UPCOMING EVENTS

Peanut Production Meeting
Thursday, February 28 – 6:00 pm
Duplin County Extension Center

Dr. David Jordan, NCSU Extension Peanut Specialist, and Dr. Barbara Shew, NCSU Extension Plant Pathology Specialist, will be guest speakers. NCDA&CS pesticide and CCA credits will be available. A sponsored meal will be served. Please call 910-296-2143 if you plan to attend.

Tobacco Associates Annual Meeting
Friday, February 29 – 10:00 am
NC Farm Bureau Building, Raleigh

The NC Farm Bureau Building is located at 5301 Glenwood Avenue, approximately ½ mile of Crabtree Valley Mall on US 70 West.

Motor Carrier Enforcement Regulations Meeting
Monday, March 3 – 6:30 pm
Duplin County Extension Center

NC Highway Patrol Motor Carrier Enforcement officers will present commercial vehicle (including farm) regulations. A sponsored meal will be served. Please call 910-296-2143 if you plan to attend.

Cotton Production Meeting
Tuesday, March 11 – 6:00 pm
Sampson County Agri-Expo Center

Dr. Keith Edmisten, NCSU Extension Cotton Specialist, Dr. Jack Bacheler, NCSU Extension Entomology Specialist, and Dr. Alan York, NCSU Extension Weed Specialist, will be guest speakers. NCDA&CS pesticide and CCA credits will be available. Please call 910-592-7161 if you plan to attend.

WHEAT

Hessian Fly

Hessian fly in wheat is currently a “hot” topic. At this time, Hessian fly is in the pupal (resting) stage. The pupa is a dark brown case. If present, the pupa can be found between the leaf sheath and the stem near the base of the wheat plant. To determine if a wheat field is infested, scout for Hessian fly pupae now.

Thresholds
There are no research-based Hessian fly thresholds. However, Dr. John Van Duyn, NCSU Extension Entomologist, suggests a pupa threshold of 1) 10% infested plants when there are “friendly conditions” and 2) 20% infested plants when there are no “friendly conditions”.
Please remember a single plant has numerous tillers.

“Friendly conditions” include 1 or more of the following: a Hessian fly susceptible wheat variety, no Gaucho or Cruiser seed treatment, wheat/wheat rotation (especially no-till), wheat emerged before November, and wheat fields planted near last year’s wheat fields.

*If threshold is met, a Karate Z treatment (1.5 – 1.9 ounces/acre) is recommended when flies emerge from pupae.* This treatment will kill flies, possibly fly eggs, and newly hatched larvae (maggots). *When Hessian flies emerge from pupae, area dealers will be notified.*

The 2-winged fly is small, long-legged, and resembles a small mosquito. The fly is a weak flier and life is only 2-3 days. Flies will deposit yellow-orange eggs singly or end-to-end between the veins on the upper surface of young wheat leaves.

The eggs will hatch within a few days and the tiny maggots will migrate to stem joints where they feed for 4-6 weeks. The maggot is about ¼ inch long when fully grown. Maggot feeding usually results in weakened stems and small, poorly filled grain heads with low-quality kernels. Weakened stems may result in lodging.

Karate Z/Nitrogen Tankmix?
Please note “SmartGrains: The Small Grains Fact Sheet included with this newsletter.

If flies have not emerged when early March nitrogen is applied, Karate Z residual activity may be past before flies emerge. Also if premature Karate Z treatment has been made with early March nitrogen (and wheat growth stimulated due to the nitrogen application), the new growth will be untreated (with Karate Z). This could lead to a “false sense of security” when flies do emerge.

Harmony Extra Formulation Change

In the past, Harmony Extra XP formulation was available for wheat postemergence weed control at 0.3 – 0.6 ounce/acre.

Harmony Extra with TotalSol SG is now available for wheat postemergence weed control at 0.45 – 0.90 ounce/acre.

0.75 ounce/acre of Harmony Extra with TotalSol SG is equivalent to 0.50 ounce/acre of Harmony Extra XP.

NCDA&CS SOIL TEST REPORTS

If your soil samples were in the Agronomic Division Lab by Christmas, you likely have your soil test reports in hand. Are you using reports to their fullest extent?

The good news is wheat, corn, soybeans, cotton, and peanut prices continue to rise. The bad news is input costs for these crops continue to rise as well. 1/3 – ½ of 2008 corn, soybean, and wheat budgets variable costs consists of lime and fertilizer.

Proper pH is the foundation of all fertility programs. If recommended, lime benefits include increased plant nutrient availability, reduction of aluminum, more efficient use of
phosphorus, an economical source of magnesium (dolomitic lime), improved nitrogen fixing ability of the soybean/peanut plant, reduced leaching of potassium, and improved performance of some herbicides. If nutrient dollars get “tight”, cut back on fertilizer, not lime!

Are you using NCDA&CS phosphate, potash, magnesium, and micronutrient recommendations for fertilizer program development? *These recommendations are designed to eliminate fertility as a limiting factor in optimum crop production.* Other yield limiting factors include soil moisture, planting date, variety, weeds, insects, nematodes, diseases, soil compaction, etc.

Many NCDA&CS soil plant available nutrient levels are reported as indices. *The following tables relate these indices to general nutrient availability and indicate the likelihood of crop response to fertilization.*

**Phosphorus (P-I) & Potassium (K-I)**

<table>
<thead>
<tr>
<th>Index</th>
<th>Nutrient Status</th>
<th>Response To Applied Phosphate</th>
<th>Response To Applied Potash</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>Very Low</td>
<td>Very High</td>
<td>Very High</td>
</tr>
<tr>
<td>11-25</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>26-50</td>
<td>Medium</td>
<td>Medium</td>
<td>Medium</td>
</tr>
<tr>
<td>51-100</td>
<td>High</td>
<td>None</td>
<td>Low/None</td>
</tr>
<tr>
<td>100+</td>
<td>Very High</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**Manganese (Mn-I), Zinc (Zn-I), & Copper (Cu-I)**

<table>
<thead>
<tr>
<th>Index</th>
<th>Nutrient Status</th>
<th>Response To Applied Mn, Zn, &amp; Cu</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-10</td>
<td>Very Low</td>
<td>Very High</td>
</tr>
<tr>
<td>11-25</td>
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</tr>
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Please call if I can help as you review NCDA&CS Soil Test Reports and develop 2008 crop fertility programs.

Disclaimer: The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina State University nor discrimination against similar products or services not mentioned.

Curtis D. Fountain  
Extension Agent  
Agriculture – Field Crops