

# Clover Versus Nitrogen: Which Is Better?

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**E**d Ballard, a private farm consultant and University of Illinois employee, explains that there are many advantages of using clover over regular nitrogen sources in fields. Speaking at a Clover Seminar and Plot Tour recently, Ballard stated that there are several advantages of clover use to nitrogen use.

"I think that there are several advantages to using clover versus the more traditional route of other nitrogen sources," said Ballard, "The main thing that you will improve by using clover is the quality and quantity of your feed."

"Clover also reduces several potential health problems in stock but I believe that the biggest benefit is looking at the economics of using clover. We start at 50 cents a pound or more for nitrogen and can't produce enough to afford it but with clover, we produce somewhere between 125 and 175. It is much more beneficial," said Ballard.

"On the Dudley Smith Farm at the University of Illinois, we are doing a study this year on clover. This is the third year of the study. Parts of the paddocks have been clover interseeded and the others have not. We are looking at five to six percent difference in the protein levels and a eight to 10 percent difference in the TDN," said Ballard.

Ballard explains that there is a 20 point difference in the relative feed value in the study and that is a significant difference in feed quality.

According to Ballard, clover is not only a cheaper source of nitrogen but a health conscience choice as well. Because of the health issues, Ballard looked to address tetany problems by using clover instead of other nitrogen choices.

"We wanted to address tetany problems by using clover," said Ballard, "legumes are high in magnesium and the clover balances out the calcium/magnesium problems. It also reduces potential for grass tetany in the spring."

"With grasses and clovers together, we can move away from some of the bloat problems that arrive with straight clover. There are definitely health factors to look at by using clover," said Ballard.

According to Ballard's research, interseeding pays 15 to 20 dollars per acre and commercial nitrogen costs about 50 to 60 dollars per acre.

Ballard states that there are some differences in the nitrogen from different clover sources.

"Some clover provides a lot more nitrogen than others. Red clover and white clover are basically the same and the most usual types of clover to use. They produce over 125 to 150 pounds of nitrogen per year per acre. Alfalfa produces a little more," said Ballard.

"Clover crops only last for a couple of years and then you have to go in and reseed. I suggest interseeding each year, which keeps the costs down and keeps a constant flow of clover. Interseed your fields in the middle of February to the middle of March and use red and or white clovers in it," said Ballard.

"To do that, you have got to graze the paddocks down in the wintertime and into the spring. You can get the seed in contact with the soil otherwise, you have got too much residue and the seed can't make it down into the soil. Once the clover starts growing, you have got to graze like normal to keep the competition down. Otherwise the old grass will shade out the clover," said Ballard.

"If you have never attempted this before, I would recommend seven to eight pounds of red clover per acre and two to three pounds of white clover per acre. Once you have gotten used to doing it each year, you can occasionally skip a



**There are many advantages of using clover over regular nitrogen sources explains Ed Ballard, a private farm consultant and University of Illinois employee.**

Photo by John LaRose

year. I usually go five pounds of red clover and one pound of white," said Ballard.

"Some farmers are using alfalfa but what we have found is that alfalfa is very hard to maintain with grasses because of the way it grows. If you are going to graze alfalfa I would like to see a pure stand of it," said Ballard.

There is no right or wrong way to broadcast your clover according to Ballard. Nowadays the farmer can go out on his four-wheeler with a seeder on the back or you can walk it out. The most common way Ballard says is the four-wheeler seeder method. Ballard states it doesn't take long and you can usually seed 40 acres in a day.

"We are seeing more and more farmers utilize clover use. They are seeing the benefits and I predict that it will soon become a pretty standard practice," said Ballard, "In Southern Illinois I would say that 50 to 70 percent of farmers use clover nowadays and I hope for 100 percent. I believe that we might be close to that in the future."  $\Delta$

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