



Ovaflow Sub Clover

Trifolium subterranean

Ovaflow is adapted to similar environments to Goulburn, Karridale and Denmark with the ability to regenerate dense clover pasture in autumn, following opening season rains. It produces winter growth when feed requirements are at their highest. Ovaflow is much more erect, particularly in winter and is a prolific seed producer, making Ovaflow a very persistent sub clover. Ovaflow has superior spring growth giving higher season long herbage production and outstanding hay production, good levels of hard seededness for better persistence and a highly nutritious feed. Ovaflow is well suited to intensive pasture grazing operations with its ability to regenerate after hard grazing.

Seed agronomy table

Maturity	Late
Days To Flower	140
Burr Burial Strength	6
Min Rainfall	600
Hard Seed Level	2
Waterlogging Tolerance	Poor
Seeding Rate	Kg/Ha

Dryland
High Rainfall / Irrigation

8-14
15-20

Hard Seed Level 1 = Least Hard 10 = Most Hard
Burr Burial Strength 1 = Very Weak 10 = Very Strong

Blends using this Seed

Grazier Blend
Northern Horse HS Blend

Enterprises this seed is being used for

Sheep
Beef Cattle
Diary Cattle
Horse
Hay & Silage
Viti & Horti



Goldstrike[®] the premium seed treatment that assists with establishment vigour and plant development.



Establishment Guarantee[®] replacement of your crop if it fails to establish satisfactorily in the first thirty days.*

Strengths

- Tolerant of heavy grazing under set stocking.
- Vigorous seedlings provide good winter feed.
- Very persistent in medium to high rainfall areas and other areas with infrequent cropping.

Limitations

- Poor persistence on deep sands.
- Insufficient hard seededness for reliable persistence in tight cropping rotations (1 year crop:1 year pasture).

- Susceptible to germination following «false breaks».
- Shallow-rooted, so unable to capture deeper soil moisture and susceptible to premature death in dry springs.
- Some older cultivars have high oestrogen levels contributing to ewe infertility.

Plant Description

A prostrate self-regenerating annual pasture legume tolerant of heavy grazing that grows from autumn through to spring and buries its burrs.

Pasture type and use

Suited to permanent and semi-permanent pastures and to crop rotations (with at least 2 years between crops). The subspecies *subterraneum* is best suited to well drained acid soils, with the other sub species, *yanninicum* and *brachycalycinum*, being suited to waterlogged acid and cracking neutral-alkaline soils, respectively.

Where it grows

Rainfall: Adapted to winter-dominant rainfall area of southern Australia with annual rainfall 275 -1200 mm. Early flowering varieties suited to lower rainfall zone, later flowering varieties suited to higher rainfall zone. Can also be grown under irrigation.

Soils: Prefers well-drained sandy loams to clay loams of moderate acidity (pH CaCl 4.5-6.5).

Temperature: Widely adapted to the agricultural areas of Western Australia, South Australia, Victoria, Tasmania, New South Wales and parts of south-east Queensland with sufficient winter rainfall. Good frost tolerance.

Establishment

Companion species: A range of perennial and annual grasses, lucerne, yellow and French serradella, biserrula, rose clover, arrowleaf clover, purple clover and burr medics, depending on soil type. On paddocks with patches prone to waterlogging it can also be sown with balansa clover, gland clover, persian clover and subterranean clover ssp. *yanninicum*.

Sowing/planting rates as single species: 8 - 20 kg/ha.

* ensure seed is Goldstrike treated.

Sowing/planting rates in mixtures: 3-8 kg/ha, depending on the number of mixture components.

* ensure seed is Goldstrike treated.

Sowing time: Sow April -June, into moist soil following good weed control. Shallow sowing (<40 mm) is essential.

Inoculation: Goldstrike Treated.

The use of Goldstrike XLR8 seed treatment is recommended to reduce damage from insects at seedling stages. Subterranean clover fixes about 25 kg of N per tonne of herbage dry

matter. As a result it can increase soil nitrogen by about 125-200 kg of N/ha/yr.

Fertiliser: Phosphorus (with potassium on deficient soils) at sowing levels dependent on soil tests. Trace elements (Cu, Mo, Zn) may be required on very infertile soils.

Management

Maintenance fertiliser: Annual applications of superphosphate (with potassium or sulphur on deficient soils) are required to achieve maximum productivity. Levels are dependent on soil tests.

Grazing/cutting: Thrives under set stocking and can be grazed moderately hard while flowering. Likely to be shaded out by more erect plants under lax grazing. Can be cut for hay.

Ability to spread: Slow spread from site of sowing. Can spread by burrs attaching to wool.

Weed potential: Its slow rate of spread, its preference for moderate-high fertility soils and specific rhizobia requirement gives it low potential as an environmental weed. It is readily controlled by a range of broadleaf herbicides within crop.

Major pests: Red legged earth mite is a major pest, particularly at plant establishment, where it can kill emerging seedlings, but also causes damage in spring. Timerteil has proved an effective means of control. Lucerne flea and blue green aphids can also cause damage in spring. Refer to chemical labels for suitability and recommended rates for insecticides.

Major diseases: Some cultivars are susceptible to the foliar disease clover scorch (*Kabatiella caulivora*), found in high rainfall, humid areas. Other foliar diseases in higher rainfall areas include leaf rust (*Uromyces trifolii-repentis*), powdery mildew (*Erysiphe polygonii*) and cercospora leafspot (*Cercospora zebrina*). Several root rots can attack subterranean clover, causing most damage to emerging seedlings and young plants. They include *Phytophthora clandestina*, *Fusarium avenaceum*, *Pythium irregulare* and *Rhizoctonia solanii*.

Herbicide susceptibility: Refer to chemical labels for suitability and recommended rates for herbicides registered for use on subterranean clover.

Animal production

Feeding value: Excellent as green feed with in vitro digestibility in the order of 70% and crude protein over 20% until mid-flowering. Quality reduces once plants hay off. Dry herbage feeding value over summer is less than maintenance value (often < 50% in vitro digestibility) although animals may be able to obtain sufficient energy and protein by digging up seed burrs.

Palatability: Readily consumed by livestock, either as green or dry feed.

Production potential: Vigorous seedlings provide good early season production. Later flowering varieties are capable of more than 10 t/ha annual production in long-season environments or under irrigation. Herbage production of 4-6 tonnes/ha is achievable in low to medium rainfall environments.

Livestock disorders/toxicity: Some older varieties of subterranean clover contain high

levels of phytoestrogens, which can affect the sheep reproductive system. The most active isoflavone is formononetin, which can cause a decline in ewe fertility. Two other isoflavones, genistein and biochanin A, are also present in all subterranean clover varieties, but these have less impact. If ewes are mated when they are grazing green, potent subterranean clover their reproductive performance can be temporarily impaired. Continued exposure over several years to high levels of formononetin can lead to permanent infertility. Ram fertility is not affected. Formononetin is present in subterranean clover only while the pasture is green.



Disclaimer: Pasture Genetics has taken all reasonable care in the preparation of this publication. The information contained is thought to be correct at the time of publication. Always seek professional advice from your local agronomist or Pasture Genetics representative prior to purchasing any products. Combined information provided courtesy of Pastures Australia and Pasture Genetics

14 -16 Hakkinen Road, Wingfield, SA • T 08 8445 1111 • F 08 8445 7777 • seed@pasturegenetics.com • pasturegenetics.com