

Coated Forage Seeds

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The effects of seed coating on forage seed establishment and yield can be inconsistent, so it is important for producers to ask questions when making decisions about purchasing coated forage seed.

Alfalfa seeds with different coatings

Coated forage seeds have a layer of nutrients, pesticides and/or rhizobia applied to the surface of the seed to enhance establishment. However, in several independent university studies, the effects of seed coating on forage seed establishment and yield were inconsistent, so it is important for producers to ask questions when making decisions about purchasing coated forage seed.

According to some companies, a thin lime coating will counteract the soil acidity immediately surrounding the seed. The lime coating can also protect rhizobia. In addition, it has also been suggested that it acts as a wick for water in times where moisture conditions are less than ideal.

Fungicides can also be added in the coating process. Fungicides can give the seedling an added boost when it is most vulnerable by protecting against pythium and phytophthora root rot, especially, in the spring when weather conditions favor the diseases.

The rhizobium on coated seed can die if it is stored too long or in warm temperatures for extended periods of time. As with all rhizobia inoculants, the coated seed must be kept cool and dry. Checking the expiration date on all inoculants and coated seed when planting will eliminate problems later. If in doubt of the viability of the inoculants, add fresh inoculant.

The higher survival rate for the seedlings mean less seed is needed to establish a good stand. That is the rationale behind recommendations to planting coated seed at normal seeding rates even though up to one-third less seeds are actually planted.

Coated seed will weigh almost one-third more than uncoated seed because of the added coating and will flow through the planting equipment at a different rate than uncoated seed. In research



studies, coated seed flowed 0 to 30 percent faster than uncoated seed (opposite of what many people would expect). In any case, calibrating the seeder for the specific brand and type of seed is recommended.

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