

medic variety

SARDI



SOUTH AUSTRALIAN
RESEARCH AND
DEVELOPMENT
INSTITUTE

PASTURES
GROUP

CALIPH[®]

An excellent producer of herbage and seed. 25% more seed production than Cyprus, Paraggio and Parabinga. (Trials across NSW, SA and WA.)

Early maturing and ideally suited to the low rainfall, alkaline soil in the cereal/livestock zone.

Superior tolerance to boron.

Resistant to spotted and bluegreen aphid.



RAINFALL

Adapted to the 275-375mm rainfall regions across the southern wheat belt.



SOIL TYPE

Caliph is highly recommended for neutral to alkaline (>pH_(H₂O) 6.0) soil types ranging from sandy loams to clays. Its boron tolerance is superior to other medium to low rainfall medics.



MATURITY

An early maturing variety which generally begins flowering around 80 days after germination making it suitable for cropping zones with as little as 275mm average annual rainfall.



REGENERATION

An outstanding seed producer, Caliph can be quite hardseeded after the first year (eg >90%), making it especially suited to crop pasture rotations in which it regenerates best after a crop.



GRAZING

Caliph has good early vigour and, once established, persists well under grazing provided enough growing points are provided for future growth. This highly nutritive pasture can be grazed in the first year of sowing, providing fresh feed in winter and spring and dry feed in the summer and autumn.



PESTS & DISEASE RESISTANCE

- Caliph has good resistance to both spotted alfalfa (SAA) and bluegreen aphid (BGA) but will need protection from cowpea aphid (CPA) if present in large numbers.
- Like most other medics it is susceptible to redlegged earth mite, lucerne flea and sitona weevil.
- Caliph is generally free of foliar disease but may occasionally be affected by *Phoma* black stem fungus in under-grazed lush stands in wet seasons.
- Medics suffer from *Rhizoctonia* and are rated MS/MR for *Pratylenchus neglectus*.

Caliph[®] the earliest maturing aphid resistant barrel medic with excellent herbage and seed production - bred by SARDI

Pastures for stock, crop & country

Managing Caliph[®] for production and persistence

ESTABLISHMENT

Establishes well if sown dry (from mid-April onwards) into cereal stubbles free of broadleaf weeds and with good weed control the previous year. Alternatively, sow into a fine, moist and weed-free seedbed soon after the break of the season.

SEEDING RATE & SOWING

Sow at 4-10kg/ha, depending on the situation. Higher seeding rates will improve competition against weeds and allow for earlier grazing in the first year. Sow Caliph at the lower rates if using in mixtures of varieties with different maturity, adaptation and hardseededness (*mixtures can help to overcome seasonal, soil and rotational variability*).

Aim for a sowing depth of 1-2cm and ensure good seed-soil contact by the use of press wheels or covering devices such as harrows or prickle chains.

INOCULATION

Inoculate seed with group **AM** rhizobium (**not** AL), unless the paddock has had a healthy stand of medic in the past two years. Inoculation is vital if the soil is under pH_(H₂O) 7.0. Good nodulation is essential to maximise nitrogen fixation for the benefit of the following crop.

NUTRITION

Good phosphorus (**P**) and zinc (**Zn**) nutrition is critical for maximum medic growth and nitrogen fixation. Recent experiments at 15 low rainfall alkaline sites in SA and Victoria have found that addition of P (31 kgP/ha) and Zn (6.3 kgZn/ha) increased medic dry matter production by an average of 25% from 1640 kg/ha to 2040 kg/ha, (GRDC project UA345).

WEED CONTROL

Maximise seed-set in the establishment year by reducing weed competition as much as possible. Early removal of grasses with grass selective herbicides results in improved pasture growth and reduced carry-over of cereal root diseases (eg Take-all and CCN). Less selective means of weed control such as spray-grazing, winter-cleaning and spray-topping can be used to control weeds after the initial year, when medic density and soil seed reserves have built-up. Medics are very sensitive to sulphonylurea herbicide residues and attention must be paid to plant-back periods for these chemicals, especially in low rainfall regions with alkaline soils.

PEST CONTROL

Monitor for redlegged earth mite and lucerne flea damage, both at the seedling and flowering stage, especially in the year of establishment. Spray as necessary.

GRAZING

establishment

Defer grazing after sowing until plants are well established and then only graze lightly until flowering. Remove stock until the stand has finished flowering and producing pods to maximise seed-set. Carefully monitor summer grazing, especially in the first year, as over-grazing of pods will reduce future pasture regeneration.

regeneration

Initially defer grazing at the break of the season to maximise plant establishment. Then apply grazing pressure to control upright grasses and encourage prostrate growth until ground cover is complete. Increase grazing pressure if necessary to prevent overly bulky pastures which are more susceptible to moisture stress and foliar fungal disease.

Ensure a good seed-set at least one year in four to maintain adequate seed-soil reserves for maximum persistence, regeneration and production.

Available from your local farm store. For more information on other varieties and the SARDI Pastures Group visit www.sardi.sa.gov.au/pastures

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