Mona Tetraploid Italian Ryegrass

*Lolium multiflorum*

Mona is a new tetraploid Italian ryegrass bred by DLF Seeds’ Australasian breeding program to replace Jeanne. The objectives in the breeding programme and testing were to develop a cultivar with improved production in all seasons, and the ability to produce for two or more years in favourable climates. Testing has confirmed that Mona has successfully out yielded Jeanne by an outstanding 34%. An added benefit of Mona is its very late heading date. This extends the period in spring when farmers can graze or cut very leafy and high quality forage by up to one month. In many irrigated or high rainfall zones, the ability to carry the production through late in the season, be of great advantage when high quality silage and hay supplies can be stock piled. Mona’s winter and early spring growth is not compromised by the late heading, which usually occurs in late flowering Italian ryegrasses.

- Very late flowering +28 days which give excellent long season production
- Replacement for Jeanne Ryegrass in 2017
- Increased yield advantage over Jeanne Ryegrass by 34%
- Winter and early spring growth is not compromised by the late heading which usually occurs in Italian Ryegrasses.
- Lateness allows for larger bulkier silage and hay cuts to build on farm feed requirements.
• Ability to produce for two or more years in favourable conditions

Seed agronomy table

<table>
<thead>
<tr>
<th>Trait</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heading date</td>
<td>+28 days</td>
</tr>
<tr>
<td>Maturity</td>
<td>Late</td>
</tr>
<tr>
<td>Lifespan</td>
<td>2 years</td>
</tr>
<tr>
<td>Min Rainfall (mm)</td>
<td>700</td>
</tr>
<tr>
<td>Seeding Rate (Kg/Ha)</td>
<td>10-15</td>
</tr>
<tr>
<td>Dryland</td>
<td>25-30</td>
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</tbody>
</table>

Heading date: 0 days = Nui perennial ryegrass.

Enterprises this seed is being used for

Sheep  
Beef Cattle  
Diary Cattle  
Horse  
Hay & Silage

Strengths

• Italian ryegrass (biennial type).  
• Very strong cool season growth and nutritive value.

Limitations

• Longevity (2 years); may occasionally be greater in moist, pest-free situations and rotational grazing.

Plant Description

**Plant:** Italian ryegrass - biennial.  
**Stems:** up to 70 cm.  
**Leaves:** hairless; blades up to 400 x 12 mm; young leaves rolled in bud.  
**Seedhead:** spike up to 30 cm long; spikelets edge-on to the rachis which is recessed opposite each spikelet; 10-20 florets/spikelet, laterally flattened up to 25 mm long.
Straight, fine awn up to 10 mm.

**Seeds:** ~230,000-250,000/kg (tetraploid)

**Pasture type and use**

Short term pasture offering high winter yields and enhanced nutritive value.

**Where it grows**

**Rainfall:** > 700mm +.

**Soils:** Medium-heavy texture, high fertility (eg Olsen P, 0-10 cm, >12 mg/kg)

**Temperature:** Cold and frost tolerant, mild summer desirable

**Establishment**

**Companion species:**

**Grasses:** Italian ryegrass.

**Legumes:** white clover, sub clover and Persian clover.

**Sowing/planting rates as single species:** 15-30 kg/ha.

**Management**

**Maintenance fertiliser:** 10 kg P/ha. Monitor S, K, Cu especially. Supply N by clover/fertiliser.

**Razing/cutting:** Graze at 2 1/2 - 3 leaf stage to optimise yield under rotational grazing. Cut at early flowering for peak nutritive value.

**Ability to spread:** Will spread from seed in cool good rainfall environments: seed set will occur if ungrazed/not cut and this will be associated with a substantial trade-off in nutritive value.

**Weed potential:** Low unless allowed to set seed.

**Major pests:** Red and black-headed cockchafer, black field cricket, white-fringed weevil, African black beetle.

**Major diseases:** Crown rust - especially in humid regions; stem rust.

**Herbicide susceptibility:** Glyphosate

**Animal production**

**Feeding value:** High.

**Palatability:** Palatable.

**Production potential:** High.

**Livestock disorders/toxicity:** Some long rotation cultivars can carry wild type endophyte and cause perennial ryegrass toxicoses