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crop with winter forage. The winter forage adds eight to 10 tons of very highly digestible, high protein forage. From that same acre of land, sorghum can produce yields equal or exceeding corn silage. Because of allelopathic compounds from the winter forage, it is not suggested to no till sorghum into the winter grain stubble. The soil needs to be worked shallow, vertical tilled, or zone tilled (incorporating manure) or have several inches of rain to move the allelopathic compounds out of the seed zone.

Planting depth is best at ¾ to one inch deep. Cultipacker seeders plant it too shallow, so it is susceptible to drying, which can kill the emerging seedling. Narrow drilled rows and 15-inch row widths work best with sorghums, but planting in 30-inch rows to match your chopper is possible (do not use 30-inch rows for organic systems). Drilled BMR sorghum is suggested at 10 lbs of seed/acre. For 15-inch rows, eight lbs of seed is enough. For 30-inch rows five lbs of seed/acre is the suggested maximum. Higher seeding rates significantly increases the lodging. An attractive part of sorghum is that seed cost is about $120 less/acre than many of the corn varieties. Another benefit of sorghum is that it will tiller profusely and fill in thin areas until all sunlight is captured. A major problem with using even modern double disk drills is that the seed drop tubes are corrugated flexible rubber. As they flex on a pass over the field, the corrugations hold the seed, and then as it straightens, the seed is dumped in a pile, instead of being spread uniformly. We highly recommend that these be switched for sleeved tubes that deliver more uniform seed placement. This is critical for winter forage planting also.

Fertilizer is similar to corn silage. Slightly higher nitrogen (sulfur is critical if no manure has been applied) will give higher crude protein and thus increase the feed value of the forage produced. Caution: too much nitrogen even from manure, and especially when there is a shortage of sulfur, plus dry conditions followed by rain, can cause nitrate issues. We have grown sorghum very successfully on clay but it does not tolerate wet feet in a soggy summer. Topdressing nitrogen will help to pull the crop through, but it will not fix anaerobic conditions.

For the sorghums that emerge slower, especially the brachytic dwarfs, herbicide is critical. With a safener applied to the seed, atrazine plus metolachlor can be used. It is critical that the herbicide be applied immediately after you finish planting, not a week later. If annual grass gets started there are no post emergent herbicides available to control the weeds and you can lose the crop.

Sorghum-Sudan normally emerges much faster than most sorghums, especially the slower brachytic sorghum type. By utilizing a stale seed bed (prepare the field, wait a week for weeds to emerge, then harrow to kill them and immediately plant) and a higher seeding rate (60 to 75 lbs seed/acre instead of 40), we have completely controlled weeds with no herbicide. This has been a boon to organic farms (sorghum-Sudan is not GMO, but is traditional breeding) that spend considerable time cultivating corn during the critical period when they should be harvesting haylage. Rapidly emerging sorghum-Sudan in narrow rows controls weeds by shading, eliminating the cultivating and the soil erosion from corn, while providing high-energy forage.

Pests are few. Pea aphids feed on the plant but do no damage; the sorghum aphid is confined to the south. A very intense outbreak of armyworm will need to be controlled. On the plus side, sorghum species’ natural compounds kill corn rootworm larvae. The rootworm adults also do not lay eggs in the crop. Thus, for a year or unusually two after sorghum, you will not need to plant the more expensive rootworm resistant corn. Another benefit we found was that deer hide in the sorghum and come out to eat the neighbor’s corn. They leave the sorghum alone.

Sorghum is not a magic crop. You need to soil test before planting, use a recommended fertilizer program, control weeds, and harvest properly. With this basic management, sorghum is a crop for northeast farmers to consider. It is one more way to reduce risk in your forage production and to perhaps lower your digestible forage costs.

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