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SOILLESS SOD PRODUCTION USING ECOMAT

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Ecomat (Canadian Forest Products Ltd. in New Westminster, British Columbia, Canada) is a recycled wood fibre mat that is being used as the growth medium for this study. The potential for improving sod production using Ecomat on plastic provides some potential advantages over conventional sod production. The absence of soil during establishment provides a much lighter sod and prevents any potential soil layering. In addition, growing the sod on a plastic subsurface enables the roots to become bound to the Ecomat, which prevents the roots from being sheared during sod harvest. This is a big advantage versus traditional sodding practices, because the newly laid Ecomat sod does not have to expend as much energy for root production, and the time needed to root into the soil is decreased. Another advantage is that the actual pieces of sod may be harvested in any size desired. Perhaps the greatest advantage with Ecomat lies with its ability to be used for sod production in almost climate: for example, a greenhouse in Norway could be used during the winter to prepare sod for a athletic field to be sodded in the spring, having the field ready for play in the summer. The objective of the current study is to determine the best possible cover for germination to occur on the Ecomat. The germination and establishment of perennial ryegrass (*Lolium perenne*) and Spartan bluegrass (*Poa supina*) under seven different covers are being compared to Ecomat without a cover. The covers being used are: Germinator, Penn mulch, paper mulch, crumb rubber, native clay loam soil, straw, and fine grade compost. The 48 (3' by 4') plots were seeded on July 3, 1995. Data being collected includes germination rate, percent grass cover, and growth rate. Fertilizer applications using granular starter fertilizer (19-26-12) were applied at a rate of .93 lbs. P_2O_5 per 1000 ft^2 three times during initial establishment: at seeding, then 14 and 21 days after seeding. Initial data has shown the fastest germination rates occurred with the ryegrass (7 days after seeding) on the plots with Penn mulch used as the cover. Germination of the *Poa supina* occurred 10 days after seeding on most plots, with Penn mulch again showing the most growth.