Dry Conditions Will Impact Sugarbeet Harvest Quality

Harvesting sugar beets under dry conditions can increase harvest loss and increase sugar content.

Prolonged dry conditions in some areas of the Michigan sugar beet growing region have affected sugar beets. Michigan Sugar Companydelayed early dig till September 17, 2013, which is later than previously planned. Moisture in many areas has been below normal and has slowed yield gains. Some areas have had less than two inches of rainfall from August 1st to September 18th, 2013. Dry conditions at harvest are beneficial in reducing soil compaction but detrimental when lifting beets because of increased harvest loss.

Be sure to check rows where beets have been lifted for small beets or broken tails. Under dry conditions, digger wheels have difficulty in penetrating soil deep enough to adequately lift smaller beets from the soil. Larger beet roots often will be snapped off rather than lifted with a long tail. Slow down and ‘if possible’ increase down pressure to allow digger wheels to penetrate deeper. Very dry conditions will increase wear on digger wheels and may also allow smaller beets to fall through the sides or between grab rolls. Narrowing of the grab rolls on the pinching side and/or modification of digger wheels may be helpful.

On average a sugar beet contains about 75 percent water. This can range from 70 to 80 percent depending on moisture conditions and variety. An average yielding beet crop that is dehydrated can gain a couple tons rather quickly when rehydrated after rainfall. On a positive side for early dig, the lower water content in dehydrated beets will result in relatively high sucrose content. However, dehydrated beets are not desired for long term storage of permanent piles. Sampling conducted by Michigan State University Extension Sugarbeet Advancement program has shown sugar contents to drop dramatically in a day or two after a rain. Sucrose content will then begin to increase a few days later.

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