Rose clover

Scientific name(s)

*Trifolium hirtum*

**Strengths**

- High seed yields are easily harvested, handled and cleaned using common multi-crop machinery
- Very well adapted to mildly acid and alkaline sandy-loam and loam soils
- Productive annual forage and tolerant to heavy grazing in medium-low rainfall areas
- Suited to self-regenerating ley systems or short-term phase farming
- Protection against false breaks
- Medium-low level of hard seed
- Ideal companion plant in mixtures with other legumes such as subterranean clover or serradella

**Limitations**

- Not adapted to waterlogged soils
- Low level of hard seeds
- Lack of persistence under intensive crop rotation

**Plant description**

The inflorescence is a globular terminal head, which varies from light to dark pink in colour. Seed are smooth, slightly compressed, cream coloured, approximately 2 mm long and weigh 3-4 mg, with about 250,000 seeds per Kg.

**Pasture type and use**

Rose clover is an aerial seeding, winter growing self-regenerating annual pasture legume. It is typically grown in areas that support either subterranean clover or annual medics and is often sown in mixture with subterranean clover, serradella and biserrula.

**Where it grows**

**Rainfall**

Suites to regions with 400 to 700 mm annual rainfall.

**Soils**

Adapted to soils of mildly acid to alkaline reaction (pH 5 to 8 CaCl2) and to a range of textures

**Temperature**

Tolerant to frosts

**Establishment**

**Companion species**

- **Grasses:** Italian ryegrass, consol lovegrass and Premier digit grass.
- **Legumes:** subterranean clover, biserrula, serradella, crimson clover, bladder clover, annual medics and gland clover
**Sowing/planting rates as single species**

Sowing rate for seed production and pure pasture swards should be 10 - 15 Kg/ha. Sow shallow at 0.5 cm. Rolling after sowing is an advantage.

**Sowing/planting rates in mixtures**

Sow at 3 - 7 kg/ha in mixtures with other pasture legumes.

**Sowing time**

Sow Rose clover in autumn as close to the break of season as possible.

**Inoculation**

Seed of Rose clover must be inoculated with group C rhizobia.

**Fertiliser**

Sow with 100 - 150 kg/ha superphosphate, or super/potash if on sandy soils.

**Management**

- **Maintenance fertiliser**

- **Grazing/cutting**

Rose clover can be heavily grazed in winter. However, because of its erect growth habit, care needs to be taken in spring to prevent overgrazing and reduced seed set.

**Seed production**

Potential seed yields of rose clover are similar to that of subterranean clover, usually ranging between 250-700 kg/ha., and in lower rainfall areas clover are likely to be higher than subterranean clover.

Rose clover can be harvested for seed with a conventional header. Drum speed needs to be high with the concave closed down and airflow under 20%.

**Ability to spread**

Many seeds of rose clover survive ingestion by sheep and are readily spread around paddocks.

**Weed potential**

There have not been reported cases of rose clover growing within native vegetation.

**Major pests**

Rose clover is moderately tolerant to blue green aphid, lucerne flea and red legged earth mite.

**Major diseases**

It has little or no susceptibility to clover scorch disease (*Kabatiella caulivora*).

**Herbicide susceptibility**

Tolerant to most of the broad-leaf herbicides used on pastures. Grass weeds can be safely controlled with common grass-selective herbicides.

**Animal production**

- **Feeding value**

Rose clover has palatability similar to subterranean clover. Organic matter digestibility of rose clover in spring is usually around 70% with 20-25% crude protein, but these values decrease with senescence.

- **Palatability**

Highly palatable
Production potential

The quantity of forage produced by rose clover is generally equivalent and sometimes better than subterranean clover. Peak dry matter yields in un-grazed swards can range between 4 and 7 t/ha.

Livestock disorders/toxicity

No livestock disorders have been reported but, as with most legumes, could cause bloat in cattle in very pure rose clover swards. Rose clover has very low to undetectable levels of the isoflavones associated with infertility in sheep.

Cultivars

<table>
<thead>
<tr>
<th>Cultivar</th>
<th>Seed source/Information</th>
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<tbody>
<tr>
<td>Hykon</td>
<td>-</td>
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<tr>
<td>SARDI rose</td>
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<tr>
<td>Sirint (seed no longer available)</td>
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<tr>
<td>Olympus (seed no longer available)</td>
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<tr>
<td>Kondinin (seed no longer available)</td>
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Further information

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Author and date

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