ADVANCED AG SYSTEMS'

Crop Soil News

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"It is the crops that feed the cows that make the milk which creates the money."

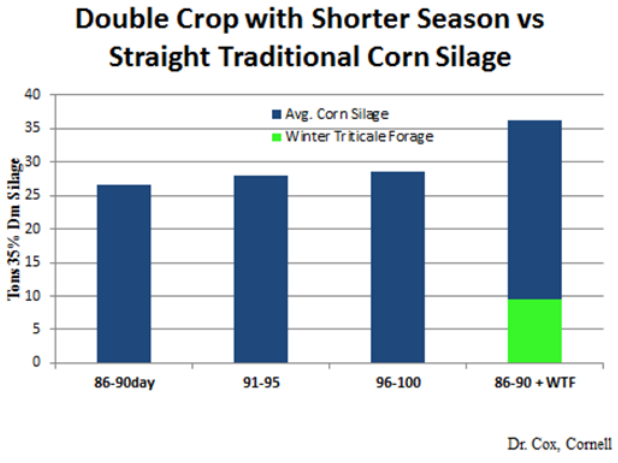
Advanced Ag Systems
Research, Education, Consulting

Maximizing Forage/Acre

And two things NOT to do!

As we move into the early winter, the seed catalogues and fliers are arriving. A change many farms are making is to shorten the season of the corn silage. With the large swings in the weather patterns that we have talked about before, a sure crop that reaches optimum maturity is more cautious approach to economically sure forage production. Variety trials over the past decade have shown the corn breeders efforts have produced higher yields from traditionally shorter varieties. Longer season varieties don't guarantee you higher yields.

Before you wax hysterical that we **HAVE** to grow the longest season corns to get the maximum yield consider two items. First, based on the Cornell test plots there is only a slight, but consistent yield increase from longer season corn. There is also an **increase in the risk** to that crop of not maturing or having to harvest in late season mud, compacting the soil for long term yield loss. The other benefit of shorter seasons type is they allow **double cropping with winter forage** which takes more advantage of the full growing season than do long season varieties. This can **directly increase your yield/acre 30 – 35% per year** while simultaneously conserving soil and nutrients and improving soil structure for long term yield gain like cover crops on steroids As you can see in the graph at the right, when we shorten the corn season on average you lose ¾ of a ton of SILAGE for every 5 days shorter. Difference between varieties of the same maturity can be greater than that. Shortening the season from 95-100 day down to an 85-day variety, would theoretically lose 3 tons of silage/ acre or 1 ton of dry matter. If we get the mature corn silage crop harvested before the 10th of September in the Albany NY area the winter triticale can be in the ground on time and yield 3+ tons of dry matter or gain over 8 tons of silage to replace that lost from the shorten corn silage season.



Dr. Cox, Cornell

The slight decrease in corn yield is more than offset by a threefold increase in total yield of **winter forage that IS FAR SUPERIOR IN SUPPORTING HIGH MILK**, compared to the corn silage you are giving up. Slightly shorter season corn varieties will allow you to maximize the winter forage potential.

Best laid plans of mice and men Part 2

The above sorghum-Sudan grew well were the ground was fallow. Where the previous crop was spring oats harvested for forage, the sorghum-Sudan did NOT grow or grew very poorly.

We had a great setup. If a hay stand is lost over winter, we simply no-till oats very early in the spring to take advantage of the nitrogen and the cool spring temperatures to capture as much of the season as possible. By mid-June when the oats are at flag leaf stage, we harvest it as silage and then immediately ***no-till*** bmr sorghum or sorghum-Sudan as a second forage crop to be harvested in early September. Thus, we get two crops where before we had none. So we tried it this year. The oats went in very early with sufficient nitrogen to fully grow the crop. After it was harvested, the entire area both the where the oats were and the control blocks with weeds between them, were treated with glyphosate. BMR sorghum-Sudan was then planted across both the oat blocks and the fallow control between them. The result: ***DISASTER.*** Apparently, there is a very negative effect of the oat residue on the sorghum species that followed. It was not moisture as we had rains and the control block had weeds that removed moisture like the oats. It was not nitrogen as all the blocks were fertilized. As you can see in the picture, the sorghum only grew where there had been no forage oats this spring. Until we sort this out more and double check our results the next growing season, I suggest you **do NOT follow oats with a sorghum species**.

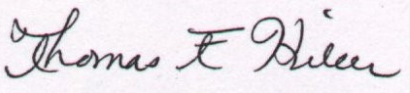
Best laid plans of mice and men Part 3

Summer peas planted with sorghum-Sudan for more protein produced so little forage biomass that it did not justify the seed cost.

We know from farmer experience that we can grow **excellent framed heifers at lower cost** without getting them fat by using a non bmr sorghum or sorghum-Sudan. We would like a little more protein in the mix. To achieve this end we planted sorghum-Sudan and cowpeas (a summer pea). The idea was that the peas would climb on the sorghum plants to get their share of sunshine. We planted both in the beginning of June. Unfortunately, either the peas grew too slow or the sorghum too fast. At the end of the season we did not have much biomass to justify the pea seed expense. Based on this we suggest you simply use a good non bmr sorghum or sorghum-Sudan fertilized with nitrogen and sulfur to support a higher protein forage.

I pass this information on to you so you know what **NOT** to do which is as important as knowing what to do. My job is to make the mistakes so you don't have to. My farmer friends converted that last sentence to "we knew you were a professional screwup!!!" Great to have friends!

Sincerely,



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