

Seed grower's
recommendations
2011

Seed production of red clover



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Seed grower's calendar, red clover

Sowing year

When	What to do
Spring	Undersowing in an early and stiff cultivar of spring wheat or spring 2-row barley. As long as lodging is avoided, cover crop sowing rate and nitrogen rate can be the same as for ordinary barley or wheat crops without seed crop establishment. Sowing rate of red clover: 2-4 kg/ha. Optimal sowing depth for red clover: 0.5-2.0 cm.
Red clover: Spade leaf to one triple leaf	Herbicides against broad-leaved weeds: Either (1) Basagran M75, 3-4 L/ha, (2) Lantagran (1.5 kg/ha)+MCPA 750 (0.7 L/ha), or (3) Express (1.0 tabl/ha)+MCPA (0.50 L/ha). The latter treatment may result in some damage to red clover seedlings, but they will usually recover. Express must never be used alone.
Cover crop stem elongation/heading	Supplemental nitrogen input, and application of fungicide, insecticide and plant growth regulator to cover crop.
August - September	Cover crop harvest. Cover crop straw can be cut and returned except when red clover plants are very weak. Leave as short stubble as possible, chop the straw and spread it evenly, spread the chaff, avoid loss of light kernels.
September	If spring herbicides did not control <i>Matricaria inodora</i> adequately: Autumn application of Express (1.0 tabl/ha) + MCPA 750, (0.5 L/ha).
September - October	Cutting/defoliation in autumn is not necessary, even in the strongest red clover crops.

Seed harvest years

When	What to do
Early spring, red clover 5-10 cm high, no frost during night.	If necessary, control <i>Phleum pratense</i> , <i>Poa trivialis</i> , <i>Alopecurus geniculatus</i> and other early grasses with Focus Ultra (4-5 L/ha) or Agil 100 EC (1.5 L/ha). If <i>Poa annua</i> predominates: Select (0.40-0.50 L/ha) + Renol (0.4-0.5 L/ha).
Shortly after growth initiation, night temperature preferably >10 °C	If necessary, control <i>Matricaria inodora</i> and other broad-leaved weeds with Basagran SG, 1.6 kg/ha. Tank mixture with Agil 100 EC may result in temporary burning of some leaves, but does not reduce seed yield. Since the effect of Basagran SB is often inadequate, consider hand roughing instead.
As early as possible, soil conducive to tillage	Plow a 3 m wide belt followed by tillage and sowing of <i>Phacelia</i> along crop edges to attract bees. Sowing rate: 1.5 kg/ha.
Early stem elongation, 20-30 May	Plant growth regulation: Moddus, 1.0 L /ha. Only in cvs. 'Nordi' and 'Lea'.
Not later than 10 June	If necessary: Focus Ultra (4-5 L/ha) or Agil 100 EC (1.5 L/ha) against <i>Elytrigia repens</i> . If there is still <i>Matricaria inodora</i> and other broad-leaved weeds, hand-roughing is usually better than a second application of Basagran SG.
Flower bud visible 15-25 June	Growers who have previously observed the lesser clover seed weevil (<i>Hypera nigrorostis</i>) on neighbour fields should spray with Biscaya OD 240, 0.4 L/ha.
Mid summer	Remove <i>Rumex</i> , <i>Matricaria inodora</i> or other weeds whose seeds are difficult to separate from red clover seeds.
Early July, start of flowering	Move bee hives into clover seed crop, one hive per 0.3 ha. Make sure the bees have water. Cut down <i>Phacelia</i> and other flowering plants that distract bees from red clover.
Minimum 60 % ripe flower heads and forecast for at least one week of good weather, in any case not later than 15 Sep.	Desiccation with med Reglone, 2-3 L/ha + adjuvant. Use 300-400 L water per ha. Spray if necessary twice, in cross.
One week after desiccation	Seed harvest. Drum periphery speed 20-30 m/s, concave clearance 6-10 mm front / 3-6 mm rear, most gentle threshing of tetraploid varieties. Seed must be under ventilation/drying within three hours after harvest.

