



COMMON RAGWEED (*AMBROSIA ARTEMISIIFOLIA*) CONTROL

In order to control ragweed, only a combination of several techniques can be successful. This includes introducing winter crops into crop rotations, using long intercropping, mixing mechanical hoeing with herbicides in spring crops and cleaning combine harvesters.

DID YOU KNOW?

Common ragweed produces a large quantity of seeds (3,000 to 10,000 per plant) which are very small (3.5 mm) and able to survive in the soil for a long time.

A VERY COMPETITIVE AND ALLERGENIC WEED

Common ragweed (*Ambrosia artemisiifolia*) is a very competitive annual weed in spring crops, causing yield losses and human allergies. Its emergence period is very lengthy (from March to September) and it can germinate in depth and go to flower even in case of late emergence. This is why it is so difficult to control in cropping systems.

CONTROL MANAGEMENT

When tackling ragweed, only a combination of several techniques can be successful.

Firstly, **introducing winter crops** into crop rotations to:

- Create a gap between the ragweed emergence period and the crop emergence;
- Benefit from a wider range of herbicides;
- Take advantage of bare soil during summer and practice tillage in order to reduce and destroy ragweed.

Secondly, **using long intercropping** (between winter cereal and soybean, for example) and practice stubble cultivation during the summer. This method destroys the ragweed which has developed after harvesting and allows to apply superficial tillage, thus stimulating ragweed emergence in

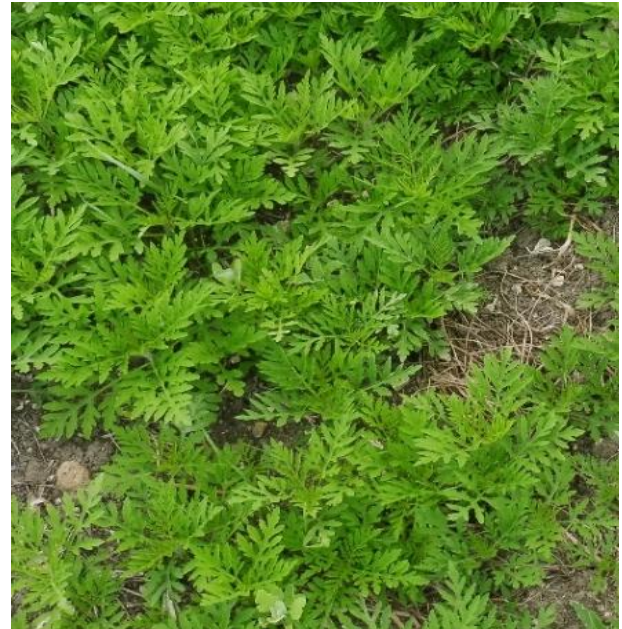
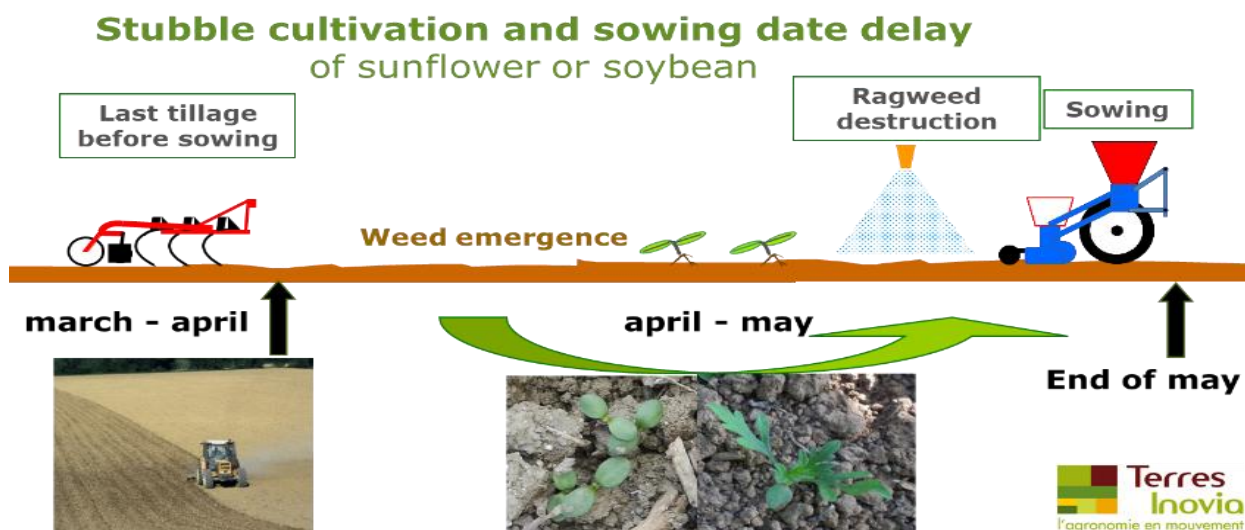


Figure 1 – High common ragweed infestation in a field (photo by Terres Inovia)

order to reduce the seedbank (obviously, the ragweed is destroyed before its flowering).

Figure 2 – Two combined measures to control ragweed in sunflower or soybean crops are false seedbed and delayed sowing





COMMON RAGWEED CONTROL

It is recommended to **delay the sowing date of the spring crop** in order to have enough time to practice stubble cultivation and destroy the ragweed seedlings more easily. This results in a reduced quantity of ragweed emergence in the spring crop.

A **mixed cultivation program** combining mechanical hoeing with pre-emergence and post-emergence herbicides, respecting spraying stages and recommended doses can contribute to reduce ragweed density in spring crops. Harvesting the most infested fields **for last and thoroughly cleaning** the combine harvester is also recommended to avoid the seed dissemination of ragweed.



Figure 3 – Common ragweed infestation in a soybean field (*photo by Terres Inovia*)



Figure 4 – Common ragweed infestation in a sunflower field in France (*photo by Terres Inovia*)

REFERENCES

- Contre l'ambrosie, trois leviers complémentaires, désherbage du tournesol et du soja », Fanny VUILLEMIN et Franck DUROUEIX, Perspectives agricoles, January 2018 #451
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