

Cornell Cooperative Extension

Central New York Dairy, Livestock and Field Crops

Field Crop Update – 15 September 2022

1. Announcements
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1. Announcements:

With soybean harvest approaching, please be on the lookout for any parts of the field that look like the picture below. This field turned out to be infested with **soybean cyst nematode (SCN)**, a microscopic soil-borne roundworm that can rob as much as 30% of your yield before plants show any symptoms. In this field, plants dried-down and defoliated prematurely, showing me exactly where to sample. This year we have **funding from the NY Corn and Soybean Growers Association to sample up to 75 soybean fields in NY** for this pest. Some growers have already heard from me regarding sampling their fields this year, but if you haven't and you would like me to sample one or more of your fields, ***please contact me.***



2. Field Observations

Lots of silage harvest activity happening today and through this weekend. With clear skies over the next 3-4 days, I'm sure many of us will take advantage. **So be safe!**

During our recent rainy weather, Cornell's silage trails showed some very interesting data. While a rain event lowered DM% for around a day, **dry-down was right back on-schedule very soon after:**

Date	85 day DM	93 day DM
9/4	29%	27%
9/5		rain
9/6	27%	25%
-		
-		
-		
9/10	32%	30%

The stalks will take up the moisture from a rain event, but that effect is very short-lived. The ears are not taking up moisture in the same way and are continuing to dry down.

Check your silage crops' whole plant dry matter to make sure you're ready to harvest – your crop may be ready before you know it. See our recent emails regarding Corn Plant Dry Down and Kernel Processing. Here's a reminder from Joe Lawrence (PRO-DAIRY):

“The status of the corn crop is highly dependent on where you are in the state this year but in areas with drought stress (but not complete plant death from drought) it will be really important to watch kernel maturity in combination with whole plant dry matter. In these fields the plants look pretty ugly but the kernels continue to attempt to mature. You will see in the attached that the year and health of the plants makes a difference in how much ear DM contributes to whole plant DM vs. stover DM. For this droughty scenario this could look more like the data from 2019 where the plants are not healthy and therefore contribute slightly more to whole plant DM but ear DM is still driving the dry down process and patience is needed to allow this to happen: <https://ecommons.cornell.edu/handle/1813/104222>.”

To assess the effectiveness of this year's nutrient plan, see this [factsheet](#) and this [factsheet](#) on the Corn Stalk Nitrate Test.

3. Growing Degree Days as of 13 Sept: See: [Climate Smart Farming Growing Degree Day Calculator](#)
 Growing degree days (GDD) are calculated by taking the average daily temperature and subtracting the base temperature for development of a given organism ((High + Low)/2 – base temp = GDD). For corn silage, we are using base 50/86, as corn development starts at 50 degrees F and ceases above 86. **Check your location, planting date, and silking date.** Silage corn needs 750-800 GDD (depending on hybrid maturity) after silking to reach a whole plant DM of 32%. Under typical late season dry down conditions we can expect the crop to reach 35% DM four to seven days later (Remember that we can expect to accumulate **20-25 GDD per day**, or even up to 30, so this is not a large window). For more details, see [this article](#). **No matter what the numbers say, always check your crop to see how close you may be to harvest.**

Hybrid relative maturity	GDD from silking to reach ~32% DM
101-110	800
96-100	750
<96	750 or slightly less (extrapolated)

Time to make plans (35% DM anywhere between 5 – 11 days from now, depending on maturity)

Gas up the harvester and the trucks (35% DM in 2 – 8 days, depending on maturity)

See you in the field (35% now or in a few days):

It's either already in the bunk or it's going in the bin or for high-moisture corn (DM likely > 35-40%)

As of: 13 Sept 2022 (Base: 86/50)			Planting Date				Silking Date				
Location	Elevation (ft)	Latitude N	May 10	May 15	May 20	May 25	July 17	July 20	July 23	July 26	July 29
Poland	675	43.23	2052	1970	1929	1858	1089	1025	949	889	834
Canastota	420	43.08	2382	2286	2238	2162	past	past	past	1035	974
Saratoga Springs	365	43.08	2295	2201	2149	2075	past	1109	1034	936	910
Frankfort	530	43.03	2287	2198	2150	2071	past	past	1054	987	929
Galway	749	43.02	2194	2106	2057	1988	past	1075	1002	935	885
St Johnsville	650	43	2107	2025	1982	1907	past	1031	956	892	839
Fenner	1480	42.97	2119	2034	1994	1929	past	past	997	932	879
Fultonville	489	42.95	2228	2141	2093	2018	past	past	1012	945	891
Bouckville	1170	42.93	2087	2005	1965	1897	past	1048	973	909	857
Richfield Springs	1580	42.85	2005	1929	1888	1816	1061	995	924	861	810
Cherry Valley	758	42.81	1991	1918	1877	1805	1057	992	920	856	805
Burlington	1959	42.72	1925	1850	1812	1747	1039	975	906	846	797
Sherburne	1115	42.69	2154	2072	2027	1956	past	1071	999	932	878
Cobleskill	937	42.68	2162	2083	2036	1963	past	past	1005	939	884
Oneonta	1107	42.47	1878	1805	1767	1702	1022	960	894	833	787
Oxford	1499	42.4	2017	1936	1893	1827	1083	1018	947	882	830
Bainbridge	1000	42.3	2066	1984	1938	1869	1109	1042	971	907	855