



August 1, 2016 - Volume XXIV - Number 9

Crop Management Newsletter

News about Crop Management for producers in Dawson, Lynn and surrounding Counties.

Thanks to the sponsors and the gins who support the Dawson/Lynn IPM Program (found on page 2)

Current Conditions

Seventy percent of our program fields are now in bloom.

Insect activity remains very light to non-existent.

We are starting to see some fields with bacterial blight and fields that are showing the effects of nematodes. These type problems start showing up as the plants become more stressed and its needs (water and nutrients) are lacking.

Sugarcane aphid has now been detected in Lynn County - approaching levels where management decisions will need to be made (see July 15 newsletter for discussion).

First Bloom and NAWF

As the plant starts flowering, measurement of the height/node ratio becomes less important, and nodes-above-white-flower (NAWF) measurement becomes more important as a plant monitoring tool.

NAWF at first bloom provides one of the most accurate mid season predictors of yield. The cotton plant needs to be growing rapidly at first bloom. Vigorous cotton plants have more momentum or "horsepower" to take the plant further into the the fruiting cycle before cutout. The method to measure this horsepower is NAWF.

NAWF count starts at the node with the upper

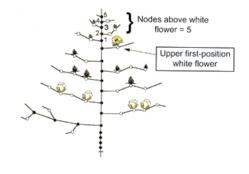
most first position white flower. A first position white flower is the flower on the first fruiting position closest to the main stem. This node is counted as 0 and nodes are counted to the top of the plant stopping with the node which has the terminal main stem leaf as large or larger than a quarter.

As the plant develops, flowering will slowly (hopefully) advance toward the plant terminal. The speed of the advance varies, but should be approximately one NAWF per week. As flowering progresses up the plant, terminal growth will also progress, but at a slower rate. The objective of insuring good yields is to keep the plant in a fruiting mode and to slow the advance of the white flower toward the terminal of the plant.

At early bloom, NAWF on most full season picker varieties should range between 8 and 12 and on short season stripper varieties, should equal 7 to 10 nodes. As boll loading progresses, NAWF declines. Rate of decline is important; a rapid decline indicates the plant is experiencing severe stress. If NAWF was high at first bloom, this decline could be due to boll loading and high demand for nutrients and water. When NAWF does not decline after first bloom, or it increases, the boll load is not developing sufficiently to hold the plant back. Boll loss could have been from lack of adequate moisture, cloudy days, lack of enough heat units, or insect damage.

When NAWF reaches 5, fruiting growth will overpower vegetative growth and this is defined as physiological cutout.

Nodes Above White Flower Counts



Special THANKS to those who support
Agriculture and the Lynn/Dawson IPM
Program

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Many Thanks to the Gins who participate and support the <u>Lynn/Dawson IPM Program</u>

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