



“Rio Blanco” Integrated Pest Management Update

Vital Crop Production Information for **Crosby** and **Floyd** Counties

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Volume 6 - No. 9

July 21, 2006

☛ Crosby/Floyd IPM Program irrigated cotton is holding up well where irrigation is adequate. Most, however, is blooming too close to the top to show exceptional potential across the two county area. Growth ranges from first bloom with 7 to 11 nodes above first white flower (NAWF) in primarily sub-surface, drip-irrigated (SSDI) fields, to 5 to 7 NAWF, essentially hovering at cut out, in center-pivot and row-watered fields that have problems maintaining adequate irrigation requirements. Plant moisture requirements are in excess of 0.30 inches per day, generally. The average square set percentages in later planted cotton remains between 85 and 95 %. It is questionable how much of this new fruit will last through the season unless rainfall is received soon.

☛ Cotton fleahopper presence is not considered a problem any longer. Cotton aphids have been noted, but are currently not a problem either. Even grasshoppers, which are normally a problem in dry years, have not been seen in sufficient numbers to cause alarm in Program cotton.

☛ Bollworms remain few and far between and at manageable levels due primarily to current weather conditions. Beneficial insects are present but not in sufficient numbers to impact worm populations, even if we were to have a flare-up of this pest. This occurrence is not likely as all moth

trap numbers are down from last week’s trapping totals.

☛ Heat unit accumulations as of **July 19, 2006;**

Heat Unit Accumulation

<u>Five yr.</u> <u>Avg.</u>	<u>Jan. 1/06</u> <u>to Date</u>	<u>May 1/05</u> <u>to Date</u>	<u>May 1/06</u> <u>to Date</u>
1,496	1,592	1,141	1,330

☛ Several questions have arisen this last week regarding the use of Plant Growth Regulators (PGR’s). There are no “pat” answers or broad spectrum recommendations which can be applied. Fields must be assessed individually to select the proper regimen to be followed. There is an “Opinion Paper” attached which should answer some frequently asked questions or provide food for thought. Thanks to all those individuals that I was able to borrow information from in order to write this paper, with special thanks to Mark Brown and Dr. Randy Boman for quotes and critiques.

☛ I would consider using PGR’s this year only if a combination of factors exist;

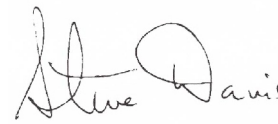
- 1) There is an adequate supply of irrigation water (SSDI, primarily) and/or, through some miracle, adequate rainfall moisture is realized (not likely this year);
- 2) The crop enters bloom with 9 to 11 NAWF and is able to hold above 6 to 7 NAWF through mid-August;

3) Adequate fertilization has been realized to accommodate a 2 to 3 bale harvest potential; and,
4) The variety of cotton is such that it will more than likely get “rank” with all previous factors considered. Picker-type varieties are notorious for this characteristic if conditions are right. We have very little knowledge regarding most of the “Flex” varieties introduced this year, but should probably assume their potential to be as great as the Round-Up-Ready counterparts. Choosing application rates of PGR’s falls under the “art” category. Anything less than 4 ozs. per acre of the 4.2% materials (2 ozs. per acre of the 8.4% material), in my opinion, is a waste of time and effort. Producers should put out their own tests of differing rates and products on small acreage to experiment with these materials in a dry year. Data collected from 2004 and 2005 is questionable when trying to apply that information to the 2006 crop.

From the 2005 Crosby County replicated result demonstration PGR Trial conducted on Regan Ware’s farm, we did learn a few things that are relevant:

- 1) Sequential applications of 16 and 24 ozs. (4.2% material) in 10 gallons of water per acre at 10% bloom and 50% bloom, were not significantly different from one 8 oz. treatment at pre-bloom in yield or lint quality parameters;
- 2) There were no significant differences in plant height between treated and untreated plots until October 3 (again 2005 was a wet year, those plant height differences **might** show up earlier in a dry year) ; and,
- 3) There was not a significant difference in yield between treated and untreated plots. There was a **numeric** difference,

however, between treated and untreated plots in lbs. of bur cotton harvested, which would provide additional income making the application of a PGR practical, fuel and chemical costs considered. As Dr. Randy Boman has said many times, “ A good boll load will essentially ‘Pix’ the crop without supplemental use of PGR’s.”



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