

# FOCUS on South Plains Agriculture

Texas AgriLife Research and Extension Center at Lubbock  
1102 E. FM 1294, Lubbock, Texas 79403

## Peanut Workshops Start Tomorrow

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## Peanut Production Workshops

*Levelland, Tuesday, February 24*

*Seminole, Wednesday, February 25*

Farmers can update their peanut knowledge at the 6th annual regional Texas AgriLife Extension Service peanut production workshops in Levelland and Seminole in February. Topics will include varieties, fertility, irrigation, disease and weed control, a producer forum, and updates from your peanut commodity groups. Three CEUs will be available. The Levelland workshop meets at the Brasch-Mitchell Building, 513 Avenue G, Tuesday, February 24th. Registration begins at 9:00 AM, includes a sponsored lunch, and concludes by 2:30 PM. Contact Hockley Co. Extension, (806) 894.3159, for further information.

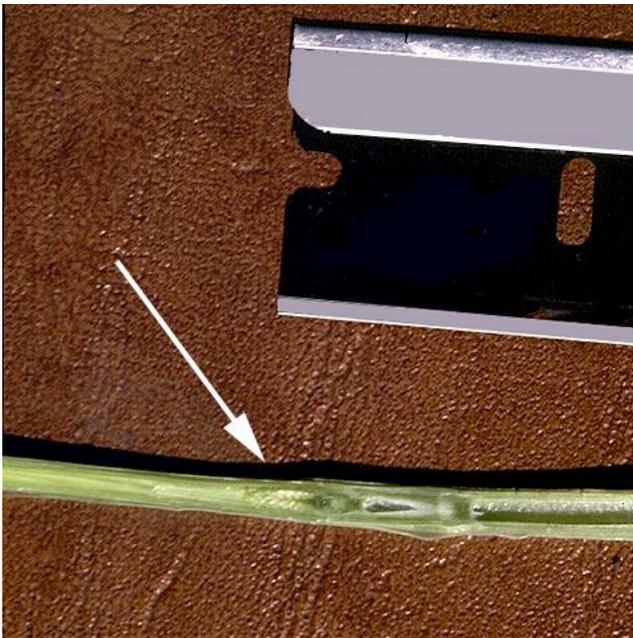
The Seminole workshop meets at the Gaines Co. Civic Building, NW 5<sup>th</sup> at NW Avenue E, Tuesday, February 25<sup>th</sup>. Registration begins at 8:30 AM, includes a sponsored lunch, and concludes by 2:00 PM. Contact the Gaines Co. Extension Office, (432) 758-4006, for further information.

## Wheat Agronomy

### Late-Winter Nitrogen Topdressing on Wheat—Make Your Plans Now

An important growth stage of wheat is approaching in the region that accentuates the need for timely application of N fertilizer, especially in our irrigated wheat. With the condition of dryland wheat being so poor, this is not a significant dryland issue at this time, though another timely rain like we had Feb. 8 can change bleak prospects.

In the South Plains, typically about March 1<sup>st</sup> (plus or minus 7 days or so), the growing point in wheat differentiates from producing leaves (vegetative) to determining over a 7 to 10 day period how many spikelets and seeds per spikelet (reproductive) your crop can potentially have. This process starts just prior to jointing, which is evident in the crop when varieties with prostrate growth habit start to stand up, nodes are observed in the base of the stem, and a few days later first hollow stem will be observed (see figure below). This development is the first and most important component of yield potential.



*Hollow stem in wheat several days after jointing has begun. A second hollow stem between joints is forming at the arrow, and to the left is the developing grain head*

As the growing point differentiates we want the crop to avoid stress from lack of moisture and insufficient nitrogen so that in turn you can set a high *potential* yield in your crop. Of course, what happens later—rainfall, weather, irrigation, insects, disease, etc.—will determine how much of that yield potential you can fulfill. But if there is an artificial and unnecessary limit placed on yield potential coming out of growing point differentiation, then you have set an un-

wanted cap on yield potential. Later applied N cannot increase seed number.

Consult the [November 26 issue of FOCUS on South Plains Agriculture](#) for tips on top-dressing N on wheat. In 2008, Extension noted that at least 25% or more of regional producers were applying significant N—with reduced potential benefit—after potential seed number was already determined.

### **Watch for Weeds in Wheat!**

Extension agronomist Brent Bean, Amarillo, notes this is shaping up to be a very bad year for winter weeds. Producers might consider applying herbicide as they go over the field applying topdress nitrogen. Keep in mind that when mustard weeds are small and in the rosette stage they are much easier to control than after they bolt. Also, the longer the weeds are there, the more soil water they are using.

Many herbicides will control the most common mustards in wheat. But the tougher-to-control weeds like prickly lettuce and kochia will require special attention when it comes to herbicide selection. In general, choose a herbicide based on how long you want it to last in the soil, Bean says. For example, 2,4-D will generally do a good job of controlling small mustard weeds but has no soil residual. Other weeds can emerge after the application that will not be controlled.

Texas AgriLife Extension's updated 2008 "[Weed Control Recommendations in Wheat](#)" is available online. (This section by Brent Bean)

### **Other Wheat Grain Production Issues**

#### **Irrigation**

As noted above, if your wheat has received minimal irrigation through the winter months then growth needs to be jumpstarted with irrigation. At this point wheat that received up to 1/3 of N in the fall (part of our standard 'rule-of-

thumb' recommendation for wheat) and has received 1" of irrigation per month over the winter clearly looks to be in better condition. Applying irrigation in the next 1-2 weeks should enhance the set of more spikelets and potential seeds per spikelet in a way that later irrigation (after the growing point finishes differentiation) cannot do.

### Russian Wheat Aphid & Other Insects

A few fields in the western South Plains have RWA infestations in varying degrees, currently perhaps as much as 5% of stems, where leaves are maroon/purplish in color and may have white streaks, and the leaves are rolled up. Some experienced producers anticipate the need to spray for control as toxin-injecting RWA is potentially much more damaging than greenbugs. However, Texas AgriLife Extension Service entomologists have prepared guidelines for determining treatment thresholds for RWA in wheat based on incidence in the field, yield potential, and projected grain prices. You can learn more about RWA, scouting, and determining your spray threshold in "[Managing Insects & Mite Pests of Texas Small Grains](#)," available online or through your county Extension office.

### Oats Agronomy

#### Spring Planting Oats for Forage Production

Numerous producers are now or soon will be planting oats for hay production. A [primer for oat production in the Texas South Plains](#) is available online or through your county Extension office.

The quick tips for spring-planted oats (not necessarily spring oats) include:

- Planting once average soil temperatures reach a minimum of 45 F (we're there) although 50 F is a little better.
- Agronomic seeding rates of 3 bu/A (90-100 lbs./A) for irrigated although due to oat seed costs, some producers will cut back a bit. If

we get a good rain then we'd suggest 2 bu/A on dryland.

- Ample nitrogen applied up front (~25 lbs. N/acre for each ton of dry matter production).
- Varieties—Data from 2001-2003 demonstrated best forage production in general was achieved using medium-long & long maturity oat varieties (these include Troy, Monida, Charisma, Magnum) and extra-long season Walken. Shorter maturity oats, which yielded better for grain production, produced considerably less forage in a one-time hay harvest (Bob, Jerry, Dallas, Chilocco, Nora).

### Alfalfa Agronomy

#### Spring Seeding Alfalfa in 2009

I have learned that across the region there are over 1,000 acres of alfalfa targeted for spring seeding in late March and early April. Texas AgriLife Extension Service strongly discourages spring-seeded alfalfa for many reasons including increased insect and weed pressure, loss of stands due to blowing conditions, greatly reduced first-year production in spite of similar irrigation levels, etc. We simply do not recommend it.

Growers who have tried spring alfalfa seedings acknowledge the difficulties in getting a spring seeding established, and most agree (or swear!) they wouldn't do it again. One of our South Plains crop consultants says spring seeding alfalfa is gambling your money (might as well go to Las Vegas, at least you will have some fun, she says). Rather we should invest our money in a fall seeding.

For further information on this topic, consult Extension's "[Spring Fever Alfalfa—The Pitfalls of Spring Seeding Alfalfa in West Texas](#)" available online or through your county Extension office. Options regularly suggested as an alternative to spring seeding alfalfa are considering spring-planted oats (finished by June to early July), summer annual forages like hybrid pearl millet or sorghum/sudan (no seed maturity required so you control harvest). Once these crops

are out of the way then producers have ample time to prepare a firm seedbed for a September alfalfa seeding.

## Soybean Agronomy

### Are Soybeans Suitable for the Central & Lower South Plains?

Extension has received several inquiries for information on soybean production, particularly in the southwest South Plains. Here's a general summary of the issues, namely the lack of good production, in soybean for this region.

#### Soybeans and Heat and Irrigation

First, I do not advocate soybeans south of about U.S. 70 (Plainview) for the primary fact that for the amount of irrigation available, the yields tend to be unsatisfactory. This was Lubbock Co. Ag. Extension agent Mark Brown's comment about 2000, and little has changed since. Some literature suggests that full irrigation soybeans may take as much as 80% of the irrigation required for corn. Heat and low humidity are major concerns. Soybean is very sensitive to these conditions at bloom.

For soybeans, Texas AgriLife's numbers suggest 2.5-3.5 bu of yield per acre inch. These are derived from a combination of field trials (not irrigation), producer records, etc. At Halfway in Hale Co. we had 2001-2003 trials on planting date X maturity, and the trials received in the range of 16-18" of irrigation with peak yields at 35-50 bu/A. Bushland data near Amarillo suggests that soybean yields declined 1 bu per day for each day planted after June 20.

#### Other Soybean Production Agronomics

A Dawson Co. producer in about 2003 irrigated 20" and yielded 31 bu/A. This was a wreck though I now believe 9 seed/ft. seeding rate on 36" rows was too thin as he ended up with only 6 plants per foot. If possible I would en-

courage soybeans to be planted on 20" rows in contrast to 40" rows.

P fertilizer should be considered as well as soybean-specific *Rhizobium* inoculant. Current soybean inoculation can be done for less than \$2/acre with seed-applied liquid (which adheres to the seed fairly well), but granular runs you \$6-8/acre. An initial result, however, for 2008 at Lubbock was that in-furrow liquid (a common practice in peanut planting) at the same rate as seed-applied inoculant gave a substantial increase in nodulation (~23 per plant vs. 1-5 per plant with seed-applied inoculant). Would we potentially get an N benefit to the subsequent crop? Not if we don't get good nodulation!

I would recommend Group IV soybeans, even if planting late May or in early July. Yields were best in our Hale Co. trial if planted early May to early June with Group IV and Group V (determinant) varieties.

Extension agronomist Brent Bean has a primer on High Plains soybeans and there are a couple of items on irrigation and growth stages at <http://lubbock.tamu.edu/othercrops/soybeans.php>. We have little other information to offer. Virtually all soybean varieties are Roundup Ready.

Soybean bottom line: To reiterate, I don't encourage soybeans in the central and lower South Plains, but if you decide to try it we have touched on a few of the issues that would be important to your production.

### Variety Testing Information Available

Texas AgriLife Research & Extension has an extensive network of crop evaluations across the region in addition to cotton. Increasingly the [main AgriLife webpage for crop testing information](#) hosts a wide range of our trial results, which includes High Plains results for corn, silage, grain sorghum, wheat, and sunflower.

In advance of web posting of results, if you are making decisions about 2009 hybrid and variety selection, contact Calvin Trostle, and I will find what you need. CT

# FOCUS on South Plains Agriculture

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