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Texas A&M System

WEST PLAINS IPM UPDATE

News about Integrated Pest Management in Hockley and Cochran Counties from Kerry Siders.



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Partners with Nature

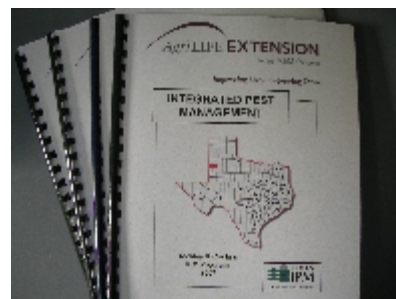
GENERAL SITUATION

Most areas of Hockley and Cochran Counties are in need of a good soaking rain. Though some isolated areas have received some recent rainfall, most like the Levelland area have not had measurable precipitation over 0.5 inch since last fall. Fire danger remains high on rangeland and other areas with dry grass and other fuels. However, spring is here and planting season is just around the corner. Pre-irrigation continues on many acres while some land preparation still needs to be completed. With grain prices and other cost considerations producers will have a good mix of cotton, grain sorghum and other crops. These are challenging times with high fuel costs, high fertilizer costs, limited products, uncertain farm bill and other issues. Things are still in our favor because the sun will shine, it will rain some day and we have the best farmers in the world on the job.

Result Demonstration Handbook

If you would like to obtain the latest compilation of research projects from 2007 in Hockley and Cochran Counties give us a call.

On the following pages I have included two projects from this handbook. The first is some cotton root-knot nematode work which was conducted at the Duane Cookston Farm near Whiteface. This study evaluated various at-plant nematicides plus the addition of Vydate at squaring. The next project is the verticillium screening work we conducted at the Preston Turner Farm in 2007, similar to 2006.



STICKING TO THE BASICS OF COTTON IN 2008

- ▶ Use minimum tillage where feasible
 - reduced tillage on dryland
 - cover crop/reduced tillage on irrigated
- ▶ Fertilize for realistic yield goal
- ▶ Variety selection - adaptability, storm proofness, value added traits based on need, disease tolerance
- ▶ Plant density - on 40" use 2-5 seed/foot with dryland at low end, irrigated high
- ▶ Soil temp 65° F for 10 days at 8"
- ▶ Do not cut thrips control and nematode control
- ▶ Use appropriate weed control program, do not skimp on this one
- ▶ Get most from available water- furrow diking a must
- ▶ Timely irrigation is a must
- ▶ Be very careful in use of plant growth regulators if at all

COTTON ROOT-KNOT NEMATODE MANAGEMENT USING AT-PLANT NEMATOCIDE PLUS VYDATE FOLIAR JUST PRIOR TO SQUARING **COOPERATOR: Duane Cookston**

RESULTS AND DISCUSSION: As shown in Table 1 the treatments which included Temik plus Vydate provided a significantly higher cotton yield when compared to other treatments receiving Vydate. The Trilex + Temik + Vydate treatment was not significantly different from the Temik or Trilex + Temik treatments without Vydate. Only the Avicta CP + Vydate treatment was not significantly different from the two Temik treatments without Vydate. However, this treatment of Avicta CP + Vydate was not significantly different than the remaining Vydate treatments of Vydate alone, or Aeris + Trilex + Vydate. These two aforementioned treatments were not significantly different than Avicta or Aeris + Trilex without Vydate. Finally, those two treatments were not significantly different from the lowest numerical yield provided by the Base (check) treatment without Vydate. On average the addition of Vydate provided protection to 98 lbs of cotton lint across all treatments. When considering only those treatments utilizing Temik the addition of Vydate provided protection to 85 lbs of cotton lint.

Table 1. Affect of nematicides on cotton at a site near Whiteface, Texas 2007.

Treatment	Cotton Lint Yield Lbs/acre
Base (check) = Baytan 30 + Allegiance FL + Argent	1216 f
Base + Temik 15G 5.5lbs	1455 bc
Base + Trilex + Temik 15G 5.5lbs	1438 bc
Base + Avicta Complete Pak	1261 ef
Base + Aeris + Trilex	1272 ef
Base (check) + Vydate CLV 17 oz*	1333 de
Base + Temik 15G 5.5lbs + Vydate CLV 17 oz	1562 a
Base + Trilex + Temik 15G 5.5lbs + Vydate CLV 17 oz	1501 ab
Base + Avicta Complete Pak + Vydate CLV 17 oz	1405 cd
Base + Aeris + Trilex + Vydate CLV 17 oz	1333 de

*Vydate CLV foliar applied on June 30, 2007

Means followed by the same letter do not significantly differ (P= 0.05 LSD)

Hockley and Cochran IPM Scouting Program

1. Field Scouting for insect, weed, and disease pests in cotton, peanuts, grain sorghum, sunflowers, etc.
2. Scouting on a 5-7 day scheduling interval.
3. Individual field pest report provided.
4. Management suggestions with emphasis on proactive IPM methods.
5. Management suggestions available upon request for irrigation, harvest aids, and other agronomic considerations.
6. Fall soil sampling for cotton root-knot nematode management suggestions.
7. Irrigated cotton or peanut scouting is \$5.50 per acre. Pricing for dryland and other crops available.
8. Prorated refunds of scouting fees for loss of crop due to natural causes.
9. Contact Kerry Siders, Extension Agent-IPM for more information at 894-2406(office) or 638-5635(mobile).

SUMMARY: The best yielding varieties (top 20%) over the last two years in the verticillium wilt screening trials were: DP 455 BG/RR, FM 960BR, NG 2448R, FM 9058F, FM 960B2R, FM 9150F, FM 9180B2F, PM 2326RR, FM 989BR, FM 9060F, FM 9063B2F, and FM 989B2R. It is unfortunate that the stripper type cottons which tend to be more resistant to Verticillium wilt do not yield consistently well.

Table 2. Affect of varieties in a Verticillium wilt on cotton in Levelland, 2007.

Variety	Lbs of lint per acre	% Lint	Loan value (\$)	Loan x yield – seed + tech fees (\$/acre)	% Wilt on 29 Aug.	Plants/ft. row
Fibermax 960BR	1,709 a	32.4	0.566	923.21 ab	8.2 g-i	2.6 a-f
Fibermax 960B2R	1,708 a	31.8	0.571	929.15 a	9.3 e-i	2.5 a-f
MX0608B2F	1,691 ab	31.1	0.510	804.75 d-g	4.4 ij	2.5 a-g
Deltapine 455 BG/RR	1,676 abc	33.2	0.586	928.65 a	14.2 a-g	2.3 a-h
Fibermax 9150F	1,670 abc	31.7	0.571	905.89 abc	11.3 d-h	2.6 a-e
Fibermax 9058F + ProAct	1,597 a-d	31.5	0.566	855.84 a-e	12.8 b-h	2.5 a-g
Fibermax 9180B2F	1,594 a-d	29.6	0.589	882.81 a-d	11.9 c-h	2.4 a-h
Fibermax 9063B2F + Actinovate	1,582 a-d	30.7	0.589	874.91 a-d	8.8 f-i	2.7 a-d
Fibermax 9058F	1,570 a-e	30.6	0.575	854.66 a-e	11.8 c-h	2.7 abc
Fibermax 9063B2F	1,569 a-e	30.2	0.587	864.08 a-d	7.2 hij	2.5 a-f
AFD 5065B2F	1,550 b-f	31.0	0.580	846.32 b-e	7.3 hij	2.5 a-g
AFD 5064F	1,548 b-f	29.3	0.548	803.65 d-g	7.3 hij	2.7 ab
Fibermax 989B2R	1,543 c-f	28.2	0.573	838.46 c-f	13.1 b-h	2.6 a-f
MX0609B2F	1,531 c-f	28.6	0.572	818.09 d-g	8.8 f-i	2.5 a-f
Paymaster 2140B2F	1,487 d-g	30.6	0.546	760.10 f-i	8.8 f-i	2.7 a-d
Phytogen 425F	1,479 d-g	29.5	0.562	782.94 e-h	11.8 c-h	2.6 a-e
Stoneville 5327B2F	1,432 e-g	29.9	0.562	746.82 g-j	12.3 c-h	2.2 e-i
Deltapine 147F	1,422 f-i	29.7	0.562	749.82 g-j	19.6 a	2.3 a-h
Deltapine 454 BG/RR	1,406 f-j	30.6	0.519	676.20 j-m	11.6 d-h	2.5 a-g
Fibermax 1740B2F	1,381 g-k	29.3	0.561	718.52 h-k	10.2 d-i	2.8 a
Deltapine 164B2F	1,366 g-k	27.8	0.556	700.37 i-l	11.5 d-h	2.3 a-h
Deltapine 117B2F	1,355 g-l	29.5	0.546	680.58 i-m	15.8 a-d	2.3 b-h
Deltapine 121F	1,327 h-l	29.4	0.580	719.93 h-k	14.6 a-f	2.2 e-i
Stoneville 4554B2F	1,315 h-l	29.2	0.571	693.13 i-m	13.8 a-g	2.2 c-h
Phytogen 485WF	1,315 h-l	28.8	0.557	677.43 j-m	18.0 abc	2.0 hi
All-Tex Apex B2F	1,306 h-l	29.7	0.572	693.12 i-m	15.2 a-e	1.7 i
Phytogen 480WR	1,304 h-l	28.4	0.575	696.49 i-m	11.5 d-h	2.1 f-i
Paymaster 2326RR	1,291 h-l	27.3	0.534	659.86 k-n	2.5 j	2.2 e-i
Phytogen 125F	1,287 h-l	27.5	0.532	636.56 lmn	12.5 c-h	2.4 a-h
Americot 1622B2F	1,280 i-l	26.8	0.561	664.27 k-n	8.9 e-i	2.4 a-h
Stoneville 5283F	1,264 jkl	28.1	0.554	651.01 k-n	18.8 ab	2.2 d-h
NexGen 3550F	1,255 kl	28.6	0.580	687.21 i-m	12.0 c-h	2.3 b-h
Americot 2220F	1,234 kl	26.5	0.538	618.62 mn	11.0 d-h	2.2 e-i
All-Tex Arid B2F	1,208 l	27.4	0.529	588.65 n	16.2 a-d	2.0 ghi

2008 *West Plains IPM Update*

WEST PLAINS IPM UPDATE is a newsletter which provides news of insect, weed and disease pests, and crop management suggestions for Cochran and Hockley Counties. The newsletter is written weekly during the growing season, from June through September. The newsletter will keep you abreast of current pest activity, natural enemies, biological and cultural control tactics, and chemical control options. The newsletter will cover cotton and other major crops grown in Hockley and Cochran counties during 2008.

You will have four options to obtain the newsletter:

_____ #1 **Paper Copy by Mail for \$10** Complete the subscription card enclosed and return.

_____ #2 **Free E-Mail Newsletter** Complete the subscription card enclosed and return.

_____ #3 **Free Fax Newsletter** Complete the subscription card enclosed and return.

_____ #4 **Free Internet Newsletter**

The newsletter can be obtained, no charge, on the web sites: <http://hockley-tx.tamu.edu> ,
<http://lubbock.tamu.edu/ipm> or www.tpma.org

Please Consider This:

- * Sprayer calibration will ensure proper rate of crop protection chemicals, good coverage, management/control of the pest, and efficient use of input cost.
- * Remember the goal of protecting crops from pests (weeds, insects & disease) is to limit yield loss, not to increase yields.
- * The use of Roundup Ready is no substitute for a good base herbicide program consisting of a preplant incorporated and at-plant preemergence herbicides.
- * The use of Bollgard does not excuse you from checking your crop for worms on a weekly basis.
- * The advice of a professional consultant on a weekly basis is even that much more important in time of economic concern and maximizing necessary production inputs.

West Plains IPM Update is a publication of the Texas AgriLife Extension Service IPM Program in Hockley and Cochran Counties.

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