

Current Peanut Situation & Production Update

Jodd Baughman -
Extension Peanut
Agronomist

There have been some recent questions about hail damage/defoliation effects on peanut. Unlike cotton peanut can recover from an excessive amount of defoliation. In recent research, simulated hail damage that defoliated runner peanut over 90% at early bloom only reduced yields in 1 of 3 years (and those peanut still yielded over 3500 lb/

A). Therefore, don't give up on hail damage peanut right away. I have also been getting some question about late



Simulated Hail Damage

planting Spanish peanut on twin rows. First, past research has not been able to show a consistent yield advantage to twin row peanut. Sec-

ondly, it will take a very favorable season and an open fall for late planted peanut (even Spanish) to make a profitable yield. Several years ago there were a number of acres of Spanish that were planted after hailed out cotton that did not perform very well. However, there have also been other instances where yields were fine. This will all depend on the season and the risk you are willing to take. On another note, drought conditions continue to persist in the

Early Season Peanut Weed Control

Peter Dotray -
Extension Weed
Scientist

Herbicides applied early post emergence (EPOST) are essential when weeds are not controlled by preplant and preemergence her-

bicides. Early season weed control is essential in order to avoid competition for water, nutrients, and light between peanut and weeds. Severe early season weed competition may cause stand and yield loss. Early emerging weeds have a greater impact on yield

than weeds that emerge later in the season. In general, EPOST herbicides are most effective when applied to small, actively growing weeds. This is especially true for herbicides with little or no systemic ability (movement) within the weeds. There are two

SPECIAL POINTS OF INTEREST:

- **Current Peanut Situation & Production Update**
- **Early Season Peanut Weed Control**
- **Peanut Disease Awareness**
- **Mid-Season Rhizobium Assessment**

Current Peanut Situation & Production Update Continued

Southeast and there are some real concerns about the effect on overall peanut production this year. Also check out our website for the new Texas Peanut Production Guide. If you have any production questions contact Todd Baughman @ 940.552.9941x233

<http://peanut.tamu.edu/productionguide07.pdf>

Early Season Peanut Weed Control Continued



Peter Dotray—Extension Weed Scientist

Always carefully read and follow label instructions for maximum herbicide performance

Contact Herbicide Burn



types of herbicides applied POST: systemic (mobile) and contact (non-mobile). Systemic POST herbicides are taken up by leaves and transported to sites within the plant where the herbicide is needed to control the weed. Contact herbicides kill only the plant tissue that comes in direct contact with the herbicide. In general, thorough coverage on leaf and stem surfaces is more critical for contact herbicides compared to systemic herbicides. However, thorough coverage is still important for all POST herbicides. Thorough coverage can be accomplished by applying herbicides to smaller weeds, increasing the carrier volume and/or spray pressure, proper boom height, and accurately applying the herbicide to weeds growing beneath the crop canopy (through various nozzle arrangements and spray equipment). The period of time needed from application to rainfall or irrigation varies for each herbicide. In general, a six-hour rain free period is sufficient for most herbicides, although some formulations have decreased this time to approximately one hour. Many postemergence (POST) herbicides require a spray additive to ensure maximum herbicide performance. In west Texas, a crop oil concentrate is recommended over non-ionic surfactants for many herbicides, while for other herbicides, the choice is not as critical as long as a good quality spray additive is used. Some labels suggest the addition of liquid nitrogen fertilizers or dry spray grade ammonium sulfate for improving herbicide performance. Mixing order and compatibility are an issue for many herbicides; therefore, always carefully read and follow label instructions for maximum herbicide performance. If you have any questions in regards to weed control contact Peter Dotray @ 806.742.1634.

Peanut Disease Awareness

Jason Woodward -

Extension Plant

Pathologist

So far this season, things have been relatively quiet regarding peanut diseases. However, close attention should be made in monitoring disease development. Post-emergence damping-off can still result due to the current environmental conditions we have been experiencing across the region. Characteristic symptoms of post-emergence damping-off include wilting and rotting of hypocotyls. For *Rhizoctonia solani*, brown, sunken lesions will be apparent on hypocotyls just below the soil line. As these lesions enlarge, they darken and may envelop the hypocotyl and roots, resulting in death of the seedling. Leaflets of seedlings infected with *Pythium* spp. may have a yellow appearance, followed by rapid wilting. Vast root discoloration will also be evident on infected plants. In addition, there is increased potential for the develop-

ment of early-season foliar diseases such as leaf spot



(early and/or late), pepper spot, leaf scorch, or web blotch. Symptoms of early and late leaf spot, and pepper spot are relatively similar and consist of brown to black lesions developing on peanut foliage. Subtle differences can be used to differentiate the three. Pepper spot lesions appear as small, irregular shaped, dark brown to black flecks on the upper leaf surface. These flecks typically enlarge slowly. Early leaf spot lesions generally have a light to dark brown center with a distinct yellow margin. The fungus reproduces on the upper leaf surface, whereas, the late leaf spot fungus reproduces on the lower leaf surface. In addition, late leaf spot lesions are dark black and void of a yellow margin. Leaf spot development may rapidly occur under conducive environmental conditions, and extensive defolia-

tion may arise. Web blotch lesions are restricted to the upper leaf surface, dark brown to black in color, and have a webbed or net-like appearance.

Leaf Spot

There are also several economically important soilborne diseases, such as Southern blight, Sclerotinia blight, and Botrytis blight; that may occur earlier in the season as a result of the wetter cooler environmental conditions. There are limited fungicides available for control of seedling diseases (several compounds have activity; however, early season use of these products may limit options for control of soilborne diseases later in the season). Fortunately, there are several fungicides which provide suppression of the foliar pathogens listed above. If you have any questions regarding peanut diseases or fungicides available for their control contact Jason Woodward @ 806.746.6101.

“Close attention should be made in monitoring disease development.”



Mid-Season Rhizobium Assessment

Calvin Trostle - Extension

Agronomist

We are approaching the time in mid-June after planting in the Texas High Plains when peanut growers should check peanut taproots for *Rhizobium* nodulation. Scouting 5 to 6 weeks after planting assesses early nodulation in advance of decisions about applying mid-season N, and if so, how much N. Use a shovel to dig plants from different rows and field locations. If nodulation is deemed poor, nothing can be done to increase nodulation in the current crop. Poor *Rhizobium* nodulation calls for supplemental N to achieve desired yield potential. This is why early scouting is recommended.

We need to know which fields are not nodulating early in the cropping season. Nodules on the lateral roots, though often high in number



Rhizobium Nodulation

(i.e., hundreds per plant) tend to be less active and may not be fixing N for your peanut crop. Active nodules are pink to dark red inside. If

nodules are white inside they are not yet active—check again in 7-10 days. Nodules no longer active are black, gray, and may be mushy. Nodules which never turn pink or red inside are from soil *Rhizobium* that may not be specific for peanuts. **For West Texas**, the following guideline rates nodulation levels 5 to 6 weeks after planting. We are particularly interested in any developing clusters of nodules on the taproot. If early nodulation is good, you can expect it to continue to increase toward peak nodulation (usually early August), but if early nodulation is poor it probably isn't going to improve. If you have additional questions about Rhizobium nodulation contact Calvin Trostle @ 806.746.6101.

Nodule Rating	Nodules/Plant	Management Consideration
Excellent	>20	Likely excellent late season nodulation, N response doubtful
Very Good	16-20	Late-season nodulation also strong, reduce mid-season N goal
Good	11-15	Will produce good crop, anticipate some reduction in mid-season N
Fair	6-10	Would have like higher nodulation, mid-season N program a decent bet
Poor	0-5	May be background soil Rhizobium only, N fertility program probably essential; Need to determine why nodulation is poor

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