



Inter-row hoeing – sugar beets + other row crops

Mechanical method that can be used to control weeds in e.g. sugar beets, maize and vegetable crops. Inter-row hoeing can be used separately or integrated with band spraying of herbicides. Inter-row hoeing can help controlling resistant weeds.

DID YOU KNOW?

Up to 70% savings of herbicides when combined with band

Readiness for use:

Efficacy:

How it works

In crops with row distances at 40-50 cm like sugar beet it is possible to do mechanical weeding. Each inter-row space is cultivated with goosefoot shares.

- 90-100% efficacy against annual inter-row weeds
- Goosefoot shares are adapted along with development of the crop, to go as close as possible to the crop
- Several passes are needed whenever emerged weeds have developed 2-4 true leaves
- Working widths are usually 6-18 of meters and the working speed is between 8-15 km/hour
- Sugar beets should not be covered by hoeing, but can persist more than 50 % soil coverage if sugar beet plants have 4 leaves or more
- Finger weeders may be used as supplementary tool
- If the beet plants gets more than 4 true leaves the hoeing efficacy decreases and the risk of crop damage increases
- Steering systems for tractor, sowing machine, hoeing system have to operate with a high precision GPS or camera to avoid uncertainties that causes crop damage or insufficient weed control
- Best efficacy on flat fields, and on dry soil



Figure 1. Inter-row hoeing in sugar beets.



Figure 2. Close-up of sugar beets after inter-row cultivation

Read more

Demonstration trials, Denmark

Video: Automated intra-row weed control in weedy sugar beets