

SUBTERRANEAN CLOVER

denmark



Denmark is a black seeded Sub-Clover that belongs to the *Trifolium subterraneum ssp. subterraneum* family. It was derived from material collected at Sardinia and released as part of the National Subterraneum Clover Improvement Program.

Denmark demonstrates a prostrate growth habit and persists well on moderate to heavy soil types. It has late season maturity which makes Denmark well suited to medium to high rainfall zones. Denmark is an alternative replacement for Karridale and Mount Barker selected for superior autumn and winter growth rates along with improved disease resistance and prefers regions with 7-8 month growing period. Seedlings of Denmark are generally smaller and more prostrate than that of Karridale and Mount Barker, however once established growth habit becomes erect during the spring. The levels of hard seed Denmark supply will vary depending on seasonal conditions but would be suitable for either permanent pasture or short to medium term crop rotations. Denmark will provide the benefits of soil nitrogen along with an effective disease break.

CHECKLIST

- ✓ **Late season maturity – 144 days to flower**
- ✓ **Superior replacement for Karridale and Mount Barker**
- ✓ **Good levels of hard seed**
- ✓ **Excellent disease resistance profile**
- ✓ **Well suited to grazing**

RAINFALL

Denmark is well suited to temperate areas receiving a total annual rainfall of 600-800mm and irrigation.

SOIL TYPE

Denmark is suited to medium to heavy soils which are moderately well drained with an ideal pH range of 5.0-7.0 (CaCl_2) but will remain productive in soils down to pH 4.5 (CaCl_2). Growers should consider liming (coating or fertiliser applications) if sowing into high acid situations (i.e. $<4.9 \text{ CaCl}_2$). Responses to lime can occur up to pH 6.0 (CaCl_2).

INOCULANT

Apply group C Rhizobium to the seed prior to planting. Plant nodulation is extremely important for soils below pH 7.0 (CaCl_2). Inoculation is essential to ensure sufficient nodulation occurs and maximise nitrogen fixation.

MATURITY

Denmark is a mid to late maturing type, flowering at approximately 144 days

after sowing and suited to areas with a 7-8 month growing season. Denmark is approximately 5 to 8 days later in maturity compared to that of Mount Barker and Karridale.

REGENERATION

Denmark has demonstrated superior seed productivity compared to Mount Barker and Karridale. It is a relatively soft seeded Sub-Clover (<10% hard seed) which is similar to Mount Barker and Karridale. However if grown in cooler conditions hard seed levels of Denmark can increase to around 29% compared to Karridale (24%) and Mount Barker (9%). This characteristic, along with improved seed yields, proves Denmark to be a more effective long term grazing option in cooler growing regions.

GRAZING

Denmark is particularly well suited to grazing and care must be taken with new sown pastures so as not to overgraze too early as plants can be pulled from the ground. Light grazing during the establishment period will help control



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weeds and encourage dense prostrate growth. Once established, heavy grazing of Denmark up to flowering will improve seed set. When flowering begins, stocking rates should be reduced to optimise seed set.

DISEASE RESISTANCE

Denmark is resistant to Clover Scorch (*Kabatiella caulincola*) and has demonstrated high resistance to strains 0 and 2 of Phytophthora Root Rot (*Phytophthora clandestina*). Denmark has demonstrated moderate tolerance to Root Rots caused by Pythium (*Pythium spp.*) and Fusarium (*Fusarium spp.*) along with moderate resistance to leaf diseases caused by Leaf Rust (*Uromyces trifolii-repentis*) and Cercospora Leafspot (*Cercospora zebrifrons*). Denmark demonstrates superior disease tolerances compared to other Sub-Clover varieties of similar maturity.

PEST RESISTANCE

Denmark, as with all Sub-Clovers, is susceptible to Red Legged Earth Mite, (*Halotydeus destructor*) Blue-Green Aphid (*Acyrtosiphon kondoi*), Blue Oat Mite (*Pentaleus major*) and Spotted Clover Aphid (*Theroaphis trifolii*). Therefore control is essential at the early seedling stage and appropriate pest management must be implemented as required.

SOWING RATE

When sowing alone to produce a dense stand sow at a minimum of 6-10 kg/ha under dryland conditions and 15-20 kg/ha under irrigation. In pasture mixtures, Denmark should be sown at 4-10 kg/ha.

If sowing Denmark for seed production it is suggested that a rate of 15-20 kg/ha is used.

Optimum time for sowing is early to late autumn after rainfall. Sow at a depth of 1-1.5cm into a moist seedbed free of broadleaf and grass weeds.

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Seedmark Exclusive Varieties

BISERRULA

Mauro

CLOVER
Arrowleaf
Cefalu
Zulu II
Balansa
Bolta
Frontier
Berseem
Elite II
Crimson
Blaza
Persian
Kyambro
Laser
Lightning
Morbulk
Nitro Plus
Subterranean
Antas

Campeda

Denmark
Gosse
Losa
Napier
Rosedale
York
White
Quest
Waverley

FORAGE

Woolly Pod Vetch
Capello
Haymaker

LUCERNE

Aquarius
Genesis
Sirosal
Venus

MEDIC

Barrel
Caliph
Jester
Burr
Scimitar
Hybrid
Toreador

PASTURE GRASS

Cocksfoot
Kasbah
Phalaris
Atlas PG
Australian II
Holdfast
Landmaster
Rhodes Grass
Nemkat
Tall Fescue
Fraydo

SERRADELLA

French
Cadiz
Erica
Margurita
Yellow
Charano
Santorini

This seed is tested for quality by ISTA Accredited Laboratories. A seed testing analysis certificate is available upon request from your seed supplier.



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