

TURFGRASS GROWN ON SAND-BASED ROOTZONE MIXTURE FOR INDOOR PURPOSE

**Constantin Iulian POPOVICI¹, Vasile VÎNTU¹, Costel SAMUIL¹,
Mihai STAVARACHE¹, Cătălina BOUREANU (CIOBANU)¹**

e-mail: iulian_vici@yahoo.com

Abstract

Sand-based rootzone mixtures used in establishing turfgrass areas have many advantages such as: reduced compaction from traffic and a fast rate of water infiltration. At the same time rapid draining and the lightweight of secondary materials used along with sand, such as peat or composted manure result in an overall lower weight of such rootzones compared to soil. This experiment studied the performance of some species of perennial cool season grasses for turf grown on four different rootzone mixtures in greenhouse conditions. Results demonstrated that a rootzone made by sand and sphagnum peat mixed in a ratio of 2:1 by volume considerations, obtained the highest turf quality in terms of establishment capacity, recovery after cutting, vertical growth, turf density, percent ground cover, thermo-hydric stress tolerance and general ornamental appearance. Compared with the rootzone made from 100% soil, sand + peat mixture offered a better availability of water and nutrients for plants. But using sand as a primary material for growing turf recommends a greater attention for supplying water and nutrients to the plants, imposing an intensive management where irrigation and fertilization should be done with smaller but more frequent doses.

Key words: *Festuca arundinacea*, *Festuca rubra*, sand, sphagnum peat, composted manure, soil