

Australian National Turfgrass Evaluation Program (ANTEP)



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The tall fescue plots at Government House in Canberra. The trials include examining the performance of tall fescue under dryland conditions.

Michael Robinson from SportsTurf Consultants outlines two research projects the organisation is conducting.



Horticulture Australia

Tall fescue (*Festuca arundinacea*) is one of the most drought tolerant cool-season turfgrasses available and is used in sportsfields, racetracks, passive recreational areas, home lawns and is also an important component of seed mixes. It is primarily grown along the south eastern seaboard of Australia (South Australia, Tasmania, Victoria and the lower half of New South Wales).

The ANTEP tall fescue trial is following a similar protocol to the perennial ryegrass trials which concluded in December 2000 (see Australian Turfgrass Management, Vol 3.1 - Feb/Mar 2001) but is also examining the performance of tall fescue under dryland conditions.

The two trial sites are located at Government House in Canberra and Chisholm TAFE at Rosebud on Victoria's Mornington Peninsula. There are 22 tall fescue varieties (including Demeter tall fescue) under trial. For comparison purposes four fine fescue varieties (Victory II Chewings fescue, Spartan hard fescue, Jasper creeping red fescue and Azay sheep fescue) and Victorian perennial ryegrass have been included.

At each trial site there are 432 plots under evaluation (27 turfgrasses, by two mowing heights by two irrigation regimes by four replicates).

Trial maintenance is based on a low to moderate level of nutrition and there are two mowing height treatments, 20mm and 40mm. The irrigated

trial is irrigated to prevent wilt and the dryland trial was only irrigated during establishment.

The trials were set up in 2002 and were assessed during establishment for seedling vigour and rate of cover. Once full cover was attained quarterly assessment of colour, density, shredding and seasonal growth commenced. Full sward assessments are undertaken for a period of two years and the trial will finish early next year.

Full results will be available on the Seed Industry Association of Australia's web site (www.sia.asn.au) after the two years of assessment are completed. Field days are planned for both sites later in this year.

This trial is funded by the Seed Industry Association of Australia with matching funds provided by Horticulture Australia Limited.

Rhizoctonia Control Project

The Victorian Greenkeepers Association, in conjunction with Sport Victoria, commissioned a research project to investigate the incidence and control of Rhizoctonia patch in bentgrass bowling greens. This disease has been shown to be a significant problem in the preparation and provision of fast-running bowling surfaces.

The project has involved surveying Victorian greenkeepers to establish the nature of their greens in terms of soil type, grass type, incidence of disease, cultural procedures used in maintaining the greens and success or otherwise in controlling the disease.

Two field trials have been conducted to determine the efficacy of chemical control. One trial investigated the use of a range of fungicides as a curative application, while the second trial investigated the use of fungicides as a preventative application at renovation of the green.

Final assessment and reporting is in progress. ﷲ

TRANSITIONAL RYEGRASS TRIALS

David Nickson, together with the TGAA Victoria and the City of Dandenong, is in the process of conducting a 12 month trial of transitional ryegrasses in Melbourne.

Couch and kikuyu will be the base grasses as it is anticipated that there will be different results from each species.

Three or four transitional ryegrasses – a turf type perennial ryegrass selected from the recent AUSTEP trial, a semi-pasture type ryegrass and possibly an annual type ryegrass will constitute the treatments as

well as a non-overseeded control. Each plot measures 4x2m with four replicates set out on a randomised block design.

The plots were established at a time that gave the ryegrass a chance to establish before subjected to winter sport wear.

At the end of the winter sport season, Nickson will spray out half of each plot and monitor and measure the couch and kikuyu cover in each treatment and also record the time it takes for each treatment to reach 90-100 per cent cover from the warm-season grass.

The remaining overseeded areas will be monitored to determine if the transitional grasses thin out and, if so, by how much. During late summer it is envisaged the remainder of the plots will be sprayed and warm-season grass coverage recorded compared to the sections sprayed earlier and the control plot.

Nickson is also hoping to start a grass variety trial for racing in southern Victoria over the next couple of months. Nickson was also heavily involved in research with Phillip Ford into the use of entomopathogenic nematodes for the control of Winter Corby grubs and the VGA turf trials (See Ford's report on Page 10-11). ﷲ