

Renegade

RED CLOVER *Trifolium pratense*



Seeding Rate	kg/ha
Dryland	3 - 4
High Rainfall/Irrigation	5 - 8

Seed Treatment	Goldstrike®
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Description
Big yielding, short term red clover

Market Segment/Target
Grazing and hay production

Features
Erect growing 'hay type'
High yielding
Good disease tolerance

Benefits
Excellent hay type for top end forage yield and annual mixes
Superior digestibility in forage
Suitable to a wide variety of soil types

Range	
Low Bloat™	N
Super N Fixer™	N
XtraLeaf®	N

SEED AGRONOMY TABLE	
Maturity	N
Hard Seed Level (description)	Medium
Waterlogging Tolerance	Fair

ESTABLISHMENT GUARANTEE™

At S&W Seed Company Australia we're so confident about our seed genetics and seed quality, we will replace seed at half the original purchase price if it fails to establish satisfactorily in the first thirty days*

STRENGTHS

Highly productive and suitable for grazing, silage or hay
Can be grown in a short-term pasture mix
Stoloniferous varieties have moderate drought tolerance and can maintain populations through the production of daughter plants
Provides a valuable source of nitrogen for companion grasses or subsequent crops

LIMITATIONS

Susceptible to a range of fungal diseases
Stock infertility can occur due to oestrogenic compounds present in most cultivars
May cause bloat in grazing animals if dominant
Relatively poor winter growth

PASTURE TYPE AND USE

Red clover is a most productive, summer-active, forage legume for temperate areas. It is most nutritious for hay or silage production and well suited to cattle grazing. Associated with high levels of N fixation.

WHERE IT GROWS

Rainfall: To be persistent and productive red clover requires an annual rainfall of at least 700 millimetres. Hardier stoloniferous varieties will persist and be productive in areas down to 600 millimetres annual average rainfall.

Soils: Performs best on well-drained fertile loamy soils of moderate to heavy texture. Tolerant of acid soils, however it performs best in a pH (water) range of 5.5 - 7.0. Moderate tolerance to soil aluminium. Does not thrive on poorly drained soils. Low tolerance to saline soils.

Temperature: Red clover can be found growing naturally between latitudes 30°N and 65°N. Tolerance to high or low temperatures reflects origin of parental material. Optimum growth occurs in the range 20 to 25°C.

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PLANT DESCRIPTION

Plant: A herbaceous perennial or biennial legume, 50 to 75 centimetres tall with a strong, deep, extensively branched taproot.

Stems: Erect, hollow, hairy, leafy stems with 4 to 6 branches originate from a dense crown. Stoloniferous types are more persistent and tolerant of close grazing by sheep.

Leaves: Trifoliolate on a slender stalk, oblong or oval shaped and hairy, with branched veins. Tetraploid types tend to have larger leaves than diploid types.

Flowers: Large sphere-shape, many small rose-coloured flowers clustered; brown and papery after seed set. Egg-shaped pods contain one seed.

Seeds: Kidney-shaped, can be yellow, brown or purple with a moderate level of hard seed present. Approximately equal to 600,000 seeds per kilogram.

ESTABLISHMENT

Sowing/Planting rates in mixtures: 2 to 5 kilograms per hectare. Ensure seed is Goldstrike® treated.

Sowing/Planting rates as single species: 3 to 8 kilograms per hectare. Ensure seed is Goldstrike® treated.

Sowing time: Can be sown in autumn (early) or spring. There is a risk of frost damage to young plants if sown in autumn.

Inoculation: Treated. The use of Goldstrike® XLR8™ seed treatment is recommended to reduce damage from insects at seedling stages.

Fertiliser: Requires high levels of fertility for best performance. Major nutrient requirements are phosphorous, potassium, sulphur and molybdenum. Soil test results and local knowledge of soil type and fertiliser history should determine rates to be applied at sowing.

MANAGEMENT

Maintenance fertiliser: Adequate levels of phosphorous, potassium, sulphur and molybdenum should be maintained for optimum growth.

Grazing/Cutting: When grown for hay, cutting red clover at the early flowering stage (one quarter to one half in bloom) maximises the yield and feed value. Generally three cuts (subsequent cuts at one quarter bloom) of hay can be expected per year, provided there is adequate fertility and lenient grazing in the first year will enhance production and persistence (leave at least 5 centimetres of growth). Rotational grazing will improve persistence. Red clover is sensitive to set stocking for long periods. Avoid overgrazing in winter, as this will hasten the thinning of stands.

Ability to Spread: Red clover can spread through the actions of stock passing the hard seed.

Weed Potential: Low. Some potential to invade disturbed native vegetation.

Major Pests: Red legged earth mite, Pea aphid, blue oat mite and cut worms. Native bud worms (Heliothis), mirids and thrips can damage seed crops

Major Diseases: Red clover can be susceptible to a number of fungal diseases including root rot (Phytophthora spp.), clover rot (Sclerotinia spp.) and crown rot. (Fusarium spp.) Rust: Powdery mildew may be a problem in areas with high humidity and rainfall.

Herbicide Susceptibility: Red clover is sensitive to commonly used hormone type herbicides such as MCPA and 2,4-D. Herbicides containing 2,4-DB can be used.

ANIMAL PRODUCTION

Feeding value: High. Intake can still be quite high when digestibility is relatively low at advanced stage of growth. Tetraploids generally have higher digestibility and protein levels than diploids. High nutritive value: Silage has a high crude protein content of 16 to 20 per cent and a ME content of 10 to 12 megajoules per kilogram dry matter, depending on the growth stage at harvest.

Palatability: Highly palatable.

Production Potential: Under optimum growing conditions red clover peaks at 70 to 90 kilograms dry matter per hectare per day in spring and summer, dropping to 5 to 10 kg dry matter per hectare per day in winter.

Livestock Disorders/Toxicity: High oestrogen levels in some varieties can lead to a reduction in the fertility of stock grazing red clover at mating time. Bloat can be a risk particularly in cattle if grazing pure stands and may cause an increase in urinary calculi (clover stones) in sheep. Occasionally causes problems with red gut in sheep.



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