**Southwest New York Field Crop Chronicle**

Compiled by Josh Putman - Field Crops Specialist, SWNY Dairy, Livestock, Field Crops Program

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**Corn Silage Kernel Processing**

*Prepared by Cornell CALS PRO-DAIRY*

Kernel processing at harvest is routinely used on many New York dairy farms. This breaks up corn kernels to improve digestibility and use in cattle. The seed coat must be broken for cattle to fully utilize the nutritional value of corn silage. An article recently published by Cornell CALS PRO-DAIRY, describes the Corn Silage Processing Score (CSPS), implementation of kernel processing, and how to monitor processor performance. These factors can help improve the digestibility of your cows and can result in increased milk production. The full article can be found at: [https://ecommons.cornell.edu/bitstream/handle/1813/70497/1_Corn%20silage%20kernel%20processing_8.17.2020.pdf?](https://ecommons.cornell.edu/bitstream/handle/1813/70497/1_Corn%20silage%20kernel%20processing_8.17.2020.pdf?)

<table>
<thead>
<tr>
<th>Corn Silage CSPS (%)</th>
<th>Rating</th>
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<tbody>
<tr>
<td>&lt; 50</td>
<td>Inadequate</td>
</tr>
<tr>
<td>50 to 69</td>
<td>Adequate</td>
</tr>
<tr>
<td>&gt; 70</td>
<td>Optimal</td>
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**Effect of Corn Plant Characteristics on Corn Silage Processing Scores**

When evaluating corn silage, the focus is often on total yield. However, when thinking about the harvesting process, and specifically the task of a kernel processor to break apart corn kernels, it is important to consider plant characteristics that may influence how the processor performs and the resulting Corn Silage Processing Score. Plant characteristics measured include:

- ear to stover ratio
- whole plant dry matter (DM)
- ear DM

By considering plant characteristics, you can improve the CSPS of the silage, increase starch utilization and increase milk production by the cow. For more information, visit [https://prodairy.cals.cornell.edu/sites/prodairy.cals.cornell.edu/files/shared/documents/2_Corn%20Silage%20Kernel%20Processing%20and%20Plant%20Corn%20showing%20number%20of%20rows%20per%20ear%20Corn%20stover%20can%20be%20analyzed%20for%20digestibility](https://prodairy.cals.cornell.edu/sites/prodairy.cals.cornell.edu/files/shared/documents/2_Corn%20Silage%20Kernel%20Processing%20and%20Plant%20Corn%20showing%20number%20of%20rows%20per%20ear%20Corn%20stover%20can%20be%20analyzed%20for%20digestibility)
PODCASTS - Corn Silage Harvest Considerations
Presented by Cornell CALS PRO-DAIRY and Cornell Cooperative Extension

Episode 1 - Corn Silage 2020 Season Recap
Ron Kuck, Dairy Educator, CCE Cayuga County and Joe Lawrence, Forage Management Specialist, Cornell CALS PRO-DAIRY kick off this podcast series by discussing the 2020 growing season. They discuss the impact weather has had on the growing season and what to consider when assessing fields, staging harvest, whole plant DM in decision making, storage planning and what to do if you’re short of space.
https://soundcloud.com/user-301921459-118136586/e-1corn-silage-harvest-considerations-2020-season-recap-for-corn-silage/s-rgQiTzZp8Nx

Episode 2 - Timing and Processing
Casey Havekes, CCE Regional Dairy Specialist, CCE NNY Team, interviews Margaret Quaassdorff, Regional Dairy Specialist, CCE NWNY Team and Joe Lawrence, Forage Management Specialist, Cornell CALS PRO-DAIRY. Margaret and Joe discuss the importance of timing and whole plant dry mater, theoretical length of cut, and kernel processing.
https://soundcloud.com/user-301921459-118136586/e2-corn-silage-harvest-considerations-timing-and-processing

Episode 3 - Monitoring and Preserving Quality
Betsy Hicks, Regional Dairy Specialist, CCE SCNY Dairy Team and John Winchell, Territory Sales Representative, Alltech discuss why and how to take corn silage samples at harvest and feed out, mycotoxin considerations, best practices for inoculant use and maximizing the fermentation process.
https://soundcloud.com/user-301921459-118136586/e3-corn-silage-harvest-considerations-monitoring-and-preserving-quality

Episode 4 - Filling and Packing
Devon Shelmidine from Sheland Farms in Jefferson County, NY, Ron Kuck, Dairy Educator, CCE Cayuga County and Joe Lawrence, Forage Management Specialist, Cornell CALS PRO-DAIRY discuss the nitty gritty of getting corn silage into the bunk, packed and covered to maximize forage quality.
https://soundcloud.com/user-301921459-118136586/e4-corn-silage-harvest-considerations-filling-and-packing

Register now for these events!
- CORE pesticide training on September 22nd from 9am - 10:50am or September 24th from 6pm - 7:50pm
  and
- Pasture Management Series on Thursday evenings from 7-8pm from September 3rd - September 17th
https://swnydlfc.cce.cornell.edu/events.php