# What Is Basamid<sup>®</sup> and How Does It Work?



◄ Basamid<sup>®</sup> is not a new product, but BASF has developed a new protocol for its use in turf renovation.

will provide you with enough starter fertilizer to get turf off to a healthy start," says Pennington, noting that the breakdown ingredients in Basamid are considered as plant nutrients.

Basamid is not a new product, but BASF has developed a new protocol for its use in turf renovation.

"Basamid has been used for 10 years, but few end users or superintendents were given a step-by-step program on how to use the product effectively," Pennington says, explaining that turf scientists at Michigan State University conducted studies in the early 1990s and discovered that Basamid could be successfully used for golf course renovation.

Ed Braunsky, CGCS at Geneva GC in Geneva, Ill., was

the first superintendent to use the "new" Basamid on a large scale. Braunsky successfully treated 12 acres of his

Proper irrigation is vital for all soil types, but differ according to varieties.

o you've decided to fumigate areas on your golf course to rid it of disease, insects and weeds in preparation for reseeding. And as an environmentally aware superintendent, you don't want to use liquid or gas fumigants, such as methyl bromide, to steril-

ize the soil. Besides, they require expensive injection equipment to apply liquid or gas fumigants.

Basamid®, a granular soil fumigant, manufactured by BASF Corp., may be the answer to your fumigation needs. Basamid's common name is dazomet, and it's from the thiadiazine family. Dazomet is not a restricted-use product.

"That's the benefit it has over other products on the market," explains Willie Pennington, BASF's Basamid specialist. "When applying Basamid, you don't have to suit up in protective clothing — as you do with restrictive products. It stays inert until you activate it in the soil with water."

Basamid, which is a microgranule, is used to renovate fairways, greens and tees. It is simply applied using a drop spreader. The product comes in 50-pound bags. It's a convenient alternative to using 2-ton cylinders that are often used in fumigation.

"Basamid will give you a clean seed bed to plant turf, and it

The Basamid® Golf Course Renovation Guide

course to prepare it for reseeding in August 1999.

"To look at what we accomplished with \$24,000 when any other approach would have cost a minimum of twice that ... that's pretty amazing," Braunsky says.

Joe Boe, superintendent of Coral Oaks GC in Cape Coral, Fla., plans to use Basamid® in the spring to renovate tee boxes. Boe, who has used methyl bromide in the past, is aware that he's going to have to find an alternative fumigant, and he has heard good things about Basamid. "My friend used it on tee areas and had success with it," Boe says.

# **Fairways and soils**

Basamid applications vary according to soil type and turf variety. Fairways consisting of clay, silt or silty sand soils require different management than sandy loam, loamy sand and sandy soils.

Soil preparation work, including verticutting and aerification, should be completed before the Basamid application. Cores need to be removed. Turf surfaces with clay, silt or silty

# **PROPER PREPARATION**

Basamid applications on fairways vary according to turf. Follow these instructions:

Clay, silt and silty sand soils:

Lightly irrigate two or more times at least two days prior to applying Basamid.

Should be scratched with dethatching-type equipment before applying Basamid.

Sandy loam, loamy sand and sandy soils: Do not need to be irrigated

prior to Basamid application unless they are too dry.

### Bentgrass:

Mow to  $\frac{1}{8}$  inch or less prior to application.

**Bluegrass, fescue-type turf:** Mow to  $\frac{1}{4}$  inch or less prior to Basamid application.

sand soils should be scratched with dethatching-type equipment before applying Basamid. Consult your local BASF rep or USGA agronomist for further instruction.

Basamid should be applied with a drop spreader at 4.5 pounds per thousand square feet (196 pounds per acre) to 5.25 per thousand square feet (229 pounds per acre) with a 50% overlapping pattern in the same direction. The rate may change depending on the pest to be controlled. It should only be applied to dry turf, not wet due to rainfall, irrigation or dew.

Proper irrigation applications are vital for all soils, but vary according to soil types. Clay, silt or silty sand soil fairways should be irrigated with 1/4 inch of water or less, but not to the point of runoff. Sandy loam, loamy sand and sandy soil fairways should be irrigated with 1/2 inch of water after application.

Irrigation practices for the two soil-type classes are differ-

ent throughout the five days after application. The key requirement is to maintain good soil moisture. If heat and high winds persist, frequency of irrigation may have to be increased. Soil should be allowed to dry out on the sixth day to prepare it for seeding.

# **Greens and tees**

Basamid applications for renovating greens and tees differ according to cool-season and warm-season turfgrass. The soil for both types should be prepared to seedbed condition and tilled to a 6-inch depth. Also, the ambient temperature needs to be at least 50 degrees Fahrenheit or higher and the soil temperature should remain above 43 degrees during the fumigation duration.

It's vital to make sure that Basamid granules are mixed into soil. Basamid's active ingredient, dazomet, is triggered by moisture in soil. It's also important for soil to be moist throughout the seven-day treatment period to ensure the proper release of fumigant gases.

For cool-season turfgrass, there are two options. The No. 1 option, greens and tees should be mowed to 1/8 inch or less. They should then be aerified and the cores removed. Soil temperature should be checked at 4 inches. Basamid should be applied to soils with a temperature of at least 43 degrees and no higher than 85 degrees. An irrigation program similar to that of fairways with sandy loam, loamy sand and sandy soils should be followed.

The No. 2 option, for greens and tees with cool-season turfgrass, sod should be stripped from the area to be renovated, which should then be rototilled to relieve compaction and prepare adequate seedbed. Sand or other organics should be added to the area and mixed into the soil profile. After Basamid is applied, the area should be irrigated with a minimum of 1/2 inch of water. The irrigation program for sandy loam, loamy sand and sandy soils should then be followed.

For warm-season turfgrass and to convert existing greens and tees from common bermudagrass to new turfgrass, a nonselective herbicide should be applied to the area to control topical growth of common bermudagrass. About seven days after the herbicide application, the greens and tees should be irrigated with at least 1/4 inch of water.

The areas should then be tilled with deep shanks to break the soil hardpan and relieve compaction. Soil temperature should be checked at 4 inches. Basamid should be applied at 8 pounds per 1,000 square feet to a depth of 8 inches or more, preferably with the till knives. The soil should then be tilled down to 8 inches or more and another Basamid application should be made at 2 pounds per thousand square feet.

The area should then be irrigated with a minimum of 3/4 inch of water on the application day and a tarpaulin should be used to cover the area for a minimum of four days. When the tarpaulin is removed, the area should be allowed to dry for the next two or three days.