

BUYING PRE-INOCULATED COVER CROPS? BUYER BEWARE.

Recently, we worked with Verdesian Life Sciences to validate the message behind our popular LINK® Cover Crop Inoculant. Our message has always been:

Inoculating legume seed at time of planting is crucial (and the best) for rhizobia survival and nodulation.

We've continually stressed that in most cases (aside from red clover and alfalfa), the rhizobium that nodulates cover crop legumes are quite fragile and very susceptible to desiccation. It's proven the rhizobium that nodulates alfalfa can survive on the seed up to two years. **However, many strains of rhizobia do not survive on legume seed beyond 24 hours.** We knew this, but wanted to substantiate our beliefs.

The Method

We tested 3 lots of coated crimson clover from distributors across the Midwest (December 2017). All 3 lots included seed tags showing updated testing in fall 2017, as well as fresh inoculant claimed to be effective until February 2019.

Here is what we found:

The Results

For clover/alfalfa seed, the **minimum level of CFU would be 1,000 CFU per seed**, according to the widely used Ag Canada standard. Even though these crimson clover lots contained rhizobia deemed to NOT expire until February 2019, the actual amounts were 1/10th of the minimum standard.

Good nodulation needs sufficient levels of active rhizobia. **Pre-inoculation of certain legume species months (or even weeks) ahead of planting can certainly be a red flag.**

Seed Lot	Results
Lot A	<100 CFU/seed
Lot B	140 CFU/seed
Lot C	<100 CFU/seed

***CFU stands for "colony forming units" or rhizobia per seed**

The Inoculating Power of LINK®



offers 170.25 trillion CFU's / 3.75 lb. bag

Assuming crimson clover is 150,000 seeds / lb.,
THAT'S 2,270 CFUs PER SEED



Additional Things to Keep in Mind with LINK® Cover Crop Inoculant:

- **Each legume requires a certain strain to nodulate properly.** For example, the strain that nodulates red clover will not nodulate crimson clover. Peas and vetches require their own specific strains. Likewise, any leftover soybean or alfalfa inoculant will not work with cover crops.
- **LINK® is designed to apply on the entire seed mix, for ease of use and convenience.** The advantage of applying inoculant on the entire mix is that the non-legume seed components then "carry" the inoculant into the soil, where the legume seeds will be nearby. This benefit provides more complete nodulation of the legume and enhanced N fixation than if the inoculant was applied only to the legume seed. REMEMBER, inoculants are for the soil, not the seed!
- **LINK® can be used effectively on over 50 legumes** making it convenient for forage plantings too

Other Frequently Asked Questions:

- How long will LINK® stay viable after it's been applied to the seed? **24 hours**
- Is LINK® a GMO product? **No, there are no ingredients of LINK® that would render it a GMO**
- Can I apply LINK® at the same rate on straight legumes? Are there enough rhizobium to handle a mono-culture legume seeding? **Yes**

For more on Soil First® LINK® Cover Crop Inoculant visit laxseed.com/LINK

