

Date: For the week of August 2, 2009

No Till Notes: Miscellaneous

By Mark Watson, Panhandle No Till Educator

We received a half inch of rain last night, so wheat harvest has ground to a halt for a few days. This brings our total for July to 2.7 inches of rain and for the year we have had 15.44 inches of precipitation, 4.72 inches above normal. We have also had unseasonably cool temperatures which is slowing the growth of the summer crops. We will need an extended growing season this fall to give some of the crops time to mature.

We did combine our winter wheat that was planted following field peas we grew last summer. The wheat behind the peas was yielding around 60-65 bushels per acre. Other dry land fields of wheat we have combined were also good, around the 50 bushel per acre mark for yields. The wheat behind the field peas appears to be 10-15 bushels per acre better than any of our other dry land wheat yields. I have also visited with a neighbor who chemical fallowed a field next to his field peas last year, then planted the whole field to wheat. He also felt the wheat behind the field peas was out yielding his chemical fallowed wheat by about 15 bushels per acre. There is something about growing winter wheat behind field peas that the winter wheat really likes. I would like to hear from other producers to find out how their wheat yields were behind the field peas.

I have also talked to producers around the southern Panhandle and western Kansas, and their field pea yields have been running anywhere from 35-70 bushels per acre. We haven't harvested our field peas yet, but they look to be 40 bushel peas. I did have one field that was overrun by sunflowers and we desiccated the field before we can harvest the peas. This was an exceptional year for field peas, but I think if we get enough moisture to grow a good crop of winter wheat, we will also have a good crop of field peas. I am going to have to figure out a better herbicide package for our fields next year where we will grow the field peas.

I wanted to bring you up to date on our irrigated corn where we sampled for our soil food web analysis. This is the field where we sampled the soil for the soil food web, and also ran a conventional soil sample for nutrients. Our soil food web analysis showed we would have 100-150 lbs. of N for the corn crop through the soil micro organism activity during the growing season.

We fertilized the north half of the field according to the conventional soil test. The south half of the field we applied 75 lbs. less N to see if the soil food web would supply the corn with enough N to make up the lack of commercial fertilizer applied to the south half of the field. We ran plant tissue analysis of the north half and south half of the field. Both samples came back in the sufficient range for our yield goal. The south half of the field was slightly lower in N, but was sufficient for our yield goal. The analysis showed we needed approximately 15 lbs. of N on the south half of the field to equal the nitrogen in the north half. We decided to chemigate 20 lbs. of N on the south half to equalize the N of the north half of the field. The south half still has about 50 lbs. less commercial N in the field than the north half.

I really wonder if the soil micro organisms can supply us with more nutrients than we realize in a no till soil. By improving the soil health we may be able to reduce our dependence on commercial fertilizers and lower our production costs. I also feel in the near future we will sample soils for nutrient content like we have always done, but we

will also sample for soil micro organisms and their contribution to our plant growth. We will then make fertilizer decisions combining the two soil tests. It makes sense to me that healthier soils will produce healthier crops and we can manage our soil's health with no till crop production practices.