

of preemergence herbicide throughout most of the growing season.

Tactics v. goosegrass

However, there are some tactics that can be used. First, since goosegrass does not germinate as early as crabgrass (generally three weeks later), the initial application of pre-emergence herbicide can be delayed, which will then allow the threshold level needed for control the chance to persist longer into the growing season. Secondly, a split application at a rate at least half the initial application (usually full label) must be made approximately four weeks later.

Even employing these pre-emergence tactics is often not enough to provide satisfactory goosegrass control. As a result, follow-up control for preemergence escapes usually requires the use of a post-emergence annual grassy weed control herbicide such as Acclaim Extra. Often this post-emergence control can be achieved using spot treatment applications for those locations where goosegrass germination is persistent. The mechanical abuse that often occurs on athletic fields imparts significant pressure on preemergence herbicides to do their job (due to the physical breakage of the chemi-



cal barrier that is needed for preemergence control).

There can be no doubt that controlling annual grassy weeds with preemergence herbicides is a formidable challenge. There are several highly efficacious products available for your use, but they are all subjected to the same external forces previously discussed that get in the way of their controlling abilities. Mother Nature does not generally favor the success of preemergence herbicides, therefore it is up to the turfgrass manager to do everything possible to ensure their success. Such things as herbicide choice, proper timing of application, appropriate split application rates and timings, sufficient water to provide herbicide activation, adequate fertilization to encourage turf competition, and the management of wear and mechanical stresses all will enhance the level of control that preemergence herbicides are capable of providing. **ST**

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Ohio St. studies coated sand

At the Ohio Turfgrass Conference last December, results were released of an Ohio State turf study on Nitamin coated sand in core aeration and topdressing applications when compared to traditional sand. Results of the research, conducted by the Ohio Turfgrass Foundation facility at OSU, demonstrated quicker turf recovery in core aeration applications and improved turf color and density in topdressing applications with the coated sand. Georgia Pacific and its local distributor released study results.

Dr. Karl Danneberger, professor at the Ohio State University's turfgrass science department, said, "We wanted to determine if backfilling coring holes with the coated sand versus traditional sand would enhance core hole recovery. Indeed, our experiments showed that after 11 days, the Nitamin-treated areas showed approximately two holes visible per plot as compared to approximately 10 holes per plot on the traditional sand-treated areas."

The core aeration study was initiated on a 3-year-old L93 bentgrass fairway established on native soil and mowed at 0.5 inches. On August 10, 2004, plant growth regulator treatments were applied to the turf at different rates. Three days later, the OSU research team set up 3 x 6 feet in area plots in a randomized block design and aerified them with 5/8-inch tines. After aerification, the team removed cores and allowed the plot area to settle and dry for three days. Then the core holes were filled with either the coated sand or traditional sand.

To evaluate the effectiveness in topdressing applications, the OSU team compared the two sands at different rates and judged the results based on color and density. Dr. Danneberger said, "We discovered that applying the coated sand at a rate of



Left: Coated Sand vs. Right: Straight Sand, 2 weeks post application

1.5 pounds per 30 square feet provided better color and density than traditional sand applied at the same rate. The lower rate of the coated sand applied at 0.75 pounds per 30 square feet also performed comparatively well."

The topdressing study was conducted on creeping bentgrass turf established on a USGA green constructed rootzone maintained at 0.125 inches. The plots measured 6 x 5 feet and the treatments were replicated three times in a completely randomized design. **ST**