Pasture Genetics
Science based seed®

FACT SHEET

– PASTURES FOR THE AUSTRALIAN FARMER –

Shaftal Persian Clover

Trifolium resupinatum

Shaftal has an erect habit, thick hollow stems and large leaflets. Hard seed level is very low at one to two per cent. Flowering and maturity is mostly late. Used in high density legume crops. Minimum average annual rainfall for this group of Persian clovers is 450 mm (Southern NSW). An autumn and winter spring growing annual with excellent tolerance to waterlogging, Shaftal Persian clover is moderately tolerant of salinity.

- Good spring growth
- Salinity tolerance
- Good companion species in mixtures

Seed agronomy table

Min Rainfall	500
Seeding Rate	Kg/Ha
Dryland	6-10
High Rainfall / Irrigation	10-15

Enterprises this seed is being used for

Sheep
Beef Cattle
Horse
Hay & Silage

Strengths

- High nutritive value.
- Extremely high production potential.
- Multi cut forage crop.
- Tolerant of seasonal flooding.
- Some tolerance of salinity.
- Free of oestrogen risks.

Limitations

- Poor regeneration.
- Plant description.

Plant Description

Plant: Erect, annual. Up to 750 mm height.

Stems: Up to 35 mm diameter, hollow, soft.

Leaves: trifoliate, up to 25 mm long, plain, strongly veined, oval-shaped leaflets with serrated margins.

Flowers: pink-violet flowers. Many-flowered cluster and mature in axillary, white, spherical, woolly seed heads to 15 mm diameter on long stalks.

Pods: membranous, dehiscing at thickened sutures; one seeded.

Seeds: ~1 mm long, ovoid, various colours (brown, olive, purple); ~1.5 million/kg.

Pasture type and use

A winter-growing, annual capable of excellent winter and spring growth. Suited to seasonal irrigation. A valuable fodder crop.

Where it grows

Rainfall: > 300 mm in winter/spring rainfall zone for dryland use. Also used with irrigation. Tolerates water with up to 1500 S/cm on low salinity soils with adequate drainage.

Soils: Suited to clay soils, pH 5.5-8.5 (CaCl2). Tolerant of severe waterlogging and mildly saline soil.

Temperature: Good heat tolerance. Quite tolerant of frost and cold but slow growing at low temperatures.

Establishment

Companion species: Grasses: Italian ryegrass.

Legumes: Balansa clover, arrowleaf clover.

Sowing/planting rates as single species: 5-15 kg/ha; broadcast onto a finely worked, weed free seed bed and cover lightly by a roller or drill seed at 5 mm depth into a clean, finely worked seed bed. High seed rate boosts winter yield and reduces weed invasion. * ensure seed is Goldstrike treated.

Sowing/planting rates in mixtures: 3-7 kg/ha. * ensure seed is Goldstrike treated.

Sowing time: February (if irrigating) to April.

Inoculation: GoldstrikeTreated. The use of Goldstrike XLR8 is recommended to reduce damage from insects at seedling stages.

Fertiliser: Apply ~20-30 kg P/ha annually and correct any nutrient deficiencies, especially K, Mo, Cu, S.

Management

Maintenance fertiliser: For optimum growth Olsen soil P (0-10 cm depth) > 15.

Grazing/cutting: Suited to winter grazing. Set residues at 2-3 cm (winter) and 4-5 cm (spring) to avoid over grazing. Rotationally graze during the 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. Suited to hay/silage production; most valuable aftermath. Stems are nutritious but slow to dry; use conditioner to speed up drying. Fast regrowth facilitates second cut; remove bales promptly, hay quite susceptible to rain damage.

Ability to spread: Excellent recruitment; produce high levels of hard seed.

Major pests: Red legged earth mite and lucerne flea need to be identified and controlled rapidly during establishment.

Major diseases: Some cultivars susceptible to leaf and stem rust (Uromyces trifolii-repentis) and clover rot (Sclerotinia trifoliorum).

Herbicide susceptibility: Glyphosate. Damaged by many broad-leaf herbicides.

Animal production

Feeding value: High (high soluble carbohydrate, high protein content & low NDF content). Retains excellent feeding value as dry standing hay during dry weather.

Palatability: Palatable.

Production potential: Good winter, spring, summer.

Livestock disorders/toxicity: Low isoflavone content - no risk to breeding livestock. Low risk of bloat. Can be associated with photo-sensitization.

International Contact

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