

How to use my CombCut ?

Some hints



How does CombCut work?



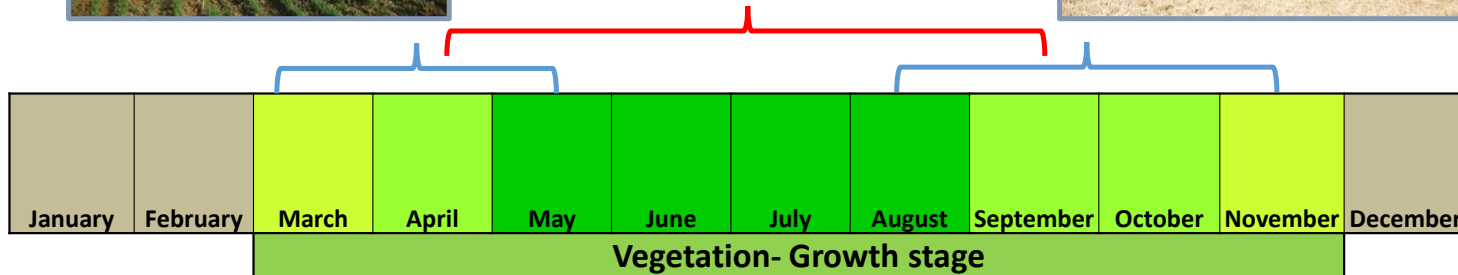
- CombCut's principle is to help the culture to "choke" the weed
 - Cut the weed to improve the competitiveness of the culture
- Machine combs through the culture, cuts the weed, but not the crop
- A physical difference between the crop and the weed is required
 - Weed is stiffer than the culture
 - Weed is thicker than the culture
 - The weed has a different branching pattern than the culture
- If the culture is too thick or cannot be combed (ex, salad / potatoes):
 - Cut the weed right above the culture
- Repeat the cutting to prevent the weed from "recharging"

Is CombCut only for Ecological farmers ?

- NO, CombCut is also used in conventional farming
 - To reduce the volume of herbicides
 - Close to spray-free zones (rivers, lakes, fresh water zones and in urban areas)
 - In vegetables
 - To fight weeds that are resistant to herbicides
 - For fighting weed in certain limited areas ("Spot fighting")
 - To cut weed immediately before harvesting
 - To cut "volunteer crop" from last years seeding
 - To cut seed heads in sugar beats
- Besides, CombCut can also be used in rainy and windy conditions



Mechanical weed control – different methods



CombCut should preferably be combined with other methods

- CombCut is one of many different methods to fight weed
- For a sustainable and efficient weed control, different methods should be combined
 - Crop rotation
 - Harrowing
 - Row hoeing
- With CombCut you don't touch the soil or risk to cause nutrition leaks
- CombCut is used during the entire growth stage of the culture



Which types of weed can you fight with CombCut ?

- CombCut has a scientificly proven effect on thistles, but can also be used on:
 - Almost all kinds of weed with a physical difference to the culture – With right timing !
 - Weed growing higher than the culture



Cocklebur



Charlock



Fat hen / Orache



Black grass

Scientifically verified & recognized



Swedish University of Agricultural Sciences

Result and measured effects on thistle by SLU EkoForsk 2008-11:

- 87-100% reduction of seed spread
- 68-89% reduction of the plant
- 66-79% reduction of the root

...Above resulted in 76-94% higher grain yield. **Project continues with research on other types of weed and in other cultures.**

COP 17-CMP 7 DURBAN 2011

United Nations Conference on Climate Change



CombCut highlighted in a report at COP17 for the world's policymakers by the RTCC (Responding To Climate Change) which is the UN official observer. CombCut is presented as an effective and sustainable solution for the agriculture challenge to feed the global population of 9 billion people.



Case 35
Weed Control without Chemicals
This article introduces a creative approach to weeds as one of the 100 innovations that shape "The Blue Economy". This article is part of a broad effort to stimulate entrepreneurship, competitiveness and employment.

10 Years
100 Innovations
100 Million Jobs

The logo for "The Blue Economy", featuring a stylized globe icon and the text "The Blue Economy".

Important parameters

- **TIMING**

- **Timing is by far the most important parameter**
- Use CombCut when the physical difference between weed and culture is most significant
- Start as early as possible in the season
 - Before the crop starts to form firm straws
 - Comb through the flag leaves of the crop
 - Before the flag leaves are formed, the risk of harming the crop is minimal
- "Cut the weed before the seed"
- Cut the thistle when it has 6-8 leaves (best effect)
- If necessary, repeat the cutting after 1-4 weeks



Important parameters

- **Remember – You don't see the full result until 1-2 weeks after the cutting**



Visible long term result



Without CombCut

With CombCut

Important parameters

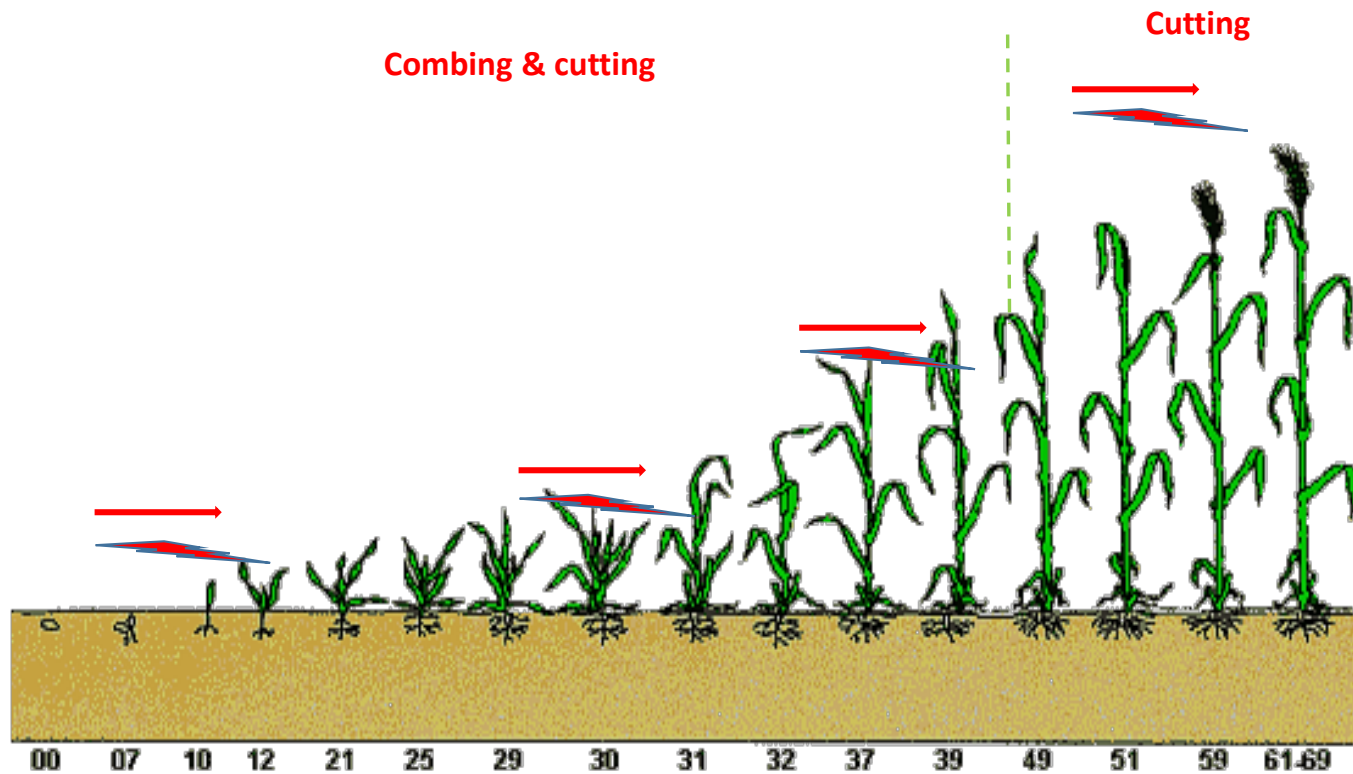
- **SPEED**

- Since the knives are static, CombCut works like a scythe
- Driving too slow reduces the cutting effect
 - When driving slow, the brushes can be used to support the cutting process
- Recommended speed is minimum 8-10 km/h
- If possible, CombCut can be driven much faster
 - We have examples up to 22 km/h

Important parameters

- Height
 - Recommended height can be 8-12 cm below the top of the culture
 - If culture is thick, it's better to raise CombCut higher
 - To let more culture pass through the knives easier
 - To avoid damage in the culture
 - In very thick culture (or in culture you cannot comb), cut the weed right above the crop
 - In many cases CombCut can be used without the wheels
 - This makes it easier to adjust the cutting height "on-the-run"

CombCut – Cutting height



Combs through the crop, cuts the weed and can be used during the entire growing phase.

Important parameters

- **PITCH ANGLE**

- The pitch angle (lending forwards/backwards) is adjusted with the Top Link in the three-point linkage
- When leaning CombCut forwards, the knives become more aggressive
- Leaning forward is best if cut material has a tendency to collect right behind the knives
- **WE RECOMEND TO USE A HYDRAULIC TOP LINK**
 - This makes it easy to adjust the pitch angle
 - Pitch angle can be adjusted "on-the-run"

Important parameters

- **KNIVES**
- CombCut's knives can be adjusted in two ways:
 - The opening between the knives (tilting)
 - Angle of attack
 - Both these settings can be read on the scales on each section
 - **Factory setting: 5/50**

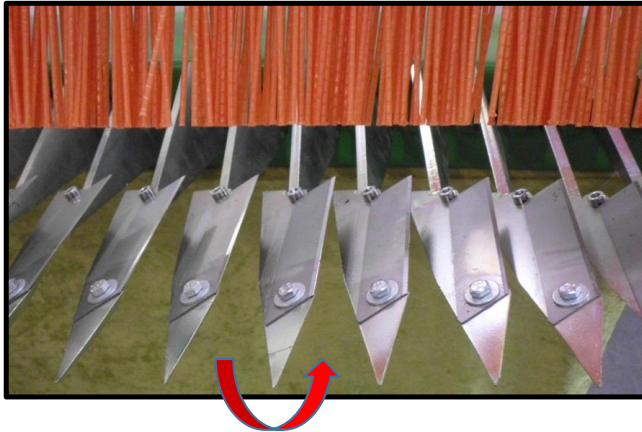


Important parameters



- KNIFE ADJUSTMENT
- To cut **more aggressive**:
 - Reduce the opening between the knives (less tilting), **Setting: 0-5**
 - Angle of attack, **Setting : 40-50**

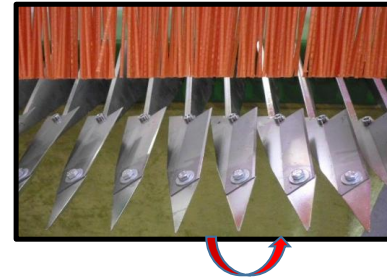
Important parameters



- KNIFE ADJUSTMENT
- To cut **less aggressive**:
 - Increase the opening between the knives, **Setting: 5-25**
- Angle of attack: **50-70**

Important Parameters

- If material is collected between the knife and the holder:
 - Increase the opening between the knives



Moving the brushes forward can also be helpful...

- This can be compensated by a more aggressive angle of attack



Different settings

- We recommend that you always note what settings is best to different type of culture, weed, time of year, growth stage, etc.
 - This way you will build your own experiance how to use CombCut best, in your local conditions
 - Since settings could vary with different conditions, there is only one table showing general settings. Additional adjustment could be nessecary to get the most optimum cutting result
- Don't forget that the sharpness of the knives also has an influence on the cutting result