Comparing Different Media for Turfgrass Establishment on Plastic

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Sod production on plastic demonstrates many advantages versus conventional sod production. The sod is grown in anyone of a possible variety of media, including compost, wood mulch, rice hulls, or even sand. Root shearing during harvesting is eliminated when grown on plastic, which allows the sod to establish faster when transplanted. The sod is held together by the roots, which grow laterally through the growth medium, enabling the production of turfgrasses with bunch type growth habits. Sod establishment on plastic may be ready for harvesting in ten weeks (depending on the turfgrass species) versus two years for conventional sod production. Since the sod is grown and harvested in such a short period, less water, fertilizer and mowing is required for production. Depending on the climate and species, two or more crops can be grown on the same area in one year. Sod production on plastic also eliminates soil loss from the farm during harvesting.

The objective of this experiment is to evaluate the different types of growth media for turfgrass establishment on plastic. The growth media being studied are: SportGrass®, Ecomat®, pine mulch, and sand. SportGrass® is interwoven plastic strands filled with sand and natural turfgrass. Ecomat® is manufactured from refined wood fiber and provides a light and uniform surface for turfgrass establishment. The pine mulch is finely shredded and is a proven medium used for sod production on plastic. Sand, like pine mulch, is a proven medium used for sod production on plastic. The turfgrasses used are *Poa pratensis* 'Touchdown' (Kentucky bluegrass) and *Poa supina* 'Supranova'. Plot evaluations consist of turfgrass quality, turfgrass density, and shear resistance. The experimental design is a randomized complete block design with three replications. After establishment the sod will be moved to a sand based field where testing will be done to simulate athletic field conditions.