New software

SimCity to SimFarm

The software producer Maxis has introduced a new companion title to its already successful SimCity and SimAnt software packages. Called SimFarm, the new software was devised with the help of farming experts to offer players the opportunity to succeed in their agribusiness careers or lose their farms to the auctioneer's gavel. The players choose the equipment, buildings, seed, fertilizer, pesticides and practices that they will need in their quest to battle the elements, in the forms of floods, droughts, and violent storms, to bring in a profitable crop and stave off possible bank foreclosures.

Ohio State University study

Shredded paper mulch better than wheat straw

A recent study from Ohio State University has shown that a new mulch has positive results when used in horticultural and agricultural situations. The new mulch produced higher yields, warmed the soil better, provided adequate weed suppression and was environmentally friendly when compared to the control material, wheat straw. The new, improved, low-cost mulch was made from shredded recycled paper.

Cornell University study compares clippings yields

Low maintenance turf growth rates compared

Cornell University compared the average clippings yield per cutting of eight mixtures of commercially-available seed blends and found that blends with high hard fescue content produced the least amount of clippings per cutting. The eight blends ranged from mixtures of ryegrass, bluegrass and fine fescues to all dwarf tall fescues, all bluegrasses, and all fine fescues. Each area was established under the same excellent seed bed conditions so difference in establishment characteristics were minimized. The table lists the seed blend and their average clippings yields.

Seed blends and average clippings yields

Blend	Species by %	Av. Clipping Yield	Clipping Yield
Loft's Ecosystems Ecology	80% hard,20%chewings fescue	2.0lbs*.	87lbs.**
Lesco Fine Fescue Links	30% hard,20% chewings, 40%creeping,10%sheeps	3.4	147
Scotts Perfect Choice Shade	30%bluegrass,30%hard,30%chewings	3.6	158
Agway Low Maintenance	15%ryegrass,15%bluegrass,50%hard, 20%chewings	5.0	219
Pennington Drought Tolerant Bluegrass	100%bluegrasses	6.1	268
Agriturf Far Rough	20%ryegrass,10%bluegrass,30%sheeps, 40%hard	6.4	281
Lesco Dwarf Tall Fescue	100% tall fescue	6.8	298
Agriturf Safelawn	50%ryegrass,25%chewings,25%hard	7.4	322

*(lbs./m.s.f.) **(lbs./A.)

TGT's view: *If reduced mowing is the primary objective, a low maintenance seed blend should not contain either ryegrass or tall fescue. If the area is subject to some traffic or wear then the inclusion of drought resistant bluegrasses will not dramatically increase clippings. If the area requires the lowest inputs possible, then the blend should be exclusively fine fescues with a heavy or complete emphasis on hard fescue varieties.* — CS.

University of Maryland study

Pre-emergent herbicides work the following summer

When pre-emergent herbicides were applied in November some showed excellent crabgrass prevention 10 months later. In an effort to widen the window of effective application times, testing at the University of Maryland found that when single applications of the pre-emergent herbicides, Pendimethalin, Prodiamine, and Dithiopyr were made late in the fall at sufficiently high rates, they provided smooth crabgrass control that ranged from 77% to 100% the following summer. The data in the table below shows a summary of the Maryland tests.

Pre-emergent herbicides effects on crabgrass

Herbicide	Form	Rate*	Rank	Average % Controlled
Pendimethalin	60.00DG	1.68	12	3.5
Pendimethalin	60.00DG	2.24	11	31.5
Pendimethalin	60.00DG	3.36	9	65.5
Prodiamine	65.00DG	0.43	6	82.0
Prodiamine	65.00DG	0.56	2	93.5
Prodiamine	65.00DG	0.73	4	89.5
Dithiopyr	1.00EC	0.43	8	67.0
Dithiopyr	1.00EC	0.56	5	88.5
Dithiopyr	1.00EC	0.84	1	97.0
Dithiopyr	.25G	0.28	7	69.0
Dithiopyr	.25G	0.43	3	91.5
Oxadiazon	2.00G	4.48	10	37.5
Untreated Check	13.00			0.0

* kilogram/hectare

TGT's view: *The older established spring-applied herbicide, Oxadiazon, did not provide acceptable crabgrass control when applied in the late fall, and Pendimethalin only when applied at very high rates. The newer materials, Prodiamine and Dithiopyr, provided good to excellent control at all but the lowest rates. Dithiopyr in the .25% granular formulation showed excellent control at substantially lower rates than the 1EC formulation, indicating that this herbicide is particularly effective on a granular carrier and that the liquid application may require watering in to reach its full effectiveness.* —CS

California study

Oxadiazon enhances buffalo grass establishment

Buffalo grass is an increasingly important alternative species in drought prone areas. But it is slow to establish when plugged because of competition on from annual weeds. A California study of buffalo grass and pre-emergent herbicides showed Oxadiazon as the herbicide that provided the best annual weed suppression while allowing for the greatest lateral growth of the species. The table below lists some of the results of this study.

Pre-emergent herbicides and buffalo grass establishment

Herbicide	Rate	Rank	Buffalo grass cover	Weed Cover
control	—	—	16%*	44%**
Oxadiazon (50WP)	0.71*	1	89%	0%
DCPA (75WP)	3.60	2	58%	14%
Pendemethalin (60WDG)	1.10	3	44%	4%
Trifluralin (4E)	0.20	4	37%	22%
Benefin (60WDG)	0.71	5	36%	25%
Dithiopyr (1EC)	0.20	6	21%	16%
Bensulide (4EC)	3.60	7	15%	37%

* ounces per 1,000 square feet
** average % buffalo grass cover
*** - average % weed cover

TGT's views: *The good-to-excellent weed prevention that DCPA, Pendemethalin, and Dithiopyr provided did not translate into good buffalo grass cover. Oxadiazon was the only material to gave both excellent weed prevention with low toxicity, the problem with all of the other herbicides checked.* —CS