



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

# Talish clover

## Scientific name(s)

*Trifolium tumens*

## Strengths

- Has a very high level of drought tolerance.
- Tolerates persistent close grazing by sheep.
- Responds well to summer rain.
- Tolerates moderate levels of aluminium.
- Long lived perennial legume.

## Limitations

- Talish clover is a new species to agriculture and the full extent of its adaptation is not known.
- May not be suited to regions with hot dry summers.

## Plant description

**Plant:** A stoloniferous persistent perennial clover with a dense prostrate growth habit to about 40cm. Growing points are located below the soil surface. Talish clover develops a very thick deep taproot similar to lucerne.

**Stems:** Slender and hairless.

**Leaves:** Trifoliate with leaflets up to 3 cm long and 2 cm wide.

**Flowers:** White with a pink tinge on long peduncles.

**Pods:** Small, ovate, inflated bladder, containing 1 to 2 seeds

**Seed:** Creamish brown, ovoid, 1-1.3 mm, with approximately 1,000,000 seeds per kilogram. Talish clover has a high level of hard seed > 80%.

## Pasture type and use

A long-lived perennial legume developed for use in a mixed perennial grass/clover sward. Suited for grazing, primarily by sheep and cattle in temperate regions where white clover is not adapted.

## Where it grows

### Rainfall

>300mm average annual rainfall.

### Soils

Adapted to a range of soil types pH 5.0 to 8.5.  
Not suited to saline soils.  
Will tolerate moderate levels of aluminium.

### Temperature

Suitable for sowing in temperate or cool Mediterranean climates.  
Tolerant of cold winter temperatures.

## Establishment

### Companion species

Grasses: Slow establishing temperate grasses such as cocksfoot, phalaris and tall fescue.

Legumes: All pasture legumes.

Grazing herbs: Both chicory and plantain.

### Sowing/planting rates as single species

3-6 kg/ha\*.

\*ensure seed is treated to reduce hard seed levels.

### **Sowing/planting rates in mixtures**

2-3 kg/ha\*.

\*ensure seed is treated to reduce hard seed levels.

### **Sowing time**

Early Autumn, when soil moisture is adequate is more reliable, however, can be sown in early to mid spring in areas receiving reliable rainfall.

### **Inoculation**

Group C (WSM 1325).

### **Fertiliser**

New sowings will require fertiliser to promote early root development and enhance seedling vigour. Major nutrient requirements are phosphorous and potassium. Sulphur and molybdenum may be required in some areas.

Soil test results and local knowledge of soil type and fertiliser history should determine rates to be applied.

## **Management**

### **Maintenance fertiliser**

Talish clover is highly responsive to fertiliser, which should be applied regularly. For best performance maintain Olsen soil P level above 25.

### **Grazing/cutting**

Although Talish clover establishes well compared to other drought tolerant perennial legumes, grazing should be lax in the establishment year.

Once established Talish clover is tolerant of continuous heavy close grazing.

Best grown in a mixture with grass if used for hay or silage.

### **Seed production**

Prolific seed producer under controlled conditions. No commercial seed production data available at this stage.

### **Ability to spread**

Will regenerate from seed, but is unlikely to survive the competition from established plants.

### **Weed potential**

Low weed potential.

### **Major pests**

Resistant to attack by pasture scarab larvae (cockchafer grubs, white curl grubs).

Susceptible to attack from redlegged earth mites, field crickets, slugs and snails particularly in the seedling stage.

### **Major diseases**

Susceptible to powdery mildew under lax grazing in areas receiving high summer rainfall.

### **Herbicide susceptibility**

Susceptible to legume selective herbicides.

Herbicides are available for selective broadleaf weed control.

## **Animal production**

### **Feeding value**

Talish clover produces high quality forage with a typical feed analysis of: digestibility 79%, crude protein 22%, metabolisable energy 11.6 MJ/kg DM.

### **Palatability**

Highly palatable legume.


### Production potential

Annual production yields of over 3 t/DM/ha have been measured in NSW DPI trials at Berridale.

### Livestock disorders/toxicity

No problems have been reported for stock eating Talish clover.

### Cultivars

Cultivar	Seed source/Information
Permatas 	Tasglobal seeds

 Denotes that this variety is protected by Plant Breeder's Rights Australia

### Further information

NSW Department of Primary Industries - Talish clover Primefact 363

Tasglobal Seeds - Permatas Talish clover fact sheet

Plant Breeders Rights - plant database search

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### Author and date

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