

Border

BALANSA CLOVER *Trifolium michelianum*



Seeding Rate	kg/ha
Dryland	4 - 6
High Rainfall/Irrigation	8 - 12

Seed Treatment	Goldstrike®
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Description
Mid maturity balansa with excellent persistence.

Market Segment/Target
Grazing and hay production

Features
Heading date similar to Paradana
High hard seed levels
Waterlogging tolerant

Benefits
Excellent regenerating annual for late season environments with wet winters
Reliable legume base for a pasture
Highly digestible feed source

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

SEED AGRONOMY TABLE

Maturity	Mid
Hard Seed Level (description)	High
Waterlogging Tolerance	Excellent

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

Sets large amounts of seed

LIMITATIONS

Not suited to deep infertile sands
Not suited to moderate to high soil salinity
Slow establishment in the first year if sown under cold conditions

PASTURE TYPE AND USE

Used as a component of permanent pastures, or in hay mixtures.

WHERE IT GROWS

Rainfall: Balansa clover is adapted to temperate climates with annual rainfall of 350 to 800 millimetres. Early flowering varieties are suited to lower rainfall zone, and later flowering varieties to higher rainfall areas. It can be grown successfully under irrigation.

Soils: Balansa clover grows across a diverse range of soil types, preferring soils of moderate to high fertility that are prone to waterlogging. It is not suited to deep sandy soils. It is adapted to acid and alkaline soils (pH water 5.4 to 9.0) although performs best where pH is below 8.3. Although displaying excellent tolerance of waterlogging, it has only low to moderate salt tolerance.

Temperature: Widely adapted to the agricultural areas of Western Australia, South Australia, Victoria, Tasmania and New South Wales. Good frost tolerance.

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PLANT DESCRIPTION

Plant: Aerial seeding, erect or semi-erect, much branched, self regenerating annual temperate legume, growing to over 80 centimetres tall, but remaining prostrate when grazed.

Stems: Hollow, hairless.

Leaves: Comprise three hairless leaflets, of varying size, shape and leaf marking. Leaflet margins can be smooth or serrated. Some leaflets are plain green while others have white to silver, pink or purple markings.

Flowers: Borne in clusters in a globose flower-head 2 to 3 centimetres in diameter, each comprising up to 45 small white-pink flowers.

Pods: 3 to 4 seeds/pod, shattering readily on maturity.

Seeds: Ovoid-oblong, 1 to 2 millimetre long, olive green, yellow, light brown, dark brown to black in colour. 850,000 to 1.4 million seeds per kilogram depending on cultivar.

ESTABLISHMENT

Grasses: Range of perennial (e.g. tall wheatgrass) and annual grasses.

Legumes: Medics, gland clover, persian clover, subterranean clover (particularly ssp. yanninicum). It is often sown in a mix with subterranean clover, if parts of the paddock are poorly drained or subject to waterlogging over winter.

Sowing/Planting rates in mixtures: Sown at 1 to 3 kilograms per hectare in mixtures. Higher rates used when it is the only legume sown. *ensure seed is Goldstrike® treated.

Sowing/Planting rates as single species: Typically sown at 4 to 10 kilograms per hectare. *ensure seed is Goldstrike® treated.

Sowing time: Sown April to June under rain-grown conditions, or as early as February under irrigation. Good weed control is essential due to its small seed size and slow early growth. Shallow sowing (greater than 15 millimetres) is essential.

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

Fertiliser: Phosphorus (with potassium on deficient soils) often applied at sowing levels determined after soil tests. Trace elements (e.g. Cu, Mo, Zn) may be required on very infertile soils.

MANAGEMENT

Grazing/Cutting: Balansa clover can be lightly grazed in the first year. Care is needed to limit grazing pressure during flowering to ensure adequate seed set. Paddocks should not be "crash" grazed or cut for hay in the first year if the stand is expected to regenerate. However, plant residue should be grazed over summer to encourage hardseed breakdown and maximise regeneration. It can be used for both continuous and rotational grazing but persistence is better under the former. It remains relatively prostrate when continuously grazed and is very tolerant of regular defoliation while young. Left ungrazed it will grow up to 1 metre tall in spring, the stems collapsing and growing horizontally. It does not recover well from a late cut or grazing when stems are large and the plants tall and flowering. Very little seed will be produced if mature flowering stands are hardgrazed.

Ability to Spread: Spreads by seed either by livestock or by movement of hay.

Weed Potential: Despite its ability to spread from seed, there is little evidence of it becoming an environmental weed. This is likely to be due to its preference for moderate high fertility soils and specific rhizobial requirements.

Major Pests: Balansa clover is very susceptible to red legged earth mite, particularly at establishment. Lucerne flea can damage stands, mainly during the warmer months. Aphids, particularly blue green aphids, can cause damage in warmer regions where they are more active.

Major Diseases: It is susceptible to root rots during establishment, particularly if sown late under cold, wet conditions. It is tolerant of clover scorch.

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

ANIMAL PRODUCTION

Feeding value: Balansa clover provides excellent green feed, and although quality reduces after maturity, but remains sufficient to ensure satisfactory animal production over summer e.g. crude protein levels in the dry matter at the very early bud stage may be over 20 per cent and digestibility about 80 per cent; within 4 weeks, these values may drop to about 15 per cent and 70 per cent respectively. In the same period, metabolisable energy may drop from around 11.5 to 10 megajoules per kilogram dry matter.

Palatability: Readily consumed by livestock, either as green or dry feed, including mature seed pods. Excellent green feed for growing and finishing livestock, Dry residues and seed pods provide useful adjunct for maintenance of sheep grazing crop stubbles. Combined

Production Potential: Capable of excellent productivity. Later-flowering varieties capable of higher total annual production in long-season environments.

Livestock Disorders/Toxicity: Bloat can occur in cattle grazing lush balansa clover dominant pastures.



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