

## Reference trials on application of mycorrhizal product - Symbivit<sup>®</sup>

Experiment conducted by Stichting Golf Duinzicht, s-Gravenhage, Netherlands in collaboration with drs. Claudia Külling, Servaplant BV, Netherlands



Stichting Golf Duinzicht, <http://www.golfduinzicht.nl>

Address: Stichting Golf Duinzicht, Mann Bouwmeesterpad, 2597 GX s-Gravenhage, Netherlands



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**Floris Bakker, headgreenkeeper of Stichting Golf Duinzicht, s-Gravenhage:**

"In 2006 in cooperation with drs. C. Kuelling director of Servaplant BV we carried out a field test of mycorrhiza effectivity. The concentration of mycorrhiza underground more than doubled during the test period (from 26% till above 60% root colonization) and the visible result was that the mycorrhiza treated part of the green had considerably less drought stress. Fertilization and irrigation could be reduced with about 50 %. Having seen these results we consider further bigger scale application of mycorrhiza."

**Materials and Methods:**

The product was applied during turf aerification on area of 250 m<sup>2</sup>. Measurements of control treatment were performed on 250 m<sup>2</sup>. Symbivit® was applied at a rate 100 ml/m<sup>2</sup>. Samples were pooled from 20 random sampling points. Mycorrhizal colonization was evaluated as a proportion of root length harbored by arbuscular mycorrhizal structures (Mc Gonigle 1990). Roots were macerated in 10 % KOH for 1 hour and then stained with Trypan Blue stain.

**Results:**

In spring 2006 half of the nursery green from golfcourse Stichting Duinzicht was treated with mycorrhizal product Symbivit. Root colonization increased from 26% (spring) to 64% (summer) and 59% (autumn) on the treated part and from 26% to 36% to 35% in the non treated part respectively. The treated part had visibly less drought stress and a little bit less dollar spot problems. First the use of fertilizer and water was reduced to about 50% of normal but this amount seemed not enough for sufficient growth during the hot season. An extra fertilizer was added. But in total it was still less than on conventionally treated greens.