: T. Fahje, FÖKO, 2018).



Picture 2: Driving lane with natural vegetation (Photo: N. Oeser, FÖKO, 2018).

Further Information

Weblinks

- [Alternierendes Mulchen \(DE\)](#)
- Check the [Organic Farm Knowledge](#) platform for more practical recommendations.

About this Practice Abstract

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