Spartan Stadium Field Conversion Update: May 2001

Lisa M. Lundberg and Dr. John N. Rogers, III Department of Crop and Soil Sciences

In December 2000, Michigan State University began the process to convert Spartan Stadium Field from artificial turf to natural grass. Considerable energies went toward the decision as to the field system type. A modular (ITM modules, GreenTech, Richmond, VA) system was determined to be the best fit for the situation. This system is similar to the one developed by MSU scientists for the 1994 World Cup matches at the Pontiac Silverdome. The major benefits of a modular field include rapid drainage and air exchange as well as ease of field replacement and environmental control of the root zone. Worn modules can easily be removed, replaced and ready to play on in a matter of hours; and heaters can be implemented to keep the root zone warm enough to provide favorable growing conditions late in the playing season. In addition, the modular system allows for remote planting and maturation. What this means is that the modules do not have to be seeded and grown at the playing field site. This benefit is allowing Spartan Stadium to be seeded in May 2000, mature throughout the next year, and be 16 months old before play begins in September 2001.

Construction of Spartan Stadium began in March 2001. Thirty five people and three University farms helped to fill 6,000 modules with gravel and a 90% sand, 10% silt + clay root zone. Of these 6,000 modules, 4,800 were used for the field and the remaining 1,200 will be used for a replacement nursery. This process took approximately one month.

In May 2001, Clark Companies (Delhi, New York) came to MSU to place the modules in the exact configuration of Spartan Stadium, add 4 more inches of root zone, and do a final grade. This took approximately three weeks. On May 25 the 13-25-12 starter fertilizer was applied to the surface. On May 26 the field was seeded with Kentucky bluegrass at a rate of 1.3 lbs/1000 ft². The seed was sown with a Brillion seeder and a rotary spreader. The nine varieties of Kentucky bluegrass used were: Champagne, Coventry, Limousine, Midnight, Moonlight, North Star, Rugby II, Serene, and Unique. Throughout the rest of the Spring and Summer, the field will be matured as we continue to control weeds, mow, water, topdress, and fertilize on a regular basis. The current plan is to move the field into Spartan Stadium in June 2002 with the first game scheduled for August 31, 2002.