



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.  $>10^{\circ}$  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