Cornell Cooperative Extension

Central New York Dairy, Livestock and Field Crops

Field Crop Update Aug 13, 2021

- 1. Field Observations
- 2. Growing Degree Days and Weather Outlook
- 3. Pest Monitoring

1. Field Observations

After a wet year, we're finally beginning to see some fungal diseases in corn and soybean crops.

Northern corn leaf blight (NCLB) and frogeye leaf spot of soy (FLS) can be damaging foliar diseases if symptoms manifest early enough in the season, prior to the R stages (thankfully not the case this year). But silage corn can surely suffer yield loss from damage to the foliage.

Currently, the best management strategies for both crops are to plant resistant cultivars and to rotate to non-host crops (soy is not a host of NCLB, and corn is not a host of FLS), though the use of fungicides can help.

Click the following links for management info and fungicide options for Northern Corn Leaf Blight and various soybean diseases: Efficacy of soybean disease control based on appropriate application timing.

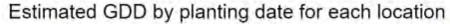
Click to see the latest <u>Oneida County Scouting Report</u>, <u>Northwest NY Crop Alert</u>, <u>Capital Area Ag Report</u>, and <u>New York State IPM Weekly Field Crops Pest Report</u> (cornell.edu)

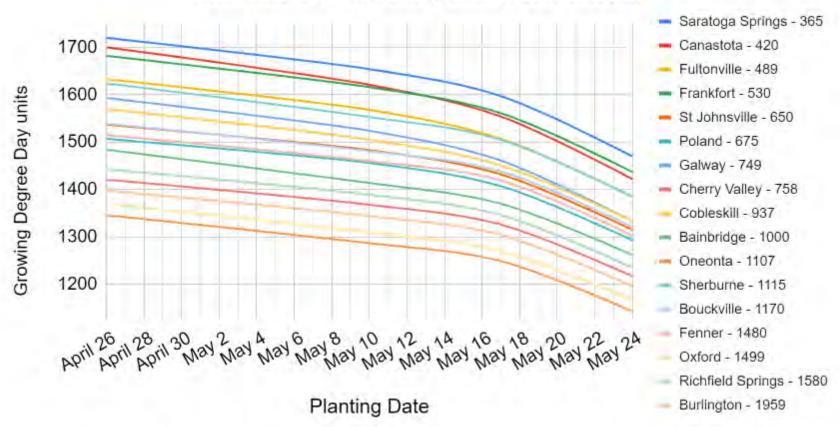




2. Growing Degree Days (GDD) for planting date and silking date as of July 28th (Climate Smart Farming Growing Degree Day Calculator) GDD are calculated by taking the average daily temperature and subtracting the base temperature for development of a given organism ((High + Low)/2 – base temp = GDD). For corn silage, we are using base 50/86, as corn development starts at 50F and ceases above 86F. Your actual silk date will likely fall sometime within this range of dates no matter where you are and what variety you're expecting to chop. Corn needs 750-800 GDD 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:

As of: 11 Aug 2021 (Base: 86/50)			Planting Date				Silking Date (750-800 GDD to 32% DM):			
Location	Elevation (ft)	Latitude N	April 26	May 10	May 17	May 24	July 14	July 18	July 22	July 26
Poland	675	43.23	1507	1456	1407	1293	499	420	350	286
Canastota	420	43.08	1720	1654	1597	1470	547	464	387	315
S'toga Springs	365	43.08	1700	1621	1554	1422	566	474	398	326
Frankfort	530	43.03	1682	1616	1561	1437	550	462	386	315
Galway	749	43.02	1593	1524	1461	1333	517	429	381	282
St Johnsville	650	43	1537	1483	1432	1315	506	423	354	290
Fenner	1480	42.97	1515	1460	1419	1303	489	414	346	282
Fultonville	489	42.95	1633	1568	1507	1385	541	453	378	308
Bouckville	1170	42.93	1539	1481	1438	1321	499	419	353	287
R'field Springs	1580	42.85	1443	1389	1346	1235	473	394	330	270
Cherry Valley	758	42.81	1421	1368	1326	1217	465	387	325	267
Burlington	1959	42.72	1398	1344	1304	1196	457	380	320	264
Sherburne	1115	42.69	1624	1553	1505	1384	531	443	373	304
Cobleskill	937	42.68	1570	1505	1451	1333	516	428	358	295
Oneonta	1107	42.47	1346	1287	1249	1143	440	362	302	251
Oxford	1499	42.4	1370	1310	1270	1167	448	367	309	256
Bainbridge	1000	42.3	1484	1414	1370	1262	482	394	302	273





Not everyone planted their corn on one of the planting dates or in one of the locations I have listed, so this chart shows the estimated GDD for each location on each potential planting date in between (based on the actual GDD on those four dates). The locations are ordered top-to-bottom from lowest elevation to highest (the number after the location name is the elevation in feet above sea level). So if your farm is near one of the locations on this list but there's a location here that more closely matches your elevation, try that instead. You can find GDDs for your own specific location and planting date using the Calculator, but for those who might have more difficulty using that tool, maybe this chart can help.

3. Pest Monitoring

Once again this week, potato leafhopper counts have been quite low. Many fields are fresh off their most recent cuttings, but even fields with 8-16" of regrowth are looking clean so far; well-below threshold.

Check out Potato Leafhopper Scouting and IPM Thresholds in Alfalfa

As expected, western bean cutworm (WBC) is on the decline (see table). Though I still have yet to see an egg mass in corn, I suspect the more water-stressed corn may have been a target for them due to delayed tasseling.

Western Bean Cutworm											
Week	Munnsville, Madison	Poland, Herkimer	Canajoharie, Montgomery	C. Bridge, Schoharie	W. Charlton, Saratoga	Cherry Valley, Otsego	Oxford, Chenango	Total			
June 21	Traps placed										
June 21 - 28	0	0	1	0	0	0	0	1			
June 28 – July 7	0	0	0	0	0	0	0	0			
July 7 - 13	0	2	0	0	1	0	0	3			
July 13 - 20	0	7	0	0	14	0	0	21			
July 20 - 27	1	66	24	3	90	0	12	196			
July 27 – Aug 3	0	38	100	29	107	0	1	275			
Aug 3 – 10	0	4	18	4	38	0	9	73			
Total:	1	117	143	36	250	0	22	569			