



A collaboration between AWI, GRDC, MLA, RIRDC and Dairy Australia

Alsike clover

Scientific name(s)

Trifolium hybridum

Strengths

- High nutritive value and productive late in the season in cool temperate areas just too dry to sustain white clover.
- Tolerant of poor drainage. Free of oestrogen risks.

Limitations

- Low production in winter

Plant description

Plant: grows to 30-60 cm.

Stems: Indeterminate. Branching hollow. The well developed crown produces many prostrate stems up to 1 m.

Leaves: plain, hairless; large leaflets with serrated margins.

Flowers: dense clusters on long stalk; globe shaped to 2.5 cm diameter; pale pink/white, fade to brown

Pods: numerous seed pods containing 1-3 seeds

Seeds: black/olive green/yellow; ~1.5 million/kg

Pasture type and use

A semi-erect biennial or short-lived perennial that can maintain presence through ability to recruit seedlings

Where it grows

Rainfall

> 500 mm

Soils

Suited to a wide range of acidity/alkalinity. Tolerates low fertility and poorly drained soils. Well suited to peaty soil

Temperature

Excellent cold tolerance. Naturally suited to montane environments. Low shade tolerance.

Establishment

Companion species

Grasses: phalaris, tall fescue, perennial ryegrass, timothy

Legumes: strawberry, red, sub. and white clovers

Herbs: plantain

Sowing/planting rates as single species

3-5 kg/ha; sow at 5-15 mm into a clean, finely worked seed bed and roll

Sowing/planting rates in mixtures

2 kg/ha

Sowing time

When soil temp. >10^o C. Autumn, or early spring in long growing seasons

Inoculation

Group B

Fertiliser

Correct any nutrient deficiencies, especially K, P, Mo, S

Management

Maintenance fertiliser

For optimum growth Olsen soil P > 15

Grazing/cutting

Very suitable for hay-making and extensive/hill country grazing.

Seed production

Prolific seeder

Ability to spread

Recruits seedlings well; cattle effectively spread seed via dung

Weed potential

Moderate on disturbed land only. Only reproduces via seed.
No innate adaptations for long range dispersal

Major pests

Similar to white clover

Major diseases

Limited information

Herbicide susceptibility

Limited information available. 2,4D_B, Basagran, MCPA, MCPB + MCPA in crop seedling stage and POAST ultra on established stand are listed in Canada, refer 2008 Forage Crops Chart - Recommended Herbicides

Animal production

Feeding value

High; nutritive value greater than red clover.

Palatability

Highly palatable

Production potential

Good autumn and spring/early summer vigour

Livestock disorders/toxicity

No oestrogen/toxin problems noted in Australia.

Trifoliosis ('dew poisoning/bighead/photosensitization/ big liver disease') is attributed to alsike clover poisoning in North America. Light-skinned animals (especially horses) are particularly affected if they are allowed to graze on alsike when it is wet; contains an unknown agent which causes primary and/or secondary (hepatogenous) photosensitization.

Cultivars

Cultivar	Seed source/Information
Grasslands Polar	Seedmark*

* Grasslanz Forage Product guide (2004)

Further information

USDA Plants database - Alsike clover

Author and date

KFM Reed, July 9th 2008