## **Cover Crop Questions And Results**



## **MIKE PLUMER**

**CARBONDALE, ILL.** any areas this year had some prevented pla-nted acres, and there have been many questions about what cover crops could be used. I just reviewed my two trial locations and visited several farms where cover crops would be beneficial.

First question: How early can cover crops be planted? The fields planted on July 23 to hairy vetch and annual ryegrass look very good. The hairy vetch is now 29 inches tall, and annual ryegrass is still growing even though it is covered by vetch. The annual ryegrass is 10 to 12 inches in height. Rough calculations would be that there is over 100 pounds per acre of nitrogen there right now and that more will be produced.

Second question: Will vetch that tall over winter? I don't know, but I suspect it will winter kill, leaving the ryegrass to uptake and hold the nitrogen. I'll let you know next spring.

The oil seed and forage radishes planted in late August and September look good, and we've seen some interesting things. Daikon oil seed radish has a 3-inch root about 1 inch in diameter, while the forage radishes are 4 to 6 inches long and 3/8 to 1/2 inch in diameter. The seeding rate trial shows that less is better. The best looking stands are from seedings of 3 and 5 pounds per acre. The 10 pounds per acre and higher rates are growing slowly and are yellow with little root developed. To get the low rate seeded, a John Deere 7000 planter was used with milo cups and a slow down gearing, or a drill with the radish seed mixed with oats or annual ryegrass, or drilling with every other hole covered. Radish needs to be about 3 per foot of row and 15 inches or farther between rows in order to develop good rooting. The ryegrass was used at 8 pounds per acre in the mix, and both look good.

The crimson clover plots look good but are too thick. Seedings of 8 pounds per acre look to be the right rate; the 10 to 12 pounds per acre rate is so thick plants are competing against each other. August and September seedings are 2 to 4 inches tall, with the lower seeding rate looking the best.

In flat, wet soil types, cover crops are struggling, while the rolling ground looks great. Yield results from the 8-year cover crop no-till fields harvested so far have been from 210 to 240 bushels per acre on Bluford and Cisne soil types. And, there are still no ruts due to the good soil structure and cover crop roots.  $\Delta$ 

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