

RYEGRASSES

Safeguard Diploid Annual Ryegrass

ARGT resistant ryegrass for reducing risk of ARGT poisoning

Lolium rigidum

ARGT resistant annual diploid ryegrass. Very early flowering with significantly more dry matter production than Wimmera. Suited to the Wheatbelt areas or where ARGT poisoning is a likely occurrence. Option for crop disease break for Take All and Cereal Cyst nematode. Safeguard is the only commercially available ARGT resistant ryegrass. Australian bred for Australian farming conditions.

ABOUT THIS VARIETY

Safeguard provides unique and sustainable biological control of Annual Ryegrass Toxicity (ARGT). Annual ryegrass is the main host for the seed-gall nematode *Anguina funesta*. The nematode carries the toxic bacterium, *Rathayibacter toxicus*, into the seed heads of the plant. These toxins produced by the bacterium can cause severe neurological conditions similar to that of staggers. It is important to monitor livestock grazing infected ryegrass as death may occur within a few hours and to look out for symptoms such as a high stepping gait and stumbling. The effects of annual ryegrass toxicity on sheep and other grazing animals are a common problem for livestock producers in most areas of Western Australia, and outbreaks of ARGT now also occur in the high rainfall zones.

Safeguard ryegrass has been developed to dramatically reduce bacterial gall formation within the seed head, reducing the toxins. A high frequency of the ARGT resistant genes in ryegrass pastures can provide effective biological control of the nematode that causes ARGT, thus preventing the toxin producing bacterium reaching hazardous levels in pasture. Safeguard can be used as a self-regenerating pasture grass when following the Safeguard



QUICK FACTS

-  **TYPE & PERSISTENCY**
Annual
-  **MIN RAINFALL**
350 mm+
-  **SOIL & PH**
Soil range: Light sand to Heavy ·
pH 5+ (CaCl₂)
-  **SOWING RATE**
8–15 kg/ha General
-  **TOLERANCES**
Mild Salinity
-  **END USE**
Grazing, Hay, Silage
-  **LIVESTOCK**
Beef, Sheep
-  **PLOIDY**
Diploid
-  **HEADING DATE**
Very early
-  **HEADING OFFSET**
-28 days vs Nui
-  **ARGT RESISTANCE**
Resistant

ABOUT THIS VARIETY (CONTINUED)

Management Guide, and reduces the risk of export hay rejections due to ARG.T.

Australian bred and adaptable to a wide range of growing conditions in Western Australia. With the added benefit of very good winter and spring production for grazing, silage or later hay, Safeguard can offer a very good pasture option for farmers in those drier areas affected with ARG.T.

It is also suitable to areas with an early finish to the season as it is able to re-seed due to its early heading. In rocky areas, where cropping is not possible, Safeguard is ideal as a self re-seeding species. The high winter dry matter yields of Safeguard can be used to fill the gap for finishing sheep and beef for the early markets.

KEY ATTRIBUTES

- ✓ Very early maturing diploid annual ryegrass
- ✓ Excellent winter yields with vigorous leafy growth
- ✓ Disease break for take-all and cereal cyst nematode
- ✓ Significantly more dry matter than Wimmera
- ✓ Self-seeding annual for sustainable biological control of ARG.T
- ✓ Reduces the risk of export hay rejections due to ARG.T

PLANTING & GRAZING NOTES

Only use certified Safeguard seed; non-certified seed is likely to be ARGV susceptible and it may be herbicide resistant. Reduce seed reserves the year before sowing Safeguard. In the year of sowing, cultivate the paddock after the autumn break to stimulate germination of the local ryegrass seed reserves, then control the seedlings with a non-selective herbicide. If you are confident of low background ryegrass levels, do not cultivate and plant with a triple disk drill or similar to minimise germination of dormant Wimmera seeds. Optimal planting is autumn. Up to 25 kg/ha should be used in higher rainfall regions. Seed should not be sown deep: drop the seed on the surface and use harrows to cover lightly with soil, or preferably sod seed with a triple disk into non-cultivated soil. Ensure there is adequate fertiliser applied at sowing. Leave an unsown test strip at least two metres wide and five metres long, well inside the paddock, to check local ryegrass levels. If a large infestation of the local ryegrass appears in this strip, and the paddock has a history of ARGV, treat it as potentially hazardous for livestock. If the paddock is contaminated by Wimmera you should take action to minimise the threat. As a precaution, stop seed set and commence regular (daily) stock inspections starting 2 weeks before the growing season and continue throughout the summer. Remove stock from the paddock if they show any symptoms of poisoning. At seedling emergence ensure that the area sown is checked for insect and or fungal diseases. If Safeguard is sown as part of a mixture with pasture legumes, Red Legged Earth Mite populations can increase rapidly and some damage can occur to grasses as well as legumes. At approximately six weeks, or once the plants cannot be easily pulled out of the soil, lightly graze the area, then rotationally graze when 10-15cm high. In the first year aim for a heavy seed set: keep the paddock tightly grazed until late into the season, then plan to remove or reduce stock numbers from early September as Safeguard normally runs to head in early October. After seed set and when the pasture has fully dried off, stock can be returned to graze on remaining plant residues. Excess ground cover in the following autumn may inhibit Safeguard germination. If the paddock has a history of ARGV, it is recommended that the mature ryegrass be tested to confirm it is safe to graze.

DISEASE & PEST RESISTANCE

Resistant to the nematode (*Anguina funesta*) involved in causing annual ryegrass toxicity (ARGV). Also resistant to cereal cyst nematode and shows tolerance to wheat and oat strains of take-all.

STAND LIFE

Self-seeding annual. The aim in the first year should be to achieve a heavy seed set so that Safeguard seed greatly outnumbers local ryegrass seed reserves; following a break in the season, Safeguard should be the dominant pasture grass. The management program requires medium term (2-3 years) planning. It may be difficult to assess the relative proportions of Safeguard and Wimmera ryegrass in regenerated pastures, so it is recommended the paddock is tested in subsequent years to confirm that the bacterium is under control.

HOW IT'S SOLD

FORM	PACK
Bare	25 kg

Certification: ASF Code of Practice, Certified Quality Assured Seed, Certified seed