



THE PULSE AGRONOMY NETWORK
PARTNERSHIP WITH INDUSTRY



PAN - All Pulse Bulletin #3 – April 19th, 2010

In this issue:

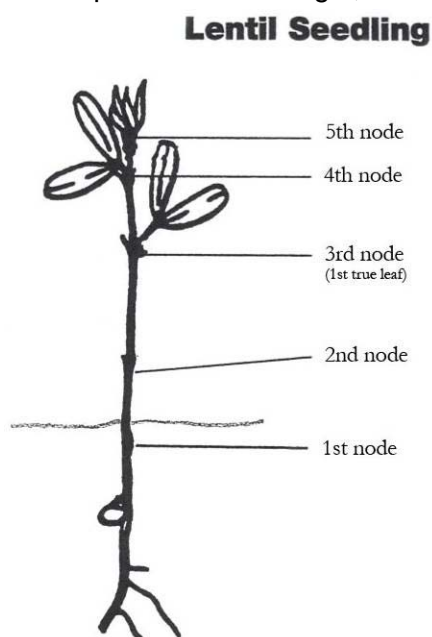
- Lentil Seedling Staging and Land Rolling
- Authority 480 – Not registered for Chickpea growers in Alberta
- AFSC Crop Insurance Enrolment Deadline Approaching
- Drought Report for the Agricultural Region of Alberta

Lentil Seedling Staging and Land Rolling

Neil Whatley

Seedling Staging - Due to variations in plant seedling heights caused by environmental conditions, agronomic guidelines are generally provided in leaf stages as opposed to plant height measurements. A lentil leaf is unique compared with the leaves of other common crops we grow like cereals and oilseeds.

We are accustomed to seeing the leaf of a cereal plant that is long and thin, or the leaf of a canola plant that is a single, broad structure. Like field pea, lentil is a member of the legume



plant family and as such it contains broad leaves, but these leaves are compound, containing leaflets. When determining the growth stage of a cereal or oilseed crop, we talk in leaf stages; however, with a lentil or field pea crop we are dealing with leaves with leaflets, which can be confused as leaves. A mistaken agronomic guideline can cause serious crop damage. So, instead of referring to leaf stages, with the grain legumes, we refer to node stages (see diagram). A node is the place on a plant stem where the leaf is attached. On a lentil seedling, the two lowermost nodes are without a leaf, but a small vegetative protrusion is visible. The first node is generally just below the soil surface. The second node is the protrusion just above this and the third node is where the first leaf is attached. On a small lentil seedling, the first leaf is often comprised of just two leaflets. Instead of referring to node stages, some guidelines refer to “true leaf” stages and it is this first leaf (a compound leaf with two tiny leaflets) that is the first “true leaf”. So, the third “node” stage and the first “true leaf” stage refer to the same seedling stage.

Land Rolling - Mature lentil plants produce pods that hang near to the soil surface, necessitating land rolling after seeding to ensure greater ease of harvester cutter bar passage at harvest time. Land rolling breaks dirt lumps caused by the seeder, pushes stones into the soil and smoothes out field ridges. Rolling can be done either pre-emergently or post-emergently. If there is little crop residue from the previous year or if the soil surface is very dry, definitely roll after crop

emergence to prevent soil erosion which could sand blast and damage the seedlings. Lentil seedlings can be rolled up to the 5th to 7th node stages (3rd to 5th true leaf stages) without causing significant seedling damage. Rolling later can cause seedling stem breakage leading to reduced seed yield and leaves plants susceptible to foliar diseases like ascochyta blight.

Due to a unique leaf pattern, agronomic guidelines for grain legumes like lentil are different than guidelines for other crops. It is important to learn how to stage a lentil seedling to appropriately carry out necessary field operations like land rolling.

Authority 480 – Not registered for Chickpea growers in Alberta

Chickpea producers in **Saskatchewan** continue to have a broadleaf herbicide registered for use, Authority 480 Herbicide, with the active ingredient, sulfentrazone, which is registered for control of kochia, wild buckwheat, lamb's-quarters, and red root pigweed. The Pest Management Regulatory Agency (PMRA) decided on April 8th, 2010 to deny an emergency use registration for Authority in chickpeas in Alberta. **The emergency use registration for Alberta expired August 31, 2009.** Part of the rationale for refusing the request is that saflufenacil (HEAT™ WG) was recently registered as a pre-seed and pre-emergent herbicide for kabuli chickpeas for control of broadleaf weeds including kochia, wild buckwheat, lamb's-quarters, and redroot pigweed.

Saflufenacil (HEAT) and Sulfentrazone (Authority 480) belong to the group of herbicides that are Protox inhibitors, commonly referred to as Group 14 herbicides. This group also includes the herbicide carfentrazone, found in CleanStart. As Group 14 herbicides, HEAT and Authority will provide control of kochia resistant to other herbicide groups, in particular Group 2.

Heat WG does not control grass weeds. HEAT should always be tank mixed with glyphosate for broad spectrum weed control. Do not apply any other soil applied herbicide with, before or after applications of HEAT and glyphosate. Sufficient data to support such a use pattern is not available and injury could result.

For Saskatchewan chickpea producers, the Authority registration has several use restrictions:

- Authority can only be applied in medium and fine soils.
- The year following Authority application only alfalfa, field corn, soybeans, sunflowers, and spring wheat can be grown. Canola can be planted 24 months after application and all other crops should follow application by a minimum of 36 months. Lentils have been observed to be very sensitive.
- Authority cannot be applied to crops that are irrigated.

Consult the herbicide labels prior to use.

See also:

[HEAT WG Label](#)

[Authority 480 Label](#)

AFSC Crop Insurance Enrolment Deadline Approaching

April 30, 2010 is an important crop insurance deadline. Producers need to make decisions about which risk management tools they require this year, options include the Spring Price

Endorsement (SPE) rider on crop insurance, which protects farmers if prices decline 10-to-50 per cent between spring and fall, the Hail Endorsement and/or the option to auto elect for Straight Hail.

Lorelei Hulston, provincial insurance manager for Agriculture Financial Services Corporation (AFSC), the provincial Crown Corporation that administers crop insurance in Alberta on behalf of the provincial and federal governments notes that this auto elect option is a major change to crop insurance this year. "Until now, producers had to wait until their crops emerged to purchase Straight Hail insurance. If they waited too long and their fields were damaged more than 25 per cent by early hail, they were no longer eligible for Straight Hail coverage on those fields for the rest of the year." says Hulston.

"The new Auto Elect option eliminates that risk because hail coverage can now be in place before April 30, 2010. When crops emerge, you won't be caught off guard by early hail. On average, 150 hail damage claims are made each year across Alberta before June 15."

Producers who choose Auto Elect receive a two per cent discount on their Straight Hail premium. Hail damage, low grain prices, and cool, dry conditions were to blame for most of the \$444 million paid out in crop insurance claims last year across the province.

AFSC Deadlines:

April 30

- **Annual Insurance-** Apply, make changes or cancel your coverage
- **AgriStability-** Enrolment & Fee (no penalty)

June 20

- **Annual Insurance** - Land Reports

September 30

- **AgriStability** - Supplementary Forms - prior year (no penalty)

October 15

- **Perennial Insurance-** Hay Harvested Production Reports

November 15

- **Annual Insurance** - Crop Harvested Production Reports

December 31

- **AgriStability** - Fee (with penalty), Supplementary Forms - prior year (with penalty)

Producers with questions about crop insurance can call their nearest AFSC office or the AFSC Call Centre at 1-877-899-AFSC (2372) before the April 30 deadline.

Drought Report for the Agricultural Region of Alberta

Since the last drought report (February 28, 2010), at least near normal precipitation accumulations (15 to 35 mm) were recorded across the south-half and the north corner of the Peace Region, the northeastern corner of the Northern Region, as well as in parts of the foothills and the southeastern corner of the Southern Region; however, precipitation accumulations across the rest of the reporting area were generally less than 10 mm, which is less than 50 per cent of normal.

Currently, modeled soil moisture reserves, relative to long-term-normal, vary from very low to extremely low (less than 25 mm) across most parts of the Northern and Central Regions, and

also across the western and southern portions of the Southern Region. Only a few areas in Alberta are currently near normal. These areas are in the south-eastern portions of the Southern Region and also in the north-western portions of the Peace Region. Unless significant precipitation is seen over the next several weeks, soil moisture reserves will remain critically low, increasing the risk of moisture stress, in the event of dry weather. This year it is critical that at least near normal precipitation patterns return, particularly through the months of May to July, which are usually the three wettest months of the year.

A large selection of related maps can be found at <http://www.agric.gov.ab.ca/acis>, under the Quick Viewer tab. Note these maps are updated once a week (usually by Wednesday) providing updates between drought reports.

The complete report is available at:

[http://www1.agric.gov.ab.ca/\\$department/deptdocs.nsf/all/dis13060#precipitation](http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/dis13060#precipitation)

Previous PAN Bulletins

View Previous PAN Bulletins at:

<http://www.pulse.ab.ca/ForProducers/Publications/PulseAgronomyNetwork/tabid/125/Default.aspx>

If there is an article that you would like to see or contribute to the Pulse Agronomy Network, e-mail reply or call 780-986-9398 Ext3.

If you would like to subscribe or unsubscribe to this mailing list please reply to tjones@pulse.ab.ca