



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."

What can we grow now?

The dry weather has produced spotty crops. One area will have rain and decent crops while just a mile away the crop is struggling from the lack of water. What we have seen is that regardless of weather, farms that **rotate frequently**, and **build their soils structure and organic matter with** intensively managed **winter forage**, their crops are doing much better despite the conditions.

Some farms are facing a forage shortage and still looking at what they can plant on runout or failed ground this year. It is to late for corn. You could use sorghum-Sudan if you are south of the Mason Dixon line. In my tests we have gotten 2 to 3 tons of very decent forage planted late July with a warm fall. If we have a long fall you might get one cut of bmr Sudangrass. An overlooked crop is BMR pearl millet. Other researchers and I have found that pearl millets have very high feed quality. In our replicated study, the grazing corn was 12.9% crude protein, the sorghum-Sudan was 14.2%; and the **BMR pearl millet was 20% crude protein**. The energy was similar (very high) between the BMR grazing corn, BMR sorghum-Sudan, and BMR pearl millet. All three had very high plant sugars. **The pearl millet does not have prussic acid management issues**. It yields very well in late summer. Pearl millet has thinner stems that may be easier to round bale for wrapping. If you are looking at grazing be careful as it is so rich it can cause bloat.

As we get to the beginning of August, especially across the northern tier of states and southern Canada, the temperatures start to drop at night and slow the production of the above warm season crops. Cool season crops can thrive under these conditions. Stands of straight cool season grasses, if fed with nitrogen and sulfur, and adequate fall rains can give good yields in early October. The key is that it will not dry fast in the fall so wide swath same day haylage and the proper inoculant will make high quality forage.



Oats is a cool season crop that excels planted August and fall harvested.

For those planting early August, **fall planted oats for forage has the biggest potential** and is most practical. Planted at 3 bu/a of grain type oats (my replicated research showed no increase for higher seeding rate see table at right), you could harvest 2 to 4 tons of dry matter by the end of September if planted in early August (for Albany, NY area). As planting is delayed, yields fall dramatically. The normally cool night temperatures of September conserves the sugars and produces forage of high fiber digestibility. With sufficient nitrogen plus sulfur, or manure, it will easily reach 18% crude protein.

Lbs. Seed/A	Mean Tons 35% Dm
80	5.5 b
100	6.6 a
120	6.0 ab
140	6.3 ab
160	6.5 a

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Fall oats are not a fool proof crop. There are critical steps for success. Planting the end of July or the first of August especially in more southern areas, has the risk that aphids bring in **Barley Yellow Dwarf Virus** which can kill the plant. Cool nights with heavy dew seems to knock the aphids and reduce the potential for loss. Dr. Shields of Cornell reports, “Since Barley Yellow Dwarf virus is circulative, a neonic seed treatment will kill many aphids before they can transmit the virus.... most of your problems would be in the disease area like rust.” Dr. Bergstrom of Cornell reports that rust populations in New York have developed the ability to overcome certain oat resistance genes and they can now infect older, previously resistant, varieties. Scouts report coming out of fields of susceptible varieties covered in rust spores, looking like the orange highway cones. There are **resistant varieties** from Dr. Sorrells of Cornell called **Steuben** and **Hayden** on the market which for now solves the issue. The other alternative is scouting to apply a **properly timed fungicide to control rust**. Ignoring until you go to mow could be a disaster as would VNS (bin run clean oat grain) not seed treated. If you choose to ignore this advice and plant non treated seed, we suggest slightly delaying for the cool nights of August to reduce the aphid population (will not help rust). We once planted oats at the end of July and by the end of August it was all dead from disease.

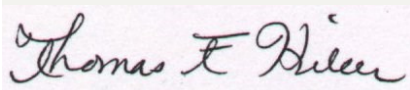
Grain oats for forage, will be ready in late September when you still have some heat to dry it for silage. If you are not going to be able to plant until later then the slower forage oat type would be the better recommendation. Be liberal with the manure before planting, and immediately incorporate it to capture the ammonia nitrogen. **NOTE!:** If you applied manure before planting, it is **NOT** recommended that you feed this to **dry cows** as **potassium levels** will run over **5%**.

Heavy yielding fall oats are wet. **Mow wide swath, and TEDD** after 2 hours of drying. You are trying to dry something that can yield more tons of dry matter/acre than a heavy first cutting alfalfa. Even with wide swath, because of the high yield, the shear mass will allow only the top to dry. As soon as the top has a light grey cast (pick up a surface plant and see if it is greener underneath) hit it with the tedder to get the lower layers spread for photosynthetic drying (use a slower forward speed or you will make non-drying tedder lumps). **It is critical that it be ensiled the same day you mow** because of the very high sugar levels. Leaving it overnight (unless it goes down into the low 40’s and 30’s) burns off the sugars and produces higher populations of Clostridia and higher levels of butyric acid. Same day haylage, because of the very high sugar levels, will speed the fermentation process and produce an excellent forage. The key is to use an inoculant designed for wet high sugar forages and to chop an inch long to control leachate. You need a sunny day before you mow to have substrate for the inoculant to work.

Fall spring oats, fresh forage, dry matter basis	
Crude Protein	17- 20% (if sufficient N & S)
IVTD 24	85 – 90%
Simple Sugars	>20%
Kd/hr	8 – 12 (not a misprint)

Fall Spring Oats plus Winter Triticale: Three bushel of oats planted with 80 pounds of triticale in the beginning of August will give an oat harvest the end of September. **If you set the mower to mow the oats at 4 inches**, the triticale will continue to grow into the fall after oat harvest. Fertilized the triticale as normal the next spring and you can have two very high-quality forage crops in one planting. It can be followed by corn or a no till legume seeding. Where this has failed is when we planted on time but had no rain which delayed the oat harvest to early November—to late for the triticale to recover.

Sincerely,



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Hand
to Better
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