

# Weed trimming in soybeans

## Problem

In cases where general management measures (crop rotation, cover crops) and direct weed control measures (harrowing, inter-row hoeing) have not provided sufficient control of weeds, weeds may overtop soybeans in summer. This situation creates three major problems: a) competition for light, water and nutrients, b) an increase in the density of the soil weed seed bank, and c) a reduction in grain quality parameters (increased moisture and impurities) at harvest.

## Solution

One or more passages with a weed trimmer machine during summer time, when the inflorescences of the weeds overtop the soybeans, resolves the problem.

## Outcome

With one or more passages, weeds that overtop the soybean crop are trimmed, thus avoiding further competition, seed ripening and spreading of the weeds. The method is also effective on weedy sunflowers. When applied in winter cereals, the method helps to contain grain moisture, which is an important price parameter.

## Practical recommendations

- The possibility to control some weeds in advanced growth stages with the weed trimmer does not replace the systematic application of preventive weed control measures.
- Proper timing of weed trimming is essential. Trimming must be carried out before canopy closure, as it will be difficult to drive into the crop after canopy closure.
- Large working widths reduce operational costs and damages on the crop by the tractor wheels, but they also reduce the cutting height accuracy.



Picture 1: Weed trimmer. Picture 2: Soybean stand after trimming the weed. (Photos: Cristina Micheloni)

## Applicability box

### Theme

Weed management

### Geographical coverage

Europe

### Application time

When weeds overtop field crops

### Required time

Depends on working width and working speed (usually 3 to 6 km/h)

### Period of impact

Current and succeeding field crops

### Equipment

Weed trimmer

### Best in

Soybean, sugar beet, winter cereals

## Evaluation

Define two experimental plots, one with trimming and one without trimming. Determine the following criteria in both plots.

### At harvest:

- Calculate yields.
- Measure grain moistures.
- Estimate the proportion of grain impurities.

### In the succeeding crop:

- Evaluate weed pressure.

## Practical testing and sharing of results

If this method seems to be suitable for your farm, we recommend that you test it under your own farm conditions.

Use the comment section on the [Farmknowledge platform](#) to share your experiences with other farmers, advisors and scientists! If you have any questions concerning the method, please contact the author of the practice abstract by e-mail.



## Further information

### Video

- This [video](#) shows the weed trimmer in action.

### Link

- At [www.aiab-aprobio.fvg.it](http://www.aiab-aprobio.fvg.it) a lot of information on organic arable crop management is available in biweekly bulletins and topic-specific leaflets.
- The [knowledge platform](#) offers information and practical updates on weed management and soil fertility management in organic arable cropping systems.

## About this practice Abstract and OK-Net Arable

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