draining to a collection gutter and then a collection vessel where runoff water can be quantified and tested for nutrients. We are in the process of securing soil moisture sensors that will be placed within each plot to measure volumetric water content (VWC). Soil moisture sensors would enable us to detect differences in VWC that could be attributed to differences in turfgrass rooting depth, and also correlate VWC with runoff volumes.

We are currently in the process of finalizing fertilizer treatments for the research. The objective of this research is to collect data to determine whether or not the use of slow release fertilizers with single application rates as high as 2.5 lb. N/1000 $ft.^2$ increase the risk of nitrogen in runoff water.

Data Collection:

1. Turfgrass color and quality, visual ratings, collected monthly. Quantitative color readings with Spectrum Technologies TCM 500 NDVI Turf Color Meter.
2. Inorganic N in runoff, collected continuously (report individual sample date results, as well as cumulative results for mass N loss).
3. Runoff volumes and VWC

Stop 15. National Turfgrass Evaluation Program Kentucky Bluegrass Athletic Field Traffic Tolerance

Dr. Kevin W. Frank and Jeff Bryan

This National Turfgrass Evaluation Program Ancillary Test was established to evaluate athletic field traffic tolerance of 82 Kentucky bluegrass cultivars.

Trial Protocol:

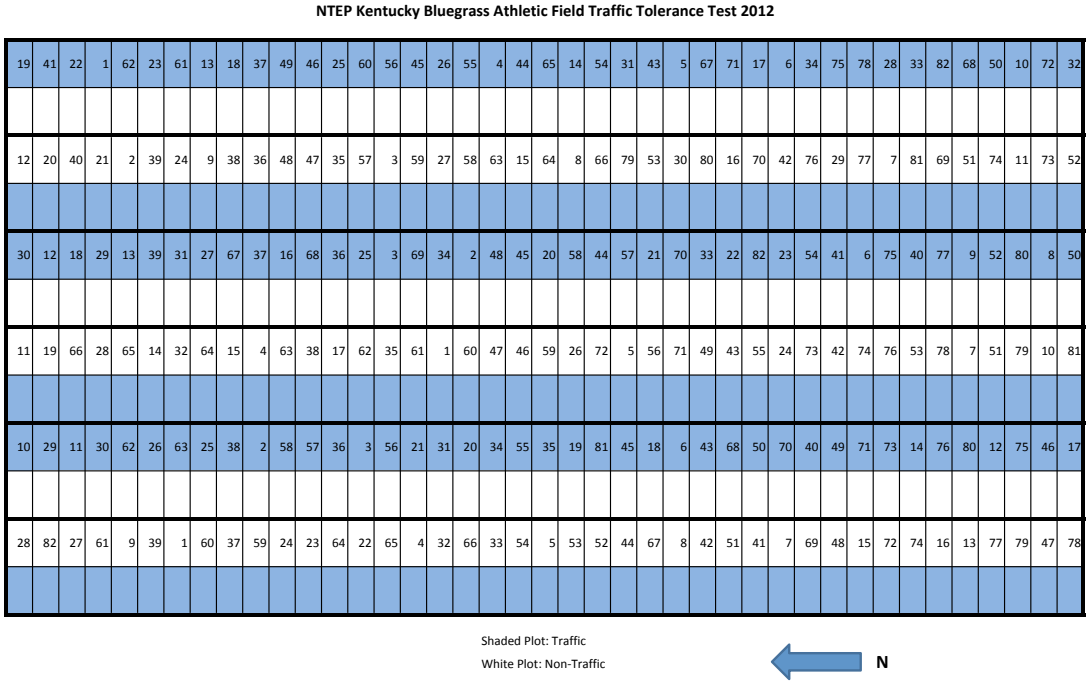
1. A Brinkman traffic simulator is used to apply traffic.
2. Entries were seeded in approximately 5’ x 10’ plots (50 sq. ft.) with three replications. Each plot will have a strip where no traffic is applied, to compare traffic vs. no traffic treatments.
3. Due to establishment failure in the fall of 2011, plots were reseeded in May of 2012. Traffic was initiated in late summer/fall of 2012.
4. Traffic is applied with 4-6 passes of the Brinkman simulator per week, for twelve consecutive weeks.
5. After the twelve week 'season', plots are to be irrigated, fertilized and generally managed to encourage recovery.
6. Traffic simulation following the procedures outlined above will be continued in 2013 and 2014.

Maintenance Schedule B (Medium Mowing)

1. Mowing height: 1.5 - 2"
2. Nitrogen rate: 3 - 4 lbs. N/1000 sq. ft. annually
3. Irrigation: To prevent stress or dormancy
4. Fungicide use only if severe stand loss is possible
5. Weed and insect control to prevent stand loss

Cultivar List

#	Cultivar	#	Cultivar	#	Cultivar
1	12PP612	31	A002882	61	A06-26
2	8pp504	32	A04-342	62	PIZK TD8
3	America	33	A06-46	63	SRX5321
4	A05-361	34	A05-T-B-382	64	PizK TD9
5	Cabernet	35	H99-1653	65	Blackjack
6	Award	36	Blue note	66	Arrowhead
7	Nu Chicago	37	A10-1	67	K9-99
8	Kenblue	38	A05-306	68	07-261
9	J-1770	39	A03-1017	69	T10-18
10	J-1136	40	A04-74	70	K4-7
11	Rush	41	RAD-849	71	K9-97
12	Sudden Impact	42	AV-ID	72	452W
13	J-1853	43	EMP IRE	73	3733
14	A050204	44	BURL 3-51	74	A05-315
15	A05 329	45	BURL 06-11	75	A05-999
16	A98-344	46	K4-3	76	A06-47
17	A98-363	47	K9-90	77	RAD-507
18	RAD-1492	48	KID-106D	78	A04-36
19	A04-38	49	BARPp119327	79	Shamrock
20	A05-360	50	Barduke	80	A01-1106
21	PPH9131	51	Baron	81	Midnight
22	DPPP818	52	BARVV0709	82	Thermal Blue
23	PP10847	53	BARVV112916		
24	Pick 033	54	BARPp110358		
25	Pick MP07	55	BARPp119326		
26	Pick 4340	56	BARVV118532		
27	SRX466	57	Skye		
28	SRX 2758	58	AKB2282		
29	SRX 4338	59	AKB2555		
30	LTP-08-6	60	A00-4199		



Stop 16. A New Weapon for Controlling Warm Season Grasses

Aaron Hathaway and Dr. Thomas A. Nikolai

Topramezone, sold as Pylex, is a new herbicide, but has a very familiar chemistry. It, like mesotrione (Tenacity), is an HPPD inhibitor. Both of these herbicides affect the biosynthesis of carontenoids in susceptible plants and cause them to lose chlorophyll, in turn, causing them to turn white. Pylex and Tenacity are versatile herbicides providing control of many warm season grasses and broadleaves.

A trial to investigate the use of Pylex, Tenacity, and Acclaim Extra for control of Bermudagrass was initiated on June 26, 2013. Two applications of each product were applied 14 days apart. Pylex provided excellent control of Bermudagrass while Acclaim Extra provided good control after 2 applications. A second trial was initiated on July 29, 2013 to investigate Pylex for control of broadleaf weeds. It was applied alone and as a tankmix with triclopyr (Turflon), which has shown to decrease the bleaching effect on susceptible plants while not interfering with control. If summer temperatures continue to increase year after year, herbicides like Pylex and Tenacity will become more and more useful as warm season perennial grasses have shown they can survive Michigan winters and compete in the summer heat.