

Delaware County Corn Silage Dry Down Results

September 18, 2019



**Precision Feed
Management**

Watershed Agricultural Council
Cornell Cooperative Extension Delaware County

Town	Ear Maturity	Disease Rating	Planting Date	Hybrid Maturity (days)	DM%
Davenport	1/3 milk line	4- severe	18-May	108	28
Davenport	milk	1 - Slight	9-June	91	25
Franklin	1/4 milk line	3 - Moderate	18-May	100	26
Franklin	3/4 milk line	3 - Moderate	14-May	100	29
Franklin	early dent	3 - Moderate	13-May	94	25
Franklin	milk	3 - Moderate	1-June	91	26
Franklin	early dent	2 - Some	27-May	87	30
Franklin	½ milk line	2 - Some	20-May	85	33
Meredith	early dent	3 - Moderate		90	33
Meredith	1/2 milk line	3 - Moderate		90	33
Sidney	1/2 milk line	3 - Moderate	12-May	109	28
Tompkins	2/3 milk line	3 - Moderate	13-May	96	32
Tompkins	1/2 milk line	3 - Moderate	13-May`	96	29
Tompkins	1/4 milk line	1 - Slight	22-May		32
Tompkins	1/2 milk line	2 - Some	22-May		34
Tompkins	3/4 milk line	2 - Some	22-May		32
Walton	1/2 milk line	3 - Moderate	15-May	110	25
Walton	1/2 milk line	3 - Moderate	15-May	90	24
Windham	1/2 milk line	3 - Moderate	15-May	99	29

Leaf Disease Rating

- 0 - **None:** No symptoms
- 1 - **Slight:** 1 or 2 lesions on 1 or 2 plants
- 2 - **Some:** most plants with 1 or 2 lesions
- 3 - **Moderate:** Multiple leaves on each plant with lesions
- 4 - **Severe:** Significant leaf area

* Evidence indicates harvest DMs will be 2 points wetter than Koster tester results.

The samples of corn tested on September 18th averaged 29% with a range of 24% DM to 34% DM. Whole field DM will be 2 points wetter than the small sample. While a few fields are getting close to or are at target DM for harvest, many are 10 – 21 days out from predicted target harvest moisture, assuming an average dry down rate of 0.5% point per day. This could change with extended dry weather, frosted corn and/or advanced leaf disease damage. We found that most samples had extensive symptoms of early leaf disease, which may progress rapidly in next few weeks with predicted above average temperatures and dry weather (and frosts?).

Harvesting too early (<32% DM) will result in reduced yield, reduced silage starch content, challenged fermentation and increased risk for silo juicing (which is a potent pollutant as well as tough on silos).

Continuing to monitor whole plant DM will be critical. Getting DM into the target zone yields best fermentation. Use of reputable inoculants helps on corn silage, especially when it is getting too dry.

Inoculants containing *Lactobacillus Buchneri* have been shown to be more effective with corn silage. Increasing chop length with wetter silage will reduce silo juicing.

Our next dry down day will be October 1, at DelRose Farm, the Hanselmans. We can do dry matters at any time at our office, just call the NM or PFM teams at 607-865-7090.

Cornell Cooperative Extension
Delaware County

Watershed Agricultural Council
Agricultural Program
nycwatershed.org



Corn Silage Dry Down Rates - When will my Corn Be Ready?

Target Range Low **32** % DM
High **36** % DM
0.5 % per day



Average Rate of Dry Down

Koster Tester % DM →

Estimated Whole Field % DM (Koster DM - 2 *)

** Koster Adjustment: Based on some work at Miner Inst. suggesting that the Koster does not drive out all of the moisture in the sample when compared to oven drying.*

Rate of Dry Down
Studies show to be
0.4 - 0.7% per day
Influenced by: Air Temperature
Humidity
Rain

Target Range	
(based on storage type)	
Storage Type	Dry Matter %
Bunk silos and piles	32-36
Bags	32-36
Concrete Uprights	35-38
Sealed Uprights	40-50

How to Use This Table:

- Green shaded cells of the table indicate acceptable target DM% for storage.
- Dates in the right hand column of the table indicate when for each row, the crop will reach DM% in that row.
- Read down the column that corresponds to the % DM for your corn sample as tested by the Koster tester (Number in Red). Go down the column until you reach a green shaded cell (target DM%), then read across to the right most column for that row to obtain the date that your field will reach the % DM indicated in the green shaded cell.

Example: A sample that tested 29% DM on Sept. 18 would be predicted to reach 34% DM on Oct. 2nd.

If your Corn is						Date
25	27	eg. 29	31	33	36	18-Sep
23	25	27	29	31	34	
23.5	25.5	27.5	29.5	31.5	34.5	19-Sep
24	26	28	30	32	35	20-Sep
24.5	26.5	28.5	30.5	32.5	35.5	21-Sep
25	27	29	31	33	36	22-Sep
25.5	27.5	29.5	31.5	33.5	36.5	23-Sep
26	28	30	32	34	37	24-Sep
26.5	28.5	30.5	32.5	34.5	37.5	25-Sep
27	29	31	33	35	38	26-Sep
27.5	29.5	31.5	33.5	35.5	38.5	27-Sep
28	30	32	34	36	39	28-Sep
28.5	30.5	32.5	34.5	36.5	39.5	29-Sep
29	31	33	35	37	40	30-Sep
29.5	31.5	33.5	35.5	37.5	40.5	1-Oct
30	32	34	36	38	41	2-Oct
30.5	32.5	34.5	36.5	38.5	41.5	3-Oct
31	33	35	37	39	42	4-Oct
31.5	33.5	35.5	37.5	39.5	42.5	5-Oct
32	34	36	38	40	43	6-Oct
32.5	34.5	36.5	38.5	40.5	43.5	7-Oct
33	35	37	39	41	44	8-Oct
33.5	35.5	37.5	39.5	41.5	44.5	9-Oct
34	36	38	40	42	45	10-Oct
34.5	36.5	38.5	40.5	42.5	45.5	11-Oct
35	37	39	41	43	46	12-Oct
35.5	37.5	39.5	41.5	43.5	46.5	13-Oct
36	38	40	42	44	47	14-Oct
36.5	38.5	40.5	42.5	44.5	47.5	15-Oct
37	39	41	43	45	48	16-Oct
37.5	39.5	41.5	43.5	45.5	48.5	17-Oct
38	40	42	44	46	49	18-Oct

Estimates assumes corn is not effected by frost.