

# Agricultural Beet

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## 2020 is Hindsight... Taking a run at '21

Looking back at a year of near optimal planting conditions, it is reassuring to confirm that optimizing planter settings can in fact yield noticeable results. With the potential of another early planting season, we can continue to invest in some of the settings and adjustments that were successful last year. Not having to accept marginal seedbed conditions as we may have had to in years past in addition to staying with proven planting practices made for our excellent crop last year. The nearly ideal seedbed and planting conditions allowed us to take advantage of a closer to normal amount of forgiveness often required due to the rare, but occasional operator error and incorrect settings!

### **Planter Recommendations for 2021**

**Before the Field:** Each type of planter has various wear components that need to be checked and potentially replaced. Parts like tires, wheels, hubs, bearings, bushings, planter bar structural steel, hydraulic cylinders and lines, and other components that have a less direct impact on the row unit, still need to be checked over closely for wear. Whereas, worn row unit parts have a direct impact on depth and spacing. These parts include; opening disks, gauge wheels and their arm components, parallel linkage components, row cleaner wheels, drive chains or cables, springs, airbags, hydraulics, closing disks/wheels, and any bushings associated with them must all be checked for excessive wear. Electrical components such as seed tube sensors should also be tested.

JD opening disks that are worn below 14.75" from 15" and CIH disks below 13.5" from 14" should be replaced. Set preliminary depth in the shop using blocks of same thickness as desired planting depth. Meters need to be checked every year whether on our test stand, or run normally on the planter in the shop. During the annual SMBSC planter test stand on March 2<sup>nd</sup> and 3<sup>rd</sup>, the Ag staff evaluated the performance of 782 meters, which for the shareholders participating by their own account provides considerable peace of mind as they head to the field knowing each meter will run.



**But... what if I switch to this?** With a plethora of new aftermarket planter add-ons becoming available in recent years, the diversity in planter configurations has grown exponentially. For the second year in a row, I received several calls about alternative closing wheel systems. I believe that these gained popularity over the last few years due to marginal planting conditions. Factory closing systems, as well as aftermarkets including the newest active down force style of closing systems, all

have certain benefits that fit certain conditions better than others. Last year in great conditions throughout the cooperative as a whole, the aftermarket systems may have shown less of an advantage. My thoughts are that they did, and will provide added benefit in some of the more marginal conditions. Those considering a spiked wheel, note that the regular depth wheel can severely interfere with seed placement and only the shallow version should be used. Many of these closing systems work well, but when it comes to planting beet seed between 1" and 1.5" deep, remember that soil conditions are an even bigger factor in emergence and stand establishment.

**Plant Population:** There remains a trend of increasing populations in the recent past. Most SMBSC growers have settled in to populations of around 57,000 seeds/acre, with given ranges from 52,000 to 65,000. In general, I urge growers to use caution below 53,000, and above 60,000. Current SMBSC recommendations fall between 4.75"-5.0" spacing to produce stands of ~200-225/100 ft. With last year's frost event raising questions about higher populations, what we observed overall refutes that argument. We are already planting to stand and the current recommendations already account for the potential loss from frost or other factors that can affect emergence and stand. Fields with stands below 140 following the frost were still able to yield and sugar up. Keep in mind that the population is only part of the equation. Maintaining uniform spacing, depth, and emergence are crucial to a good crop. We don't want any extra social distancing between beet seedlings!



**Making the First Pass:** When you hit the field, the initial steps you take in checking and adjusting your planter have significant revenue consequences for the entire crop year, which can be both positive and negative. The best way to check depth and spacing is a method I observed from one of our shareholders. Using a small ratchet strap to tie up the rear closing system so the seed trench remains open, the performance of everything else on the row unit becomes very evident.

2020's excellent planting season was not a fluke, but rather a combination of the favorable tillage conditions stemming from the prior fall and the use of proven planting practices. Your level of patience and willingness to address important planter adjustments does make the difference between just planting for a 200+ stand of beets versus obtaining a uniformly spaced 200+ sugarbeet stand. The latter being far more likely to maximize sugar yield and profitability while also facilitating proper defoliation and scalping to assure quality beets for storage. The SMBSC Agricultural staff is highly knowledgeable and dedicated to a strong start for your 2021 sugarbeet crop. Please contact your agriculturalist or your equipment dealer with any questions. Have a safe and successful spring!

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