

Rhizobium Inoculants for Legumes

One reason we plant legumes like clovers and alfalfa is because they produce their own nitrogen. But not always. Keep reading to ensure that your legumes do produce nitrogen.

Nitrogen fertilizer is expensive. Anything you can do to reduce your need for nitrogen will save you money. One way is to use more legumes - like alfalfa for hay and clovers or alfalfa added to grass pastures. Legumes make their own nitrogen by forming root nodules with bacteria call Rhizobium. If you dig up a legume plant, these nodules are the small, pinkish clusters of lumpy growths on the roots.

Many soils do not normally have enough of these Rhizobium to form nodules naturally. Thus, to be sure your legumes produce nitrogen, Rhizobium bacteria need to be added to your seed. Many top quality legume seeds are pre-inoculated with a wonderful seed coating that contains these bacteria. However, sometimes we need to add just a little more inoculant to ensure good nodule formation.

That's because Rhizobium are living bacteria. Pre-inoculation attaches them to seeds during winter for spring planting. If this seed is held over for planting later, many of these bacteria may die due to heat during storage or to the length of time between attachment and planting. As a result, older pre-inoculated seed may contain too few live bacteria to form many nodules. And, of course, any seed that has not been pre-inoculated will have no bacteria for producing nitrogen. To avoid this problem, purchase some dark, powdery inoculant prepared specifically for your legume and add it to your seed as directed just prior to planting. Each type of legume has its own special inoculant so be sure to get the right one. This nitrogen insurance will cost less than a dollar per acre. That's a pretty cheap way to guarantee your legumes produce nitrogen every year.

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