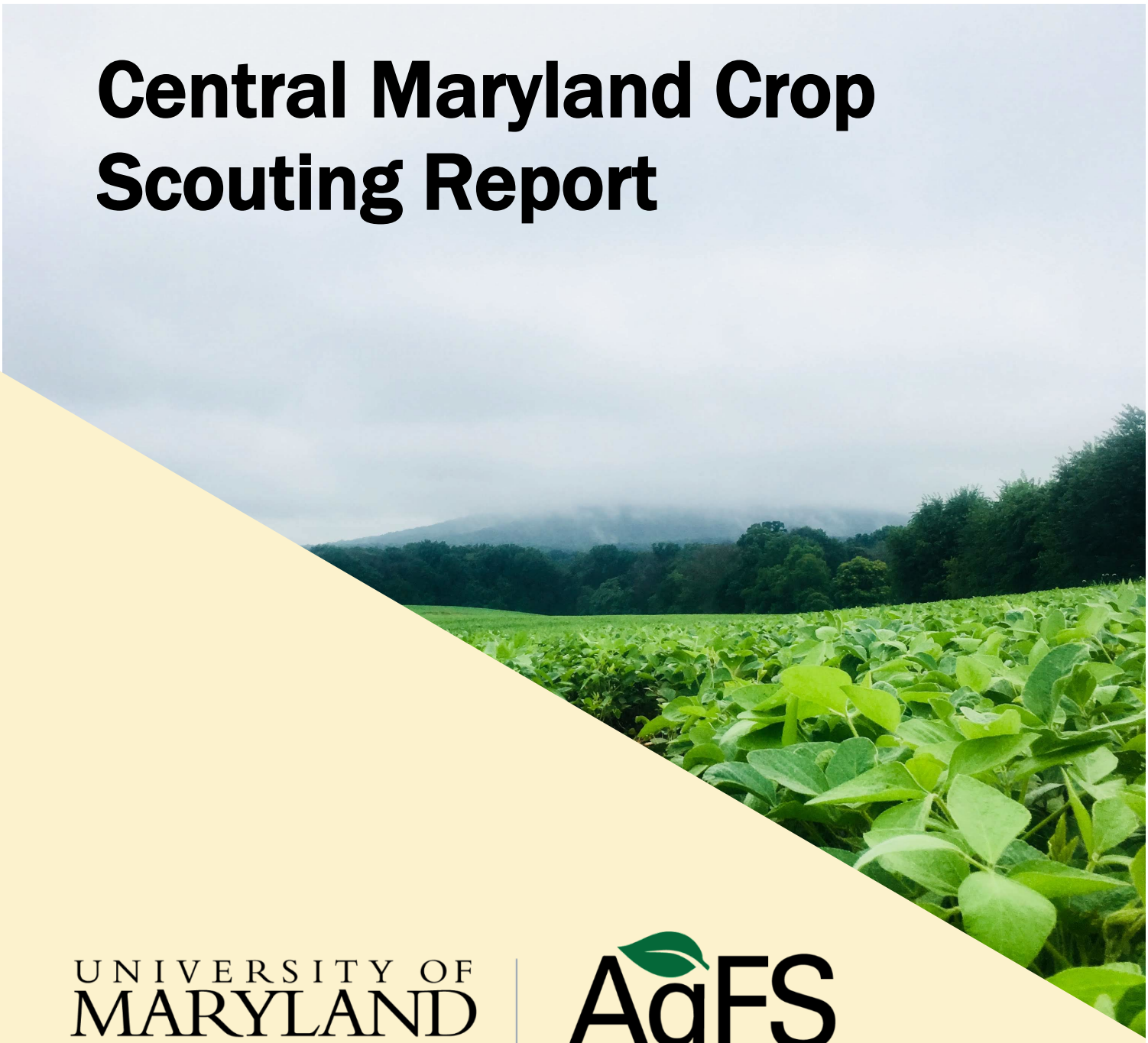
Central Maryland Crop Scouting Report



UNIVERSITY OF MARYLAND EXTENSION | AgFS Agriculture & Food Systems

2023 Third Edition
Week Ending 5/14/2023

Introduction

Happy Monday! Welcome to the third installment of the Central Maryland Crop Scouting Report from the University of Maryland Extension. Agriculture Agents in Frederick, Howard, and Montgomery Counties are offering free agronomic crop scouting for growers in Central Maryland. These reports will be available to the grower, providing a field-scale report of the observations and recommendations to address any potential concerns observed. These reports are compiled and summarized to provide a general overview of observed trends for all readers of the report.

As mentioned in the first report, there are many details still to work out in the reporting and delivery of these reports. In this, the Central Maryland Team has decided to release these reports on Monday in an effort to supply additional forward-looking thought processes and ensure additional time to compile crop conditions.

Growers and agronomists; feel free to provide any observations or trends you have come across while scouting–we appreciate your involvement and participation.

Finally, if you would like to have an Agriculture Agent with UME come to scout your fields, please visit https://go.umd.edu/CMD-IPM-Scouting to complete the Google Form, or contact any one of the Ag Agents:

UME - Frederick: Mark Townsend, Agent Associate. mtownsen@umd.edu, (301) 600-3578

UME - Howard: Nathan Glenn, Agent Associate. nglenn@umd.edu, (301) 375-0260

UME - Montgomery: Kelly Nichols, Agent: kellyn@umd.edu, (301) 590-2807

Frederick County

Wheat:
Fields scouted this week ranged in planting date from early to late. Much of the early wheat crop in Frederick is beginning to flower, while some of the later planted fields are showing seed head emergence.

All scouted fields had a significant proportion of cereal leaf beetle, with a handful at or near IPM Economic Threshold Level of 1 CLB larvae/flag leaf. However, a few of these fields at the threshold level were at flowering and growers were advised to consider control options.

Though an earlier insecticide application (assuming IPM threshold population) may have been more effective at controlling the CLB population and subsequent damage, research cited in this University of Delaware Fact Sheet on Cereal Leaf Beetles notes that significant damage may still occur between flowering and soft-dough stage.

There are many products labeled for CLB control in small grain crops, always read and follow label instructions.

Another scouted field in the Middletown area showed signs of Barley Yellow Dwarf Virus (BYDV) infection. The virus is transmitted through the saliva of certain aphid species and can result in significant yield loss. Though few aphids were directly observed in the BYDV affected fields, a significant population of green bug aphids (one of the BYDV associated species) were observed in adjacent fields. Higher than normal aphid populations and therefore the presence of this disease is known to increase with warmer winters.

There is no direct treatment for BYDV, rather one may only treat for aphid populations. However, these treatments are advised for aphid infested fields of small grain at early crop developmental stages, not at heading. Thankfully, spring infections of BYDV are observed to affect yield less-so than fall infections.

Alfalfa:
Much of the alfalfa acreage in Frederick was chopped this week. In this, no scouting trips were performed for cooperating growers. However, we may be well advised to begin scouting again for potato leaf-hopper as an UME Vegetable IPM scouting alert indicates that some regions are experiencing pressure already.

Orchardgrass Hay:
One scouting trip included a few fields of orchardgrass for hay; the fields were in their third year of establishment. Fields showed signs of stagonospora or Septoria leaf blotch (right image) throughout the field.

The exact disease must be determined via microscopy, though the discoloration of the hay crop remains the same. The infection develops in cool, damp conditions and can become worse with mild temperatures and timely rains. The infection can result in the defoliation of the lower 30-40% of affected plants.

No fungicides are labeled for pure stands of orchardgrass. In this, other control methods including adjusting cutting height taller, preventing over application of nitrogen fertilizers and proper potassium fertility are advised to control the disease.

Corn:
Planting progress in Frederick was slowed by cooler temperatures of the recent past. However, many more acres were planted last week. Scouted fields ranged in maturity from VE to V1. Early planted corn appeared in good condition, though one field appeared to have very slight emergence issues likely due to germinating seed imbibing cold water.

Again, scouted fields did not contain any below ground pest pressure in the form of slugs, rootworm, or seed corn maggot. However, these are pests of concern in which scouts would be best served digging roots to determine pest pressure.

Soybeans:
Soybean planting has been similarly slowed due to cooler temperatures. Scouted fields were in the VC stage. In one field, germinated soybean plants appeared to be mildly chlorotic, showing signs of imbibitional chilling at germination.

An article titled, “Imbibitional Chilling – Is It a Concern?” from Ohio State University does well to explain the affects of this as well as potential management considerations.

–Mark Townsend, Agent Associate.

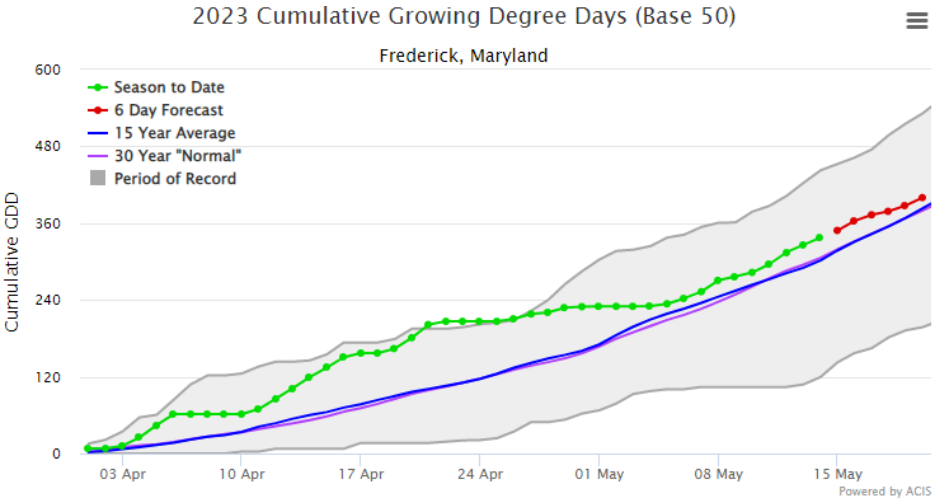
Montgomery County

Cereal leaf beetle and slugs are active. Wheat is flowering, and fungicide applications are going out. Corn is between V2 and V3 in Western Montgomery County. The head blight risk assessment tool is showing a low to medium risk over the next 2-4 days. Please continue to monitor the head blight risk assessment tool as the risk level for susceptible varieties has increased week over week.

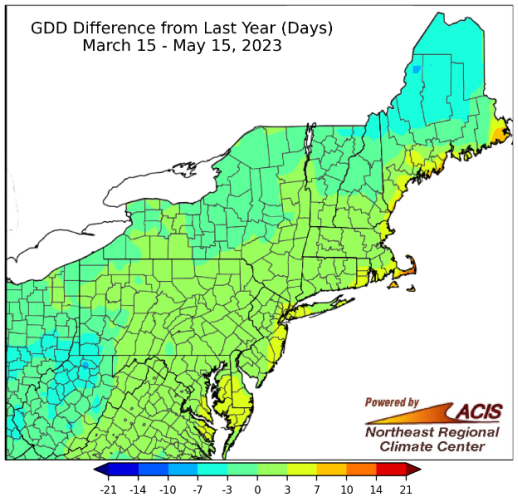
--Kelly Nichols, Agriculture Agent.

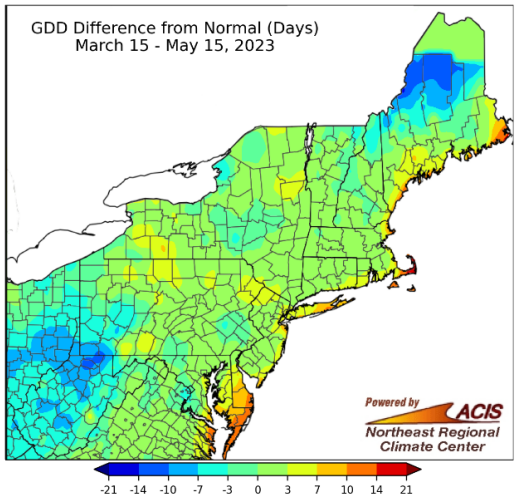
Weather

Since May 1st, we have accumulated 108 GDD (base 50) bringing the annual total to 381 as of 5/14. This has drastically reduced the speed at which we had been progressing in terms of heat accumulation since early April.



The chart here from the Climate Smart Farming GDD Calculator set to Frederick, MD, illustrates just how rapidly we accumulated growing degree days in April, with some of the days in the middle of the month pulling above the period of record levels. More recently, we have dramatically reduced this rate as the recently lower temperatures have pulled us closer to an average year. This can also be observed in the GDD Difference from Normal chart shown here to the left.





Notably, Central Maryland is back within a week (0-3 days) of average GDD accumulation. Though the forecast is calling for some sunny and mostly dry weather (max 40% change of rain), temperatures will stay relatively mild for this time of year. It may be advisable to keep this in mind for future scouting trips as there could be a potentially greater incidence of pests that favor cooler temperatures.