



These samples and pictures were taken on August 25th, 2010.

The left side has **10 ears** picked from a neighbors field. They were planted approximately April 15th, 2010 and have a final stand of roughly 30K (3 samples). The leaf samples are from the ear leaf and are a pale green color with large dead and diseased areas showing. The leaves are also somewhat firm and brittle, the one on the far left is folding into a "V" shape and they are all very dry. All of the ears are showing severe stunting and major "tip back". The butt of the ears are deformed, pollination was not uniform, most cobs are hooking, and test weight will most likely be lower than normal. This is a corn/corn field and I would figure the Nitrogen applied to be 150 lbs. or more, some of it was fall applied. P & K ????. This corn is probably 10' tall and standing well so far but some stalk deterioration is showing up now. The field is virtually weed free, there is nothing else living out there, the corn is dying and not producing much sugar at this time.

The right side of the picture has **9 ears** picked from a field of mine that is in the second year of transitioning to organic production. This field was planted on May 22nd, 2010 at 31K with a final stand of 27K. The corn is an organic variety from Blue River Hybrids so there was no captan seed treatment. That is why the later planting date, needing warm soils for a fast emergence. This corn emerged in 4-5 days and was never stunted from cold and damp soils. Cost for this seed was approximately \$60.00/acre. The leaf samples are from the ear leaf and show very little disease and

have a rich green color to them. They are soft in texture and supple, still very much alive not hard and dry. When holding the leaves they move and flow, there are very few dead spots in these leaves and disease is low. The ears are tipped back and could have filled better, however they filled what they have very well with straight rows of kernels. The butts are squared off and the ears are straight without hooking the cobs. Pollination for the most part seemed to go pretty well here. This corn is between 9-10 feet tall and standing well. It is following soybeans and the ground was pretty mellow, the field was cultivated twice in the summer. The fertility was 10 gallons per acre of liquid fish, which is a 2-4-0.5-1Ca product, and 20 gallons per acre of composted liquid manure. Also in the summer a foliar azotobacter was applied to attach to the plant and fix nitrogen from the atmosphere for the plant. The fish and compost were split applied between a pre-plant broadcast application, 2x2 application with the planter, and foliar sprays with the azotobacter product. The company that makes the azotobacter claims that it could possibly fix up to 50 lbs. of N per season. At this time I am planning to make 1 more foliar application to this field since the corn kernels are still filling. Even though the number of kernels is fixed we can still influence the test weight of the kernels thus adding yield to the crop. There are a few escape weeds in the field, but it looks like it will yield better than the other field discussed here. The corn in this field is still alive and producing sugars.

The picture below was taken on July 10th, 2010 in the organically grown field described above.

