OHIO STATE

These are challenging times for land grant institutions like Ohio State that provide research, teaching and outreach services. Reductions in funding have meant tuition fee increases for students and programs within the university having to become self-sufficient. Big changes are also afoot at Ohio State in that we are switching from quarters to semesters in summer 2012 and we are changing the major to "Sustainable Plant Systems" with a turfgrass science option. In keeping with the new major, the focus of our research at Ohio State has also been more focused on the issue of sustainability and IPM practices.

Dr. John Street and Deb Holdren were recently awarded a major Specialty Crops Grant to investigate the integration of microclover and turfgrass as an environmentally viable turfgrass ecosystem. In addition, many of the pest control products we evaluate are organic or biorational (non-toxic) in nature. We also continue to look at composts, organic fertilizers and low maintenance turfgrass varieties and species, such as tall fescue.

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From an agronomic standpoint, we have done a lot of work with The Andersons over the past 4 years, evaluating their advanced dispersible granular technology. One of these products has been the granular version of the plant growth regulator trinexapac-ethyl, which could be a useful tool for reducing mowing frequencies while improving turf quality. For the past several years we have been working with the stoloniferous ryegrasses and this year we evaluated drought and heat tolerance of those cultivars. In what is considered to be one of the hottest and most humid summers on record, with sand rootzone temperatures well over 100 F, there were a couple of cul-

tivars that did considerably well, even at 5/8 mowing height, so watch out for those!

New this fall we have established a Kentucky bluegrass trial that includes common types, compacts, hybrids, monostands and blends. With some pretty intense management at the onset, we were able to go from "seed to play" in about 7 weeks and we will be evaluating wear tolerance in the spring of 2012. Also new this winter is an overseeding study that we will continue as long as the ground isn't snow-covered. We are looking at germination of annual, perennial and tetraploid ryegrasses during the winter months.

Lastly, we are very fortunate to have a great relationship with the Director of Sports Medicine, Dr. Tim Hewett, who has joined forces with us on some grants and research projects. His specialty is ACL injury, so his input on traction research is invaluable. We recently acquired a pneumatic foot that can simulate athlete maneuvers like starting, stopping and cutting. The beauty about this equipment is that we do not have to have plots of turf installed at the turf facility at cost to a sponsor, as we can test small samples in the lab.

We continue to test & look at synthetic turf hardness in relation to Gmax and Head Injury Criteria (HIC) and we would like to further investigate critical fall heights in relation to sports like rugby and football, to make sure our playing surfaces do not contribute to concussions. There are many projects we'd like to do, we just need the funding! For more info on our Sports Turf Program, see our website: Buckeyeturf.osu.edu or visit us on Facebook (Buckeye Turf) and Twitter (Osuturf).-by Pam Sherratt, sports turf extension specialist

>> **THIS PNEUMATIC FOOT** can simulate athlete maneuvers like starting, stopping and cutting, and Ohio State researchers can test small samples in the lab rather than having to install costly plots.

Title of Research Study, Ohio State	Principle Investigator
The use of FeHEDTA herbicides as biorational broadleaf weed controls	Dr. David Gardner & Emily Horner
Timing of application of Cavalcade PQ for post/Pre emergence control of crabgrass	
Herbicide programs for seeding/overseeding	
Broadleaf weed control products	
Microclover and turfgrass ecosystems	Dr. John Street & Deb Holdren
Dispersible granular technology	All turfgrass science team
The effect of various cultural practices on putting green firmness	Arly Drake (MS) & Dr. T. Karl Danneberger
Athletic field protection systems	Matt Williams (PhD) & Dr. T. Karl Danneberger
Turfgrass physiology in shade	Aneta Studzinska (PhD) & Dr. T. Karl Danneberger (completed 2011)
Impact of dew on turf health	Dr. T. Karl Danneberger
The effect of enhanced ultraviolet light on turfgrass physiology	Ed Nangle (PhD) & Dr. David Gardner
The effects of compost topdressing on native soil health and sports turf playing quality	Marcela Munoz (MS) & Dr. John Street (completed 2011)
Models to measure carbon sequestration in the landscape	Gina Zirkle (MS) (completed 2011)
Ecologically sustainable turfgrass	Andrew Muntz (MS) & Dr. David Gardner
Drought resistant perennial ryegrass	Pam Sherratt & Dr. John Street
Natural and synthetic fertilizers	
Granular plant growth regulators	
Winter over-seeding with annual, perennial, and tetraploid ryegrasses	
Kentucky bluegrass establishment and wear tolerance	
Effects of surface characteristics on the traction and hardness of synthetic and natural turf	
Fungicide efficacy trials	Joe Rimelspach & Todd Hicks
Bacterial wilt	
Insecticide efficacy trials	Dr. Dave Shetlar & Jen Andon

RUTGERS UNIVERSITY

The following is a synopsis of ongoing and future sports turf research projects at Rutgers.

Traffic stress research concluded on the 2006 National Turfgrass Evaluation Program (NTEP) Tall Fescue Trial at Rutgers Hort. Farm II in North Brunswick, NJ in 2011. Wear and compaction were applied to the trial in Spring 2009 and 2011; Summer 2008 and 2010; and Fall 2007 and 2009. Wear stress was applied with the Rutgers Wear Simulator, a modified M24C5A Sweepster in which the steel brush on the unit was replaced with rubber paddles. The rotational movements of the paddles causes wear. The simulator allows control of both forward operating speed as well as paddle rpm. Compaction was applied with a 1.5-ton roller.

Results suggest that attention should be given to tall fescue variety selection for