

Pregermination?

Have questions? Send them to Dave at: ISU, Hort. Dept., Ames, IA 50011.

by Dr. Dave Minner

I've heard about using pregerminated seed for fast establishment. How do you prepare this faster-growing seed? Will it help provide grass in the worn areas of my field?

This is a nifty little trick-of-the-trade that has been modified by many sports turf managers. The following information comes from Mike Andresen, sports turf manager for the Iowa State University Athletic Department.

Preparation

1. Begin the pregermination process four or five days before you plan to apply seed to the field.

2. Put a 50-pound bag of seed into a large, water-tight container. We keep four 50-gallon plastic trash cans on hand and mark them 'for pregermination only'. The woven-plastic seed bags that seed typically comes in are perfect for pregermination.

3. Fill the container with water so that the seed is completely immersed. Add four ounces of Pana-Sea to each container with the seed and water. We do this in our heated shop so that everything equilibrates to about room temperature (70°F).

4. Recommendations specify a 12-hour soak cycle, followed by a 12-hour drain cycle, followed by another 12-hour soak cycle. For convenience, we remove the bags each morning and allow them to drain during the eight-hour work day. Before the end of the work day, we set up another soak cycle for that night.

There have been times when we forgot about the bags and allowed them

to soak for two or three days. Even then we obtained a good germination.

Application

Pregerminated seed can be applied to a field by hand or with conventional seeding equipment. It's important to remember that root growth of pregerminated seed has already begun. This can't be reversed. You must use the seed within about five days of the start of the soaking process.

The seed must be dried before it's fed into spreaders or seeding equipment. Open the bags and spread the seed on a concrete floor with rakes. Calcined clay materials such as Turface can be used to speed the drying process and make it easier to seed. Remember, seed left in equipment will continue to grow and will clog the system. The tubes in drill seeders are particularly vulnerable.

Divot repair

Seed can also be combined with sand to make a divot mix that can be placed in specific areas of the field by hand. This isn't as time-consuming as it sounds, and it can make a big difference in starting new grass as a field begins to show wear during the playing season.

Here are a few pregerminated divot-mix combinations using a five-gallon bucket to measure your sand:

- Kentucky bluegrass: 0.2 lb. pregerminated seed per bucket
- Perennial ryegrass: 1.0 lb. pregerminated seed per bucket
- Bluegrass/ryegrass mix (30/70%

by weight): 0.5 lb. pregerminated seed per bucket

Dump a bucket of sand on a concrete surface and spread a layer one inch thick. Spread the appropriate amount of seed over the sand by hand. Use rakes and flat shovels to roll the pile together and mix in the seed. If the seed is too wet, add some Turface to soak up the water and make it easier to handle.

It's best to use the divot mix right away, since you will have one-inch roots in about three days. Simply fill the divots with the sand/seed mixture and pack it down with your foot. Spread a 1/4-inch layer of the divot mix over thin areas. Supply adequate irrigation to keep the seedlings alive during establishment. This practice can be done during the playing season or in the off-season. It is a very simple and effective tool in the continual fight to keep grass cover on the field. □

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