

Warm Season

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Grass Trials

Warm-season grass cultivars available for planting

Just a quick reminder to all those that are participating in the regional warm-season grass trials that now is the time to plant out the trial plots and to take full benefit of the warm summer conditions. We also understand that some locations may be prevented from planting out the trials this season because of the drought and water restrictions.

The vegetative plant material is available through the Queensland Department of Primary Industry (QDPI) and QDPI will negotiate Materials Transfer Agreements with co-operating clubs/courses to prevent unauthorized propagation from experimental plots.

Please contact Don Loch on Donald.Loch@dpi.qld.gov.au or 07 32861488 or John Neylan on john@agcsa.com.au as soon as possible. We need to know the varieties required and the area to be planted.



Trial Plots at Lakelands Golf Club

The cultivars available are;

Hybrid bermudagrass

MS-Supreme, TifEagle, Mini Verde, Novotec, Tifdwarf, Tifgreen, Champion Dwarf and Flora Dwarf.

Paspalum vaginatum

Sealsle 2000
Sealsle Supreme
Velvetene
SeaDwarf



We would like to see as many of the available cultivars tested at each site, however, if there are constraints on the available area we would require at least 3 cultivars with 2 replicates. The individual plot size needs to be at least 5 square metres. If 5 species/cultivars are to be planted with 2 replicates there will be 10 individual plots. With each plot being 5 square metres the total trial area will be 50 square metres. The individual plots should ideally be about 5 metres long so that they can be used for putting or rolling a bowl.

Warm-season Grass Trials Underway At Lakelands Golf Club

In 2001 the AGCSA, with funding from Horticulture Australia Ltd, commenced a project to collect hybrid couchgrass off-types from golf putting greens and bowling greens from around Australia. The purpose of the project was to evaluate natural variations of Tifton 328 and Tifdwarf, which exhibited improved characteristics, whether it was increased turf density, improved winter tolerance, improved shade tolerance or increased disease resistance.

It is uncertain what the trigger mechanism is for these off-types to occur, however, there are a range of conditions that may encourage

the development and expansion of these off-types including; mowing height, climate, pests and maintenance regimes. In recent years in Queensland, there have been problems associated with disease, humidity and heat stress that have resulted in deterioration of the surface and is referred to "summer dieback". During these periods of stress, the observation has been made by many Golf Clubs and Golf Course Superintendents, that greens often have patches of these off-types that appear to be unaffected by the conditions.

Because of the natural variation and the apparent successful survival of some of these off-types, there is a large and as yet untapped gene pool that needs investigation. There are several Universities in the USA that have collections of off-types, which have been developed as discrete varieties. In Australia there is a good opportunity to develop an Australian couchgrass suitable for putting greens.

In the original project 93 off-types were collected and planted into a space plant nursery at Lakelands GC, where they were assessed for their growth characteristics including; rate of spread, growth habit, density and turf quality.



Trial Plots at QDPI Redlands

From the original collection 12 off-types were selected for further development and evaluation. Darren Moore, Golf Course Superintendent at Lakelands GC has now established extensive evaluation trials as part of his Masters studies at Sydney University. These trials are evaluating the selected off-types against the industry standards; TifEagle, Tifdwarf and Tifton 328 in replicated plots where the following parameters are being measured;

- ◆ Stolon length
- ◆ Rate of spread and establishment

- ◆ Internode length
- ◆ Internode diameter
- ◆ Leaf width

Once the plots are established other parameters as they relate to putting surface quality will be assessed including;

- ◆ Quality as a putting surface
- ◆ Colour
- ◆ Turf density
- ◆ Disease
- ◆ Green speed

The plots are of sufficient size that they will be able to be mown at two different cutting heights.

At this early stage of the project there are obvious differences between the off-types and the industry standards.

As part of the project, DNA analysis will be undertaken to identify whether the off-types are genetically different to the original plant material.

Acknowledgements

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- ◆ Horticulture Australia Limited
- ◆ Bowls Australia

- ◆ Queensland Golf Union
- ◆ Victorian Golf Association
- ◆ South Australian Golf Course Superintendents Association
- ◆ Golf Course Superintendents Association of Queensland
- ◆ Australian Golf Course Superintendents Association
- ◆ Horton Park GC
- ◆ Sanctuary Cove
- ◆ Indooroopilly GC
- ◆ Twin Waters GC
- ◆ Lakelands GC
- ◆ Jimboomba Turf Group
- ◆ Tropical Lawns P/L
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