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Introduction

Near ideal weather over much of the region is helping to put the finishing touches on this year’s corn and soybean crop. Early maturity soybean fields are beginning to turn color and many corn fields are beginning to show leaf discoloration and senescence. Top die-back is showing up in some corn fields, inspection of stalk quality in these fields would probably be a good idea. Now is a good time to take one last walk through the corn, soybean and forage fields to asses any problems with disease, fertility, weeds, insects and soil compaction that would need to be addressed in next years crop. Now is also the time to take that final harvest of alfalfa so that the crop is able to prepare itself (six weeks of re-growth and rest) for the long winter ahead. If you haven’t yet joined a Crop Update Live web meeting, this week would be a great session to attend as Dr. Phil Jost (University of Georgia Extension Agronomists) will be discussing how the current infestation of soybean rust is impacting soybean producers in his state.

Weather information

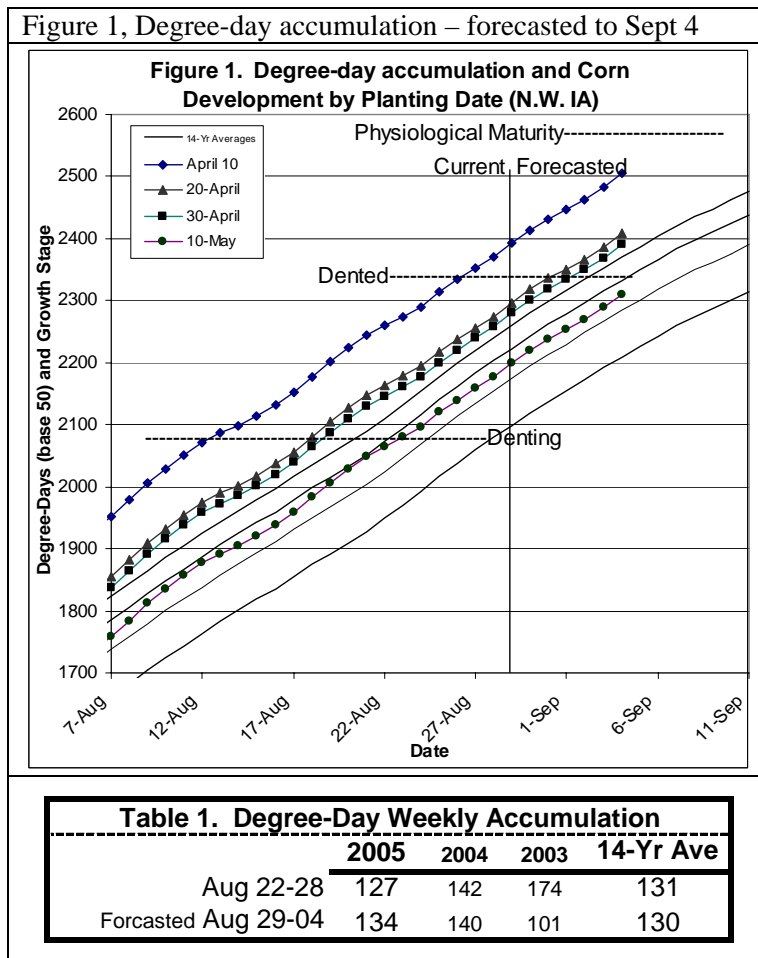
Growing Degree Day The finish line for the season is in site, as the mark for physiological maturity was placed on the graph this week. Near normal weekly accumulations of growing degree days was observed last week and is forecasted for this week as well. West-central IA continues to be 103% to 106% of normal in DD accumulations for most corn planting dates. Accumulation and predicted plant phenology stages are shown in Table 1 and Figure 1 and is forecasted through Sept. 4. More detailed degree-day accumulations by planting date can be obtained at this URL: <http://www.extension.iastate.edu/nwcrops/degree-days-2005.htm>

Crop Management

Corn Development Most corn in the area should be fully denting with the milk line advancing down the kernel, near ½ milk line in some fields. Corn taken for silage is occurring now in many areas.

Soybean Development: Estimate soybean yield potential.

- ✓ Estimate the number of plants per acre (measure an area 1/1000 of an acre and count the number of plants within the marked area.)
- ✓ Count the number of pods on ten randomly selected plants within the marked area and calculated the average number of pods/plant



- ✓ Calculate pods per acre by multiplying plants/acre by pods/plant
- ✓ Calculate seeds per acre by multiplying pods per acre by an estimate of 2.5 seeds/pod
- ✓ Calculate pounds per acre by dividing seeds/acre by an estimate of 2900 seeds/pound
- ✓ Estimate yield by dividing pounds/acre by 60 lbs. per bushel.

The formula is: $[(\text{plants/acre}) \times (\text{pods/plant}) \times (2.5 \text{ seeds/pod})] / (2900 \times 60) = \text{Estimated Yield bu/acre}$
This formula uses several estimations and therefore may be variable depending on the final number of seeds per pod and seed weight. (Source: Corn and Soybean Field Guide, 1997; Purdue University Coop Extension Service)

Forage and Pasture Management

Give alfalfa a rest before winter. The timing of the last harvest of alfalfa affects its winter survival and next spring's vigor. Alfalfa needs about six weeks of uninterrupted growth in the fall to become fully winterized. Dr. Barnhart (ISU's Extension Forage Specialist) recommends that for the best survival of the stand, attempt to take the last summer cut by late August or very early September, and let regrowth stand in the field.

<http://www.ipm.iastate.edu/ipm/icm/1999/9-13-1999/alfalfaman.html>

Pest Management

Top die-back I've noticed in many corn fields west of Carroll where the corn appears to be prematurely dieing or is maturing from the top down rather than the normal bottom to top. I believe this may be due to an uncommon situation where anthracnose stalk rot is attacking the plant causing what is commonly called top die-back. For a very good summary of this disease, refer to this 2002 ICM newsletter.

<http://www.ipm.iastate.edu/ipm/icm/2002/9-23-2002/anthracnose.html>

Scout and evaluate corn and soybean field health now while you have time. Many disease, insect and weed pest problems can be found in area corn and soybean fields now. Obtaining a positive ID on a disease, weed or insect will be very important when making crop rotation, hybrid and variety selection decisions for next year. Be sure to utilize the ISU plant disease clinic (<http://www.extension.iastate.edu/Pages/plantpath/pdcintro.html>), and/or the ISU weed, insect and soil fertility specialists when confronted with an unknown problem. When scouting fields, be sure to dig plants and examine the root system, the lower stalk area, split stems and collect soil and plant samples for further testing if the problem is not easily identified.

Soybean Aphid Aphid populations explode in numbers in many west-central IA soybean fields last week, most likely in response to mild air temperatures. Most soybean fields are at or past the R6 growth stage where our current research suggest we would not observe a response in yield with an insecticide treatment. In the past, aphid populations tend to decrease or entirely disappear near the end of August or into early September.

ICM Newsletter: Refer to this week's ISU Extension Integrated Crop Management newsletter for many good articles on soil and pest management: <http://www.ipm.iastate.edu/ipm/icm/>

Crop Update Live special feature on soybean rust in the southeastern U.S.

Be sure not to miss this week's "Crop Update Live" web meeting (Friday morning at 7:30 am) as Dr. Phil Jost (University of Georgia Extension cotton and soybean specialist) will discuss the current situation of soybean rust in the State of Georgia. This will be an excellent opportunity for you to submit questions to Dr. Jost on how Georgia soybean producers are responding to soybean rust in their operations. The state of Georgia is where soybean rust appears to be most active at this time. To join the web meeting, click on this link

<http://breeze.extension.iastate.edu/r20526204/> Friday morning at 7:30 am. To view a recording of this or past meetings, browse to the Crop Update Live webpage: <http://www.extension.iastate.edu/nwcrops/crop-update-live-2005/>. The link to the "live" meeting will be active on the web page until it is replaced with the link to the recording following the meeting.

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Serving northwest Iowa

IOWA STATE UNIVERSITY
University Extension

For further information pertaining to this newsletter; please contact me or any of the county extension offices. This newsletter can also be accessed on-line at http://extension.iastate.edu/carroll/crops/newsletter_2004.htm. If you would like this letter to be emailed directly to you, please send an email with the desired email address to vagts@iastate.edu.

This newsletter is available via fax (in selected counties) or e-mail and can always be found on the web at http://www.extension.iastate.edu/nwcrops/newsletter_2005.htm If you would like to receive this newsletter in a format (different than what you currently receive), please let me know by phone (712-792-2364) or email (vagts@iastate.edu).

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