

DEPARTMENT OF SCIENTIFIC & INDUSTRIAL  
RESEARCH (DSIR) - NEW ZEALAND

**Colonial Bentgrass Breeding**

1990 Research Grant: \$10,000  
(Fifth year of support)

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Principal Investigator

The original objective of this project was to breed a Colonial bentgrass cultivar for U.S. golf courses using New Zealand breeding materials, and doing the breeding work in New Zealand. The resulting cultivar would hopefully require much less water and maintenance than those currently available in the USA, but still be attractive and persistent. The project took the pragmatic approach that breeding material fulfilling the objectives would probably be found on sites such as non-irrigated, low-input fairways of golf courses in hot, dry regions of New Zealand.

During August 1990, the project was visited by Dr. Peter Hayes. (Sports Turf Research Institute, Bingley). Dr. Hayes was able to examine and discuss the selections, meet other staff in the project, and share his perspective of the overall program. I discussed with him my concerns that the evaluations (and therefore the rankings and subsequent publicity) our selections are receiving in the USA are not related to low maintenance conditions. This could be a real problem in the National Turfgrass Evaluation Program, where irrigation, frequent mowing, etc. will probably be applied if stress appears in the trials.

In a trip through the USA in 1990, I learned that bentgrass color other than the color of "Providence" creeping bentgrass is bad. I saw the scores on several trials, and all entries of *A. castellana* and *A. tenuis* were marked down because they did not have the dull blue color of creeping bentgrass. In other turf respects they (currently) equalled or surpassed the creeping bentgrasses. This fixation with color had special mortification for me, as it downgraded our NZ-bred 'Egmont' colonial bent. At the Sports Turf Research Institute in England, where comparative color is not so important, Egmont is the best bentgrass. However, we will try to make adjustments in our project to account for these American concerns. Standards of surface excellence will not be allowed to drop just for the sake of low maintenance, and we will try to make the colors darker. This should not delay or require an expansion of the project.

The project remains for me a most exciting and enjoyable part of my work. The targets are environmentally very worthwhile, and the plant material is interesting. Most of all, the feeling of being able to collaborate in a bi-national project, and one at the forefront of customer use and funding is unique. It is a great change from the highly competitive aspects of many other breeding projects.