



PEANUT PROGRESS

CURRENT PEANUT SITUATION & PRODUCTION UPDATE



Todd Baughman
State Extension Peanut Specialist

Most of the peanut production area started the season with a good soil profile of moisture. This was followed by several weeks of cold weather that slowed emergence and peanut development. However, recent warm weather has peanuts actively growing and in much of the area peanuts are starting to bloom. This stage of development has led us into the peak period of water demand and will continue

through pod and kernel development.

We are very close to the period of peak bloom which occurs approximately 60 to 70 days after planting. High temperatures, low humidity, and water stress can all negatively affect blooming and pollination. Lack of blooms and pollination can potentially reduce yield and will most definitely delay development.

This is a real concern in Texas where we are always in a battle to get the peanut plant mature before cold temperatures and frost at the end of the season hit. While only 15 to 20% of the blooms will produce a harvestable pod we want to try to set as many of these as possible during the early portion of the blooming season. The peg becomes visible about 7 days after

fertilization and will enter the soil approximately 7-14 days after pollination. We want to make sure that peanut plant is not stressed for water during this period, we keep humidity as high as possible in the peanut canopy (to encourage blooming), and the soil is moist for the peg to enter the soil and start to develop.

It appears that we have the potential for an excellent crop so let's keep building on that potential. During peak water demand (coinciding with bloom, peg, and pod set) the peanut plant will require between 1.5 and 2.0 inches of water per week. This must be supplied through stored moisture, rainfall, or supplemental irrigation. Typically with our irrigation situation in Texas once you get behind on water you can

PEANUT DISEASE OUTLOOK



Jason Woodward,
Extension Peanut Pathologist

Things appear to be going good this season and most peanut fields are beginning to bloom. Despite

slow emergence, that was most evident on early planted peanuts, because of the cool temperatures and rainfall that were experienced early in the growing season. Despite these conditions, seedling disease issues were few and far between. I received a few calls with concerns about several peanut fields exhibiting seedling disease symptoms; however, final stands were adequate. The most notable symptoms were discolored hypocotyls on seedlings of deeper

planted seeds. Despite these observations, there were no reports of seed severe decay. Several fungi, including *Rhizoctonia solani*, *Pythium*, *Rhizopus*, and *Fusarium* spp. can affect peanut seedlings. Many of these same pathogens are capable of infecting cotton and additional fields exhibiting seedling disease where reported. Historically, the commercial standard for peanut seedling disease has been Vitavax PC; however, there have been

CURRENT PEANUT SITUATION & PRODUCTION UPDATE - Cont.

never Irrigate yourself out of that hole and yield is still an overriding factor in a positive peanut economic outcome. Therefore, water stress needs to be minimized as much as possible. Water stress in conjunction with high temperatures and low humidity

(more likely to occur as we get further into July and August) will decrease the number of flowers formed and set. For additional irrigation and plant growth and development information see the Texas Peanut Production Guide at <http://peanut.tamu.edu>.

If you have any production questions contact **Todd Baughman @ 940.552.9941x233**.

PEANUT DISEASE OUTLOOK— Cont.

several new products registered over the past few years. Seed treatments such as, Trilex Star (Bayer CropScience), Trilex Optimum (Bayer CropScience), and Dynasty PD (Syngenta Crop Protection) provide stands equivalent to or better than Vitavax PC. Seed treatment options for organic producers are limited. The biological fungicide Kodiak (Bayer CropScience) is labeled for use in organic production; however, its performance has been inconsistent.

Currently, there are very few peanut diseases to observe on the Southern High Plains. Recent trips to Lubbock, Terry, Gaines and Dawson Counties have turned up a few plants exhibiting symptoms of *Aspergillus* crown rot (caused by *Aspergillus niger*) and leaf scorch (caused by *Leptosphaerulina crassiacca*).

Aspergillus niger spores on the crown of a dead peanut plant.



The frequency of Crown rot is very low and infections rarely result in economic losses, thus fungicide applications are not warranted.

Symptoms of Crown rot can resemble those of other diseases, but examination of the crowns and lower stems of wilted plants will reveal a dark brown discoloration, and the production of dark black spore masses. Seedlings and young plants are most susceptible to infection, and in extreme instances may result in noticeable stand reductions. As plants mature, they generally become less susceptible, but the fungus can continue to kill plants throughout the season, especially during periods of drought stress and/or high soil temperatures. Other factors associated with crown rot include planting low quality seed, the use of non-fungicide treated seed, as well as crown and root feeding insects. Likewise, leaf scorch rarely results in yield losses. Symptoms of this disease are often in conjunction with damage that may occur on the foliage (i.e. herbicide damage,

insect feeding, or leaf spot). This same fungus may also manifest a second symptom (pepper spot) later in the growing season; however, there does not appear to be a clear relationship between the presence of leaf scorch early in the season and late season pepper spot severity.



Plant exhibiting symptoms of *Aspergillus* crown rot.

Other diseases to be mindful of as we approach July are the pod rot complex, Sclerotinia blight, and Verticillium wilt. Management of these diseases often requires an integrated approach and/or changes in fungicide application methods. Additional information regarding these and other mid-season diseases will be made available later in subsequent Peanut Progress issues. Also, If you would like to see the 2009 Peanut Disease Management Results, if or you have any questions regarding peanut diseases, contact Jason Woodward @ 806-632-0762, or via e-mail jewoodward@ag.tamu.edu.

EARLY SEASON WEED CONTROL



Peter Dotray

Extension Weed Specialist

Peanut fields should be kept clean for the first 4 to 6 weeks of the growing season in order to maximize yields. Preplant burndown herbicides (**Gramoxone Inteon**, **Roundup**), tillage before planting, preplant incorporated herbicides (**Prowl**, **Sonalan**, **Treflan**), preemergence herbicides (**Valor**, **Dual Magnum**, **Strongarm** (in labeled areas or the state), and **Gramoxone Inteon (Firestorm, Parazone)** from ground crack to 28 days after cracking have been successful. However, additional weed management strategies may be necessary to maintain season-long weed control since newly emerging weeds have been observed.

There are several herbicides labeled for use postemergence in peanut. **Cadre (Impose)** and **Pursuit** have good activity on many broadleaf and grassy weeds, and nutsedge; however, there appears to be more weed escapes following these herbicides compared to what we experienced just 5 or 10 years ago.

The development of weeds resistant to **Cadre** and **Pursuit** has become a bigger concern across the peanut belt.

Both of these herbicides have an 18-months rotation restriction following application before cotton and grain sorghum may be planted.

Basagran, **Cobra**, and **Ultra Blazer** are options for use postemergence in peanut. **Basagran** has activity on cocklebur, sunflowers, and yellow nutsedge.

Ultra Blazer and **Cobra** are effective at controlling **Palmer amaranth (carelessweed)**, **annual morningglory**, and other broadleaf weeds, but weed size and “health” are important for effective weed control. Activity from these herbicides will quickly decrease as weed size increases and these herbicides do not provide soil residual weed control. **Storm**, a prepackaged mixture of **Basagran** and **Ultra Blazer**, may be used to control a wide range of small and actively growing annual broadleaf weeds. All of these herbicides need a spray additive (crop oil) for maximum herbicidal activity. Herbicide options to control grassy weeds include **Select (Arrow, Shadow)** and **Poast Plus**.

Peanut fields should be kept clean for the first 4 to 6 weeks of the growing season in order to maximize yields.

2,4-DB (Butyrac or Butoxone) is also an option for use postemergence in peanut, but extreme care must be taken when using this herbicide. **2,4-DB** has good activity on several annual broadleaf weeds including **morningglory** and **sunflower** and larger and tough-to-control weeds such as **silverleaf nightshade (whiteweed)**.

The use of crop oil with **2,4-DB** will increase herbicide activity; however, crop oil will enhance phenoxy-type injury to peanut.

Previous research suggests that this injury will not result in yield loss at the end of the season. **2,4-DB** may be tank mixed with other herbicides to broaden the spectrum of weeds controlled. Proper tank clean out and drift reduction must be a priority when selecting this herbicide.

Dual Magnum (and Outlook) are preemergence herbicides that may also be used postemergence followed by rainfall or irrigation for residual weed control and to decrease peanut injury following preemergence applications. Peanut injury has been noted with **Dual Magnum** when the herbicide has been applied preplant incorporated or preemergence on sandy soils followed by high rainfall (2 to 4 in) within 3 to 6 days after planting. **Dual Magnum** and **Outlook** have good activity on annual grasses and small-seeded broadleaf weeds, but must be applied prior to weed emergence or emerged weeds must be controlled by tank-mixing with another POST herbicide. Activity on yellow nutsedge has been observed when these herbicides are applied POST to peanut, but activation shortly after herbicide application (within 24 to 36 hrs) by rainfall or irrigation is necessary for effective control.



Were on the Web:
<http://peanut.tamu.edu>

There is a link to a survey that we would like for each of you to fill out.

<http://peanut.tamu.edu>

The Survey asks several questions to help us to recognize and improve on this newsletter for the 2010 season.

Please answer the 18 questions on the survey. At the top of the survey there is an option to **reset form** and/or **print form** for your records. When you have completed the form, please click the **Submit by Email** button at the bottom of the survey.

Please take the time to fill out this survey so that we can continue to assist you with your peanut production issues and help become aware of areas that we can improve upon.

TEXAS AGRILIFE EXTENSION SERVICE

Todd Baughman
P.O. Box 2159
11708 Highway 70 South
Vernon, TX 76385

Phone: 940-552-9941
Fax: 940-553-4657
E-mail: tbaughma@ag.tamu.edu

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