

## Ag Health Labs Adds Corn Silage Processing Score (CSPS)

Have you wondered if you are harvesting your corn silage properly to get the most milk possible from the feed? Ag Health Labs has added a Ro-Tap machine to evaluate if the corn kernels (which contain the starch) in your corn silage are processed enough to maximize the amount of starch available for digestion by the cow. This test is referred to as 'Corn Silage Processing Score' or 'CSPS'.

### The Process of CSPS

The Ro-Tap machine vigorously shakes sieves with openings that decrease in size from the top to the bottom. Approximately 100 grams of dried corn silage is placed on the top sieve. The Ro-Tap will aggressively shake the sample for 10 minutes while oscillating at 278 times per minute, and tap the top of the sieves 150 times per minute. After the shaking is complete, there will be particles of corn silage remaining on each sieve based on the size of the particles. The goal is to get a high percentage of the starch particles in the corn silage processed fine enough that they are passing through the 4.75 mm sieve.



Ro-Tap Machine containing 7 sieves and a bottom pan.

The Corn Silage Processing Score (developed by Dr. David Mertens) refers to the percentage of starch that passes through the 4.75 mm sieve. If the CSPS is less than 50% the **corn silage** is underprocessed, between 50 and 70% is marginally processed, and greater than 70% is optimally processed.

The degree of processing you want to achieve is your personal decision. However, the information you gain from the CSPS will help you make informed decisions about whether you want to make adjustments to your corn harvester or if you are satisfied with how it is processing the corn kernels in the corn silage.

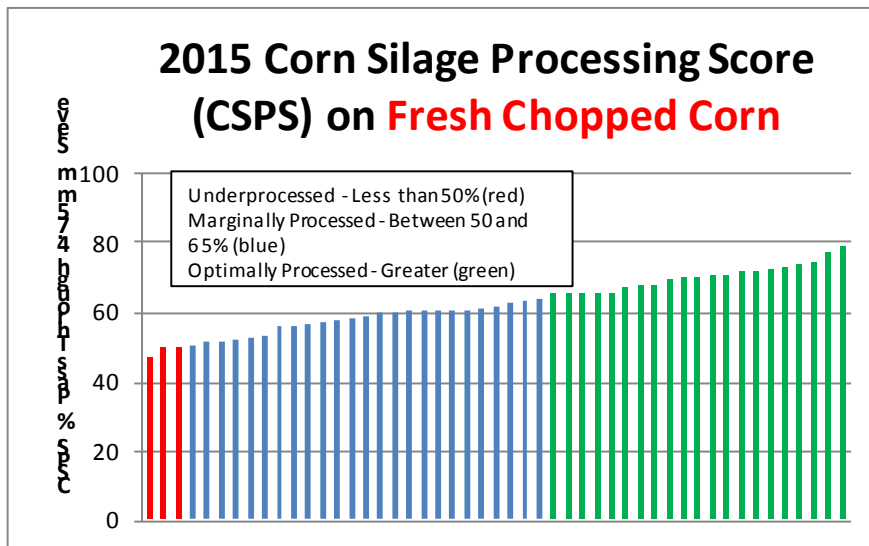


### Introducing Dr. Gus Carreon

We are excited to introduce the newest member of our cattle health network! Dr. Gus Carreon is a 2013 graduate of WSU's college of Veterinary Medicine. He will be working under Cattle Strategies, PLLC, a cattle health and management company led by Dr. Fred Muller. Dr. Carreon is bilingual and is fluent in both written and spoken Spanish.

Observation: CSPS values on **Fresh Chop Corn** tend to be lower than on **Corn Silage** that has been fermenting over time. Therefore, the CSPS values you get this fall on your fresh chop corn may increase over time next year as the corn silage ferments in the pit.

Corn Silage harvest is in full swing this fall, and we have collected some data from the fresh chop corn silage samples that we have received at the lab (please see graph). Approximately 43% are optimally processed, 51% are marginally processed, and 6% are underprocessed.



If you are interested in having some of your fresh chop corn analyzed bring us a gallon zip lock bag  $\frac{3}{4}$  to full of fresh chop corn. If the samples arrive before 2 pm, you will receive CSPS results the next business day. Good luck harvesting!



4.75mm sieve

## Reminders

- The CSPS of fresh chopped corn silage will run 5-7% lower than fully ensiled corn silage
- Now accepting manure samples for Manure Nutrient Analysis.
- Currently reporting Digestible Organic Matter Index (DOMI) for wet chemistry and NIR analysis packages for ranking hay crop forages
- We now are offering Hop Analysis for dry matter, acids, and oils
- Like and follow us on Facebook and YouTube



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