

False seedbed / stale seedbed

False seedbed is a method to provoke germination of weeds from the seedbank ahead of sowing the crop. The method can be used in combination with weed harrowing and/or flex tine harrowing, and the efficacy increases if it is combined with late sowing

DID YOU KNOW?
False seedbed is an important IPM-tool against resistant weeds

Readiness for use: 

Efficacy: 

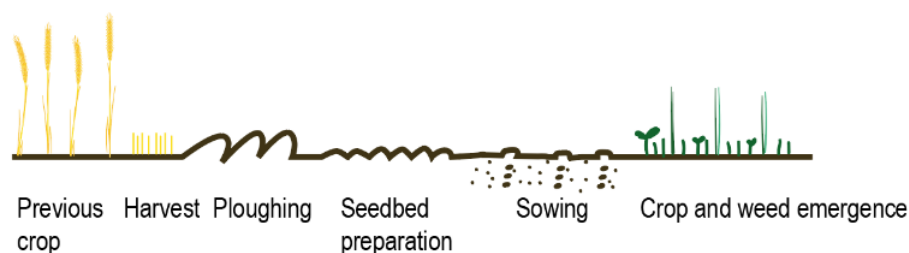
How it works

- A seedbed is made and left for a period to provoke germination of weeds from the seedbank in the upper 0-5 cm soil layer. When the weeds emerge, they are destroyed mechanically ahead of sowing/drilling the crop, figure 1 (bottom).
- First a seedbed is prepared with the same thoroughness of soil cultivation as before sowing a crop
- Next, the soil is left for a period of 3-30 days depending of weed species to allow the weeds to germinate.
- When weeds have emerged, they are destroyed. The destruction can be made mechanically (superficial treatment), physically (e.g. by flaming) or with chemicals (e.g. glyphosate).
- If the time before sowing allows, then harrowing or flex-tine harrowing can be used in the upper 2-3 cm to stimulate further emergence, and destruction is repeated
- Finally, the seedbed is prepared again and the crop is sown/drilled.
- If false seedbed is combined with late sowing there may be a reduction of 50-80 % of emergence of some grass species, e.g. black grass
- False seedbed may be difficult to carry out on heavy soils where there is a risk that the seedbed may dry out, or if the time period before seeding is too short

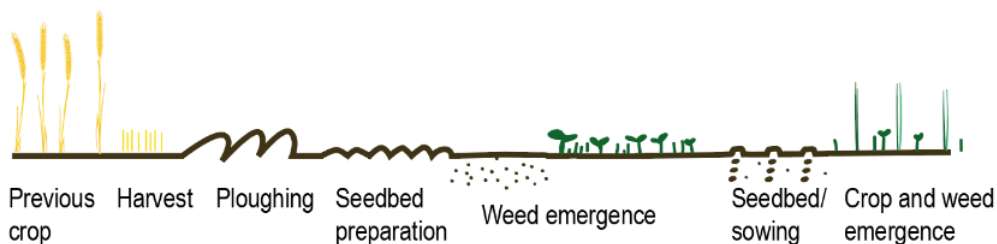
Figure 1. **The mechanism of false seedbed, (Melander, 2002)**

(On top) traditional seedbed preparation and sowing, (below) false seedbed in between ploughing and sowing

Without false seedbed



With false seedbed



CONTACT

SEGES
INNOVATION

Jens Erik Jensen
SEGES Innovation P/S
jnj@seg.es.dk
+45 2171 7706

Marian D. Thorsted
SEGES Innovation P/S
mdt@seg.es.dk
+45 2475 7914



AARHUS
UNIVERSITET

Bo Melander
Aarhus University
bo.melander@agro.au.dk
+45 22 28 33 93