

AGRICULTURAL BEET

September 29, 2020

Southern Minnesota Beet Sugar Cooperative
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Setting Up a Successful "21"

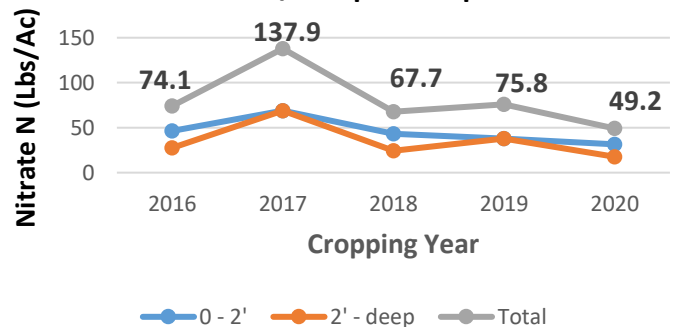
Remember your SMBSC Soil Fertility Analysis Program this fall to prepare for your 2021 crop!!

As you begin that harvest of your 2020 crop from fields that you plan to raise your 2021 sugar beet crop, please remember to take advantage of your cooperative's soil sampling program. The program was created to provide an easy way for your soil sampler to submit samples and obtain the type of information that is most valuable to you for successful sugar beet production. Last week SMBSC sent out documents outlining our 2021 soil sample program specifics to all soil sampling personnel. Shareholders can find this information by going to the portal under "[Communications](#)" and selecting the "[Shareholder Messages](#)" selection.

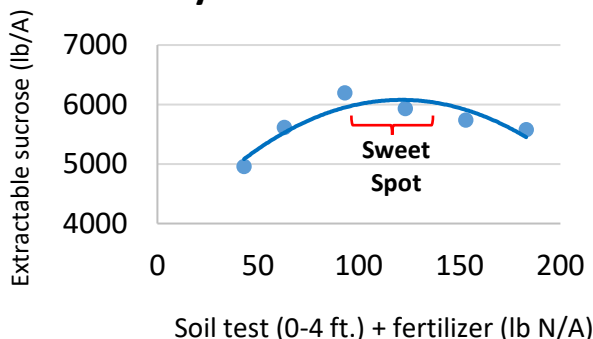
Incentivized participation: The importance of participation in your cooperative's soil sampling and analysis program cannot be overstated. This is the sole reason that your cooperative will pay for the basic analytics package and has also implemented a soil sample submission incentive. SMBSC compensates \$2 per acre to shareholders for all sugar beet fields that follow the sampling requirements of the program!

Program value: Last spring when the information from the 2019 fall soil samples were compiled, a trend was identified. The 2020 crop possessed some of the lowest soil nitrate levels of recent years (graph at right). Albeit notable, the trend was not totally unexpected considering the wet weather cycle of the past few years and the influence of saturated soils on nitrate leaching and denitrification processes.

5 Year Shallow / Deep N Sample Trends



ESA by total available N



Armed with this information, an AgBeet was released to facilitate last minute pre-plant fertility adjustments that recognize the research-driven extractable sucrose per acre (ESA) response curve (graph to left). ESA can be impeded by both too much and too little soil nitrate N. This suggests an opportunity for "Sweet Spot" management to avoid the downward slopes on either side of the graph.

Bottom Line: Please utilize the SMBSC Soil Fertility Analysis Program in order to obtain a snapshot of your field by field fertility levels as well as provide your cooperative with an opportunity to identify important trends that you can use to make critical soil fertility adjustments to your crop.