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Tool sheet

Finger-weeding in row crops

Finger-weeding is applicable in many agricultural and horticultural row crops. It controls intra-row weeds, which are those that grow in the crop line.

DID YOU KNOW?
Finger weeding is gentle to most row crops and is easy to apply

Readiness for use: **Efficacy:**

How it works

Finger-weeding is a well-known mechanical weed control method. Either side of the crop row is treated by a rotation wheal with 'fingers' made of rubber (Figs. 1 and 2). It may also consist of just one wheel per row, see the video in the inserted link

- Finger weeders uproot and cover weeds with soil during operation
- The soil needs to be even, loose and workable for finger weeders to operate effectively
- The aggressiveness of finger-weeding is determined by driving speed, the distance between the two wheels and stiffness of the rubber-fingers. High aggressiveness is achieved with high forward speed and wheels set close together with overlapping and stiff fingers.
- Soft fingers, wheels apart and low forward speed result in reduced aggressiveness
- High aggressiveness provides effective weed control but may adversely injure the crop
- Finger-weeding is most effective against small weeds; between the white thread growth stage and up to the cotyledonous growth stage. Thereafter the effectiveness declines rapidly as weeds develop
- High selectivity of finger-weeding, where effective weed control results in minimum crop injuries, requires a clear size differential between crop and weed plants with crop plants being greater than weed plants
- Repeated passes may be necessary to achieve satisfactory control

Figure 1. Finger weeding in maize.
Photo Henning Thomsen AU

Figure 2. The white dotted line shows the crop line in transplanted white cabbage.
Photo Bo Melander

Read more
Video of finger-weeding

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