

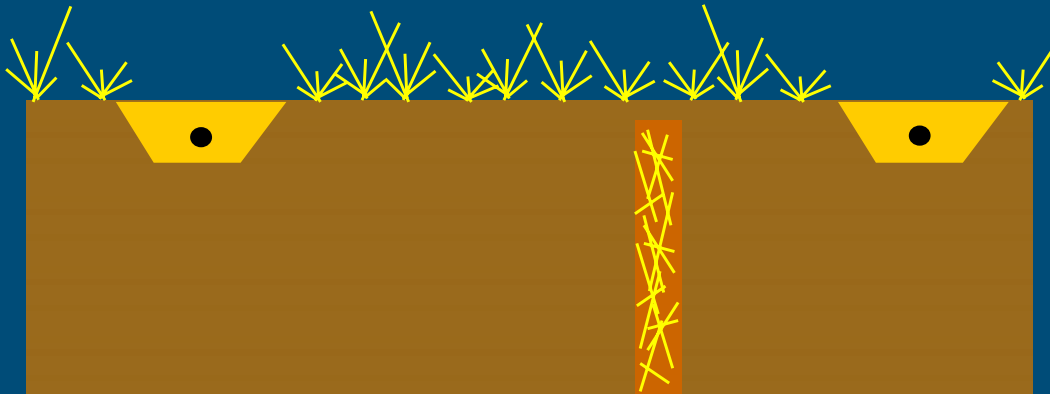
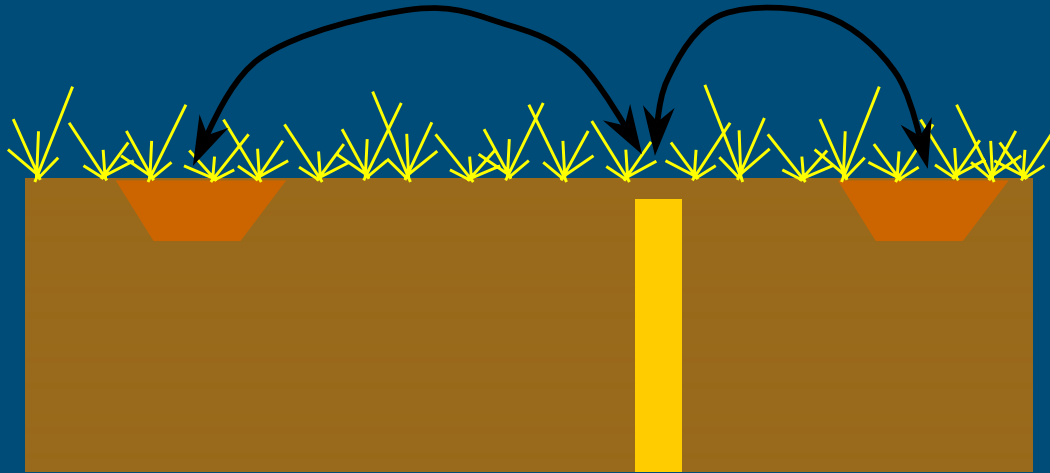
# CTF weed management perspectives

- Reduce herbicide reliance and weed resistance
  - Combine soil conservation with non-chemical tactics
  - Flexible rotations and mixed cropping on strips
  - Improve timeliness and quality of mechanical and thermal control and cultural practices
  - Precise small-scale soil, crop & residue manipulation
  - Enhanced diversity and manageability of natural processes (e.g. habitat for weed seed predators)
- Structured field designs increase flexibility + options

# Some examples

- Band application of herbicides
  - Non-selective herbicides between crop rows: GM crops not needed
  - Residual herbicide bands + shifting rows: less carryover
  - Reduced use, low drift, more options, simplicity+flexibility
- Weed-suppressive inter-row cover crops
  - flexible sowing time, sowing in standing crops and residues
  - Rolling, undercutting, mowing+residues moved to rows
- In-row mechanical weeding on narrow crop strips
  - 12-24 m wide auto-steer cab-adjusted pull-type cultivators: €5/ha
- New strip tillage tools for minimum disturbance
  - Precise shallow cultivation without cutting through stubble
  - “Harvesting” seed-producing weeds
  - Strip ploughing or slot tillage: long-time burial of weed seeds

# Some examples



# CTF: horticultural principles on arable scale?



# Essential “ingredients”

- Accessible, trafficable, level wheelways
- Precise automatic guidance
- Precise surface profile in crop zone, no rubbish
- Tools for small-scale manipulations / band application
- Match to local climate, soil, crops, weed, farm size...
  - Many things are needed for other purposes as well
  - Can largely be met with current technology (? or !)
  - Are these options utopian or realistic?
  - How to proceed?