

Controlling docks by stubble cultivation

Problem

The traditional plough with a working depth of 20 cm is only partly suitable for controlling docks as it splits the roots, making it difficult to bring them to the surface manually or with a harrow. Most of the dock roots that stay in the soil start to sprout again.

Solution

In order to clear docks, the skim plough and the flat cultivator have proved to be effective. They cut through the soil at a depth of 12-25 cm and expose the old roots. The challenge is then to bring these roots to the surface with a suitable harrow in order to collect them.

Outcome

The stubble cultivation cuts the dock roots below growth points. The vegetative plant parts are then cut off from the water and nutrient supply, and regrowth is inhibited.

Practical recommendation

- Summer dock treatment is especially worthwhile in dry summers with catch crop cultivation and after early maturing crops (winter barley, whole-crop silage) or with an early tillage of grass-clover.
- After grass-clover lay or cereal harvest, undercut the dock plants at a depth of 12-15 cm with a skim plough (without skimmer) with a support wheel, a stubble cleaner or an overlapping flat cultivator (Figure 1).
- Bring the roots to the surface by passing over the field with a spring-tine harrow every 7-14 days. Additionally, apply a rotary harrow in heavy soils to expose the roots.
- After every round, collect roots manually or let them dry in suitable weather conditions. Only leave fully dead roots on the field.

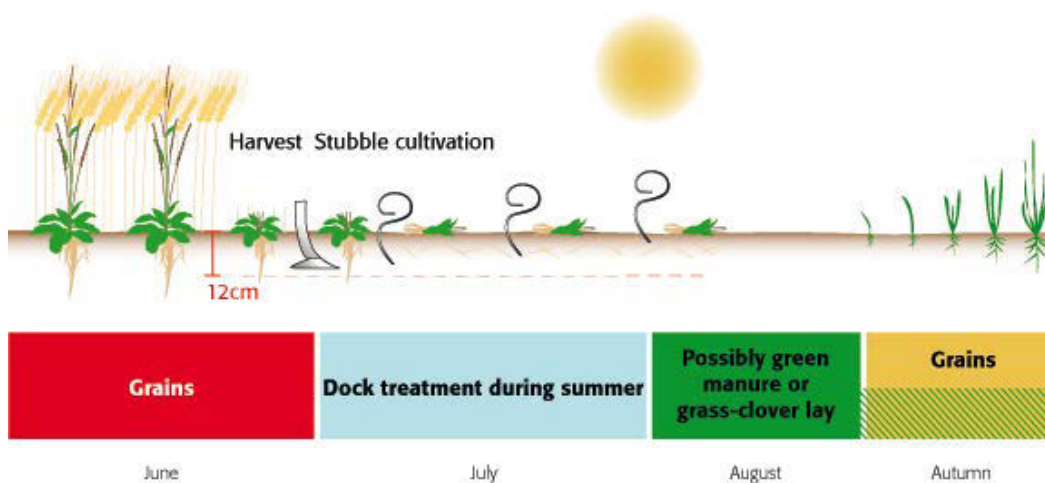


Figure 1: Dock treatment in summer by stubble cultivation after cereal harvest reduces dock infestation in the long-run.

Applicability box

Category

Weed control

Geographical coverage

Within the range of docks

Application time

Between the end of June and beginning/middle of August

Required time

1 time skim plough or flat cultivator, 1-3 times harrowing, possibly collection of root-stocks by hand

Period of impact

Succeeding crop, long-term impact

Equipment

Skim plough or flat cultivator, spring-tine harrow

Best in

After an early maturing crop like winter barley or whole-crop silage.