



**TURFGRASS**  
SPECIALISTS (2005) LTD

**Heritage**seeds®

# Ryegrasses for Sportsfields

Worldwide ryegrass is used extensively in agriculture as well as for turf practices such as sportsfield and golf course over-seeding. In these situations turf ryegrass is used as a permanent stand or in the transitional region as a temporary turf for over-seeding dormant warm season grasses.

In Australia and New Zealand we have various climatic zones. These climatic zones are considered as warm season, transitional and cool season. Turf professionals use cool season grasses in all of these zones for over-seeding. Out of all three zones the transitional zone is the most difficult region in which to grow grass. The transition zone is described as a zone where it is cold enough in the winter to make it difficult to maintain warm-season species and warm enough in the summer to make it difficult to grow cool-season species. Therefore, no one species is well adapted in this region.

Heritage Seeds/Nuturf/Turfgrass Specialists offer a range of turf grasses suitable for the warm season, transitional and cool season zones, whether it is to be used as a temporary grass or a permanent grass policy. When choosing a grass species or variety, it is important to check if varieties have been trialed and tested in independent trials. If the variety being suggested to you for purchase has not been under multi-parametered trials, caution is warranted. Generally these varieties will not perform well in some categories. In selecting an appropriate cultivar or blend, it is best to select one that has rated highly both locally and nationally and has done so over a range of parameters such as disease, density, colour, shredding and recovery from wear.

Turf professionals should be careful of clever marketing campaigns to promote Mediterranean varieties. Breeders of Mediterranean varieties will have you believe the most important aspect of a turf grass is how much it will grow during winter and how this will suit our environment. While winter growth may be important these companies may fail to mention other important performance parameters and they may also fail to mention how continental varieties are being used with great success in New Zealand's cold climates. Breeders and researchers will also try to draw conclusions from grass clipper rates and translate this to wear tolerance. It is interesting to note that one of the biggest questions that is not addressed by the companies with Mediterranean varieties is "Do Mediterranean rye grasses handle wear as well as a Continental variety?" In addition to this, questions about how they perform over a range of important turf performance

categories must be addressed, i.e. disease pressure, density, tillering, colour, aesthetics. In agriculture Mediterranean varieties are used for increased upright growth and yield for grazing, but does this mean it is suited to a turf application? The requirements for cattle grazing are not the same as the requirements of sportsfields. Have important parameters such as the ones mentioned above been forgotten about in the breeding process? Certainly trial data suggests this may be the case.



Pic 1. Heritage Seeds trial site, Dandenong, Victoria.

When choosing a variety of ryegrass a few important points to consider are:

- **The range of turf performance categories.** These being colour, shredding, density, wear tolerance, playability and disease. There are varieties that may grow fast but have issues with density, shred or are disease susceptible. Look at all turf performance categories when making your selection.



Pic 2. Mediterranean left, continental Ryegrass on right

- **The Mediterranean vs Continental varieties.** A Mediterranean

variety was submitted in a trial in Europe, and early results certainly raised some serious questions on turf performance. Out of 80 perennial ryegrasses the Mediterranean variety ranked in the bottom 6 for a number of categories, these being; visual merit (sward density, leaf width, disease resistance and colour), shoot density, fineness of leaf and live ground cover after applied wear. For recovery after wear, it had the lowest score for the entire trial-80th out of 80 varieties! These are what most agree are significant turf performance categories.

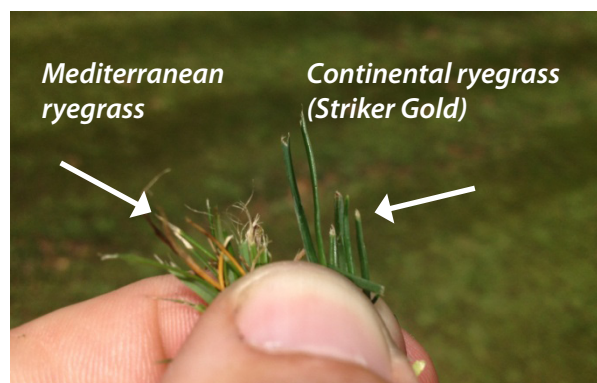
- **The speed of grass growth or how much clipper rate a grass has** is not a reflection on a grass wear tolerance. If this were the case an agricultural annual ryegrass would look appealing. Continental ryegrasses have been selected after a long history of breeding. In this long history a variety of parameters have been used for varietal selection eg colour, density, disease, shredding, wear tolerance. Continental ryegrasses have a higher tiller density than Mediterranean varieties. Density is an important component of wear tolerance. Be mindful of grasses that have not undergone intensive breeding selections and be mindful of single parameter trials designed to show up individual traits.

- **The low mowing abilities.** The continental varieties (Striker Regenerator, RPR, Premier II, etc) handle a lower mowing regime extremely well. Premier II, RPR and Regenerator blend are used in cricket wickets and cricket grounds due to this low mowing feature and recovering abilities.

- **The Poa invasion.** In trying to combat poa issues it is important to have good sward density. Continental varieties and blends such as Premier II and Striker Regenerator are proven to be the densest varieties. RPR's ability to spread aids in combating poa annua invasion. Masking poa annua with a lightly coloured Mediterranean grass that may have a more open sword can increase your poa invasion and reduce the playability of your surface.

<http://www.heritage-seeds.com.au/products/regenerating-perennial-ryegrass-rpr/>

- **The cutting ability or shredding.** All high end continental varieties have been bred for good cut-ability; in other words, reduced shred. Please see attached picture where a Mediterranean ryegrass was picked on the left and from the same trial a continental variety was selected. Both grasses were mown using the same cylinder mower. Be mindful of grasses that shred as these will have an impact of the aesthetics and disease of your playing surface.



## Mediterranean Ryegrass

- **The climate.** In Australia and New Zealand continental varieties have been very successful at providing premium sports surfaces. In New Zealand continental varieties have been making their way into the market in a huge way. Continental varieties have been grown in New Zealand's south island for many years with great success. The NEW RPR (regenerating perennial ryegrass) has performed extremely well in both the Australian and New Zealand climates. Big sports stadiums have been using and will continue to use continental varieties due to their superior turf performance in these climatic conditions.

- **The Endophytes.** Endophytes are a beneficial, naturally occurring fungi that live inside a ryegrass plant in a symbiotic relationship. By this it means they both have an interdependent relationship and both parties benefit from each other. In short, the endophytes that live in the plant aid in both abiotic and biotic stresses the plant may encounter. In particular these are heat stresses and insect attack on the ryegrasses. There are some theories that maintain that endophytes have an alleopathic effect on bermudagrass. Interestingly there is no data to back up the claims coming from the companies that sell these low endophyte grasses. If you are looking for extra biting insect resistance and persistence you should look towards high endophyte ryegrasses. It is advisable to take a ryegrass out of warm season grasses early with chemical treatments rather than waiting for natural transition. The only noticeable effect a ryegrass can have on a warm season grass is that of competition. Leaving a ryegrass oversown into a warm season in too long creates a competitive effect on warm season grasses.

- **The Price.** Although pricing is important, overall performance is the most important factor. Generally the cheaper a grass is to buy, the less breeding and research has been conducted on the variety. A 20 cent difference in price equates to \$200 per tonne of seed and this can equate to well less than \$100 difference per field. Is less than \$100 per field worth risking your playing surface to wear issues, disease issue or reduced aesthetic appeal?

For more information on Heritage Seeds/Nuturf/TGS's full range of turf seed please speak to your local TGS representative. You may also visit our websites at [www.heritage-seeds.com.au](http://www.heritage-seeds.com.au) or <http://www.turfgrassspecialists.co.nz/>



Premier II at Patterson Stadium Perth  
Western Australia

