Alexandria Berseem Clover

*Trifolium alexandrinum*

Alexandria is an annual legume suitable as fodder in dryland and irrigated areas. Alexandria is a «multi-cut» type berseem clover. This type of clover is commonly known as «annual lucerne» for its ability to be cut and/or grazed under rotation and produce high protein quality fodder.

Alexandria is a selected derivative, bred from Egyptian Clover introduced by Professor Perkins of Roseworthy Agricultural College, South Australia. When mature it attains a height of 60 -75 cm with slender, branched stems with abundant trifoliate, highly palatable «sweet» leaves.

- Excellent hay and fodder production.
- Vigorous winter growth with a flush of growth in spring
- Multiple grazings or hay cut
- Late maturing, large leaves of high nutritive value
- Superior spring-summer production under irrigation
- Adapted to heavy soil types
- Safety _ with limited bloat potential
**Seed agronomy table**

<table>
<thead>
<tr>
<th></th>
<th>Mid / Late</th>
<th>600</th>
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</thead>
<tbody>
<tr>
<td>Maturity</td>
<td></td>
<td></td>
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<tr>
<td>Min Rainfall</td>
<td></td>
<td>Low</td>
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<tr>
<td>Hard Seededness</td>
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<tr>
<td>Waterlogging Tolerance</td>
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<tr>
<td>Seeding Rate</td>
<td></td>
<td>Kg/Ha</td>
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<tr>
<td>Dryland</td>
<td></td>
<td>6-10</td>
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<tr>
<td>High Rainfall / Irrigation</td>
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<td>10-15</td>
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</tbody>
</table>

**Blends using this Seed**

- Winter Max Blend
- Winter Express Blend

**Enterprises this seed is being used for**

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

**Strengths**

- High nutritive value and productive throughout year.
- Some tolerance of salinity.
- Free of oestrogen risks.
Limitations

- Poor regeneration; intolerant of heavy frost.

Plant Description

Plant: Erect, annual with short tap root; grows to 750 mm.
Stems: Slender, hollow, branched.
Leaves: Plain, trifoliolate, slightly hairy on both surfaces; oval leaflets with, near the tip, serrated margins.
Flowers: Oval/cone shaped, ~2cm diameter, numerous, cream.
Pods: Contain 1-2 seeds.
Seeds: Oval, yellow/red-brown; ~350,000/kg.

Pasture type and use

A winter-growing, annual capable of excellent early growth in autumn. Suited to seasonal irrigation.

Where it grows

Rainfall: > 600 mm in winter/spring rainfall zone for dryland use. Mainly used with irrigation.
Tolerates water with up to 1000 ppm salt.
Temperature: Good heat tolerance; low cold tolerance. The least winter hardy of the cultivated clovers. It should not be grown in areas where winter temperatures commonly go as low as 6°C.

Establishment

Companion species:
Grasses: Italian ryegrass & festulolium.
Legumes: Persian, medics, balansa, arrowleaf clovers.
Sowing/planting rates as single species: 6-15 kg/ha. Sow at 15-20 mm into a clean, finely worked seed bed and roll.
*ensure seed is Goldstrike treated.
Sowing/planting rates in mixtures: 3-5 kg/ha. Sowing time: Early autumn.
*ensure seed is Goldstrike treated.
Inoculation: Goldstrike Treated.
The use of Goldstrike XLR8 seed treatment is recommended to reduce damage from insects at seedling stages.
Management

**Fertiliser**: Major nutrient requirements are phosphorous and potassium. Sulphur and molybdenum may be required in some areas.

**Grazing/cutting**: More suited to cutting/fodder conservation; quick regrowth and good aftermath - on suitable soils. Rotationally grazing in cool season when 15-20 cm tall; this stimulates tillering. If sown with grass must graze late winter/early spring to allow clover to contribute later. Set residues at 2-3 cm (winter) and 4-5 cm (spring) to avoid over grazing.

**Ability to spread**: Poor recruitment; no hard seed.

**Weed potential**: Low. Seed very susceptible to false breaks.

**Major pests**: Red legged earth mite, blue-green aphid, spotted alfalfa aphid, heliothis, blue oat mite.

**Major diseases**: Some cultivars susceptible to leaf and stem blight and clover scorch - Pythium, Phytophthora and Kabatialla caulivora.

**Herbicide susceptibility**: Glyphosate. Damaged by most broad-leaf herbicides.

Animal production

**Feeding value**: High; high protein content.

**Palatability**: Palatable.

**Production potential**: Good autumn, winter, spring.

**Livestock disorders/toxicity**: Low isoflavone content - no risk to breeding livestock. Low risk of bloat.