

Installation of mulched rip lines

Mulched rip lines are installed in paddocks sown to annual crops each year, soon after planting using a purpose-built implement.

Mulched rip lines are most useful in crops of onions, pyrethrum, poppies and peas.

The straw and rip lines are designed to retain run-off water on the paddock by:
slowing water movement down-slope with the straw; and
getting the water to infiltrate into the soil through the rip lines.

The rip lines create a zone of loose soil that acts like a 'sponge'. Any soil moving down-slope is also trapped by the straw and so prevented from leaving the paddock

- ✓ Immediately after sowing, level contour lines are marked (using a hand held clinometer) across the slope with small brightly coloured flags.

It is critical to ensure that the lines are level or on-the-contour, because if not, the lines will concentrate surface runoff water into depressions resulting in increased erosion rather than infiltration of the runoff into the soil.

- ✓ Marking out the lines requires 2 people.
- ✓ Start at the top of the slope with the first line just below the top break in slope.
- ✓ Stand approximately 30 metres apart across the slope.
- ✓ With your right hand bring the clinometer up to the right eye or hold the clinometer up at eye level, hold away from your eye slightly and look through the clinometer and line up cross hairs on the other person at the same height.
- ✓ Read the scale on the right and move up or down the hill until cross hairs align with zero.
- ✓ Place a red flag at your feet in the correct position.
- ✓ Each person then moves across the slope approximately 30 m to place the next flag.

Work across the slope from one side of the paddock to the other and once a line is completed, move down slope to the next line.

- ✓ On slopes of 12 – 14 % the mulched rip lines are spaced at approximately 40 m intervals - on steeper slopes the lines may be as close as 25 m apart while on flatter slopes they can be up to 80 m apart.

A two-tined ripper hitched to a wheeled tractor is used to install the rip lines across the slope.

- ✓ Soil is ripped to approximately 250 mm depth.
- ✓ At the same time cereal straw is laid on top of the rip lines at the rate of a small square bale for each 25 – 30 m of rip line (approximately 5 tonnes/hectare).