

Vol. 17 No. 18

# Pest Alert

August 18, 2000

**The Pest Alert is now found on the World Wide Web at  
<http://www.colostate.edu/programs/pestalet>**

**AUGUST 13 VEGNET REPORT (P 1)  
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## **AUGUST 13 VEGNET REPORT**

During the second week of August - 2000, rainfall totals (inches) varied from 0 to 0.28 throughout Colorado, western Nebraska, western Kansas and eastern Wyoming. Temperatures averaged in the low to upper 90s throughout the region. The regional weather forecast predicts below average rainfall and above average temperatures for the third week of August.

Very few disease reports continue to filter in to VegNet. The Sugar Beet industry is still reporting infection from *Cercospora* Leaf Spot; and some powdery mildew has been observed in Front Range fields.

Please share sightings of pest problems by calling the CSU VegNet Team at 970-491-6987 (Howard Schwartz), 491-7846 (Mark McMillan), or 491-0256 (Kris Otto).

### POTATO

Most of the earlier planted fields are finished for the season, but continue to scout later planted fields for early blight and late blight. Disease pressure has generally been light, as heat stress has been the dominant problem for the potatoes in recent weeks.

For late fields, maintain the Early Blight Protection Program throughout the Front Range and northeastern areas of Colorado with protectant fungicides such as the EBDCs (e.g., maneb, mancozeb, penncozeb, dithane, polyram, Quadris), super tin.

Disease Model: with a May 1 emergence date, the early blight model (threshold of 300) is averaging 660 to 7000 and with a May 15 emergence (regrowth) date, the early blight model is averaging 590 - 630 throughout eastern Colorado as of August 13. However, the high temperatures have apparently exceeded the optimum for the fungus to develop, even in the presence of moisture

The late blight model (threshold of 18, with disease possible in 7 to 14 days) has not changed appreciably during the last week, and is holding at 9 to 18 in the Front Range, 19 at Fort Morgan, and 18 to 28 at northeastern sites (Wray, Yuma), with a May 1 emergence date. A mid-May emergence date lowers the disease values 1 or 2 points, only. There are still no reports of Late Blight in the state as of August 13.

In the San Luis Valley (May 1 emergence date), the early blight model is at 530; and the late blight model is still less than 2.

Maintain an aggressive scouting program, and use the earlier emergence date to schedule more aggressive protection programs for early blight and late blight, if it shows up this year especially on later planted fields of potatoes.

#### DRY BEAN

Continue to scout fields for early signs of rust, white mold or bacterial diseases such as common bacterial blight, bacterial brown spot, and/or halo blight.

Rust has been confirmed on Bill Z a few miles northwest of Brush, and near Vernon, CO in the last day.

If rust is detected in susceptible varieties, protectant fungicides such as Bravo at a 14-day phi and Maneb at a 30-day phi have been effective in recent university trials. [Note: There is no Section 18 label for Tilt available for bean producers to use in Colorado or Nebraska during 2000.]

A late-season copper-based bactericide program (with products such as Kocide, Champ, NuCop, etc) continued during pod fill to early bump periods can reduce common blight (bacterial brown spot, halo blight) severity later during late bump to striping. Maintain the protection until late pod bump if disease threatens; until 2 - 3 weeks preknifing.

White mold is managed by application of fungicides such as Topsin and Benlate at 100 % to full bloom with good coverage of the blossoms to reduce infection sites for the pathogen. Manage irrigation water to dry out plant canopies and soil surfaces between waterings.

Western flower thrips feed in developing flowers and can cause flower and pod abortion. Five flower thrips per blossom can reduce the number of seeds per pod and number of pods per plant. Treatment with products such as Orthene can reduced western flower thrips losses.

Heat stress during the last few weeks is affecting pod abortion, pod set, seed fill and seed size in the bean crop throughout the region.

## ONION

Most seeded fields continue to bulk up well, and may benefit from a protectant bactericide/fungicide application (copper + EBDC product such as maneb, mancozeb, dithane, penncozeb) for the bacterial disease complex. There are still no reports of serious bacterial (or foliar fungal) problems in transplanted or seeded onion, other than a few plants affected by bacterial soft rot, purple blotch and possibly a trace amount of downy mildew in the Front Range. Botrytis blast may appear at this stage of the season as small, whitish, sunken lesions usually beginning near leaf tips and progressing downwards.

Maintain the copper-based bactericide program, tank-mixed with an EBDC product on a 7 to 10 day interval to reduce problems with bacterial diseases and any fungal diseases (Purple Blotch, Botrytis Blast) that could develop as the plants continue to develop and mature in the next few weeks. Rovral could be added for enhanced protection against Purple Botch and/or Botrytis if detected. Ridomil/Copper can be added for enhanced protection against Downy Mildew if detected.

If one uses an April 1 emergence date for seeded onions, the Purple Blotch disease model (threshold value of 300) is averaging 460 to 550 in the Front Range and Fort Morgan areas, 420 to 470 in the Arkansas Valley and West Slope areas. Therefore, our onion areas have exceeded the threshold and require aggressive scouting programs to detect early infection in the next 7 to 14 days in seeded fields; especially later fields of onions. However, the high temperatures have apparently exceeded the optimum for the fungus to develop, even in the presence of moisture.

## **AUGUST 20 VEGNET REPORT**

During the third week of August - 2000, rainfall totals (inches) varied from 0 to 1.26 throughout Colorado, western Nebraska, western Kansas and eastern Wyoming. Temperatures averaged in the upper 80s to low 90s throughout the region. The regional weather forecast predicts average to above average rainfall and above average temperatures for the last week of August.

There was a wave of bean rust reports from western Nebraska and a few reports of light infection from northeastern Colorado north of Fort Morgan last week. Very few disease reports from other crops and areas have filtered in to VegNet recently; however, last week's rains could contribute to more disease development throughout the region. The Sugar Beet industry is still reporting infection from Cercospora Leaf Spot; and some powdery mildew has been observed in Front Range fields.

Please share sightings of pest problems by calling the CSU VegNet Team at 970-491-6987 (Howard Schwartz), 491-7846 (Mark McMillan), or 491-0256 (Kris Otto).

## POTATO

Continue to scout later planted fields for early blight and late blight. Disease pressure has generally been light, as heat stress has been the dominant problem for the potatoes in recent weeks. However, the recent rains may stimulate a flush of early blight and possibly other problems.

For late fields, maintain the Early Blight Protection Program throughout the Front Range and northeastern areas of Colorado with protectant fungicides such as the EBDCs (e.g., maneb, mancozeb, penncozeb, dithane, polyram, Quadris), super tin.

Disease Model: with a May 15 emergence (regrowth) date, the early blight model is averaging 630 - 680 throughout eastern Colorado as of August 20.

The late blight model (threshold of 18, with disease possible in 7 to 14 days) has increased a few points during the last week, and is averaging 12 to 20 in the Front Range, 21 at Fort Morgan, and is unchanged at 18 to 29 at northeastern sites (Wray, Yuma), with a May 15 emergence date. There are still no reports of Late Blight in the state as of August 20.

In the San Luis Valley (May 1 emergence date), the early blight model is at 574; and the late blight model is still less than 3.

### DRY BEAN

Continue to scout late maturing fields for early signs of rust, white mold or bacterial diseases such as common bacterial blight, bacterial brown spot, and/or halo blight.

Rust has been confirmed on Bill Z a few miles northwest of Brush, and near Vernon, CO; as well as in southwestern and northwestern Nebraska during the last week.

If rust is detected in susceptible varieties, protectant fungicides such as Bravo at a 14 day phi could still provide protection against secondary infection if the plants have 3 weeks or longer until knifing. [Note: There is no Section 18 label for Tilt available for bean producers to use in Colorado or Nebraska during 2000.]

A late-season copper-based bactericide program (with products such as Kocide, Champ, NuCop, etc) continued during pod fill to early bump periods can reduce common blight (bacterial brown spot, halo blight) severity later during late bump to striping. Maintain the protection until late pod bump if disease threatens; until 2 - 3 weeks preknifing.

White mold is managed late in the season by careful management of irrigation water to dry out plant canopies and soil surfaces between waterings.

### ONION

Most seeded fields continue to bulk up well and are cropping, and may benefit from a continued protectant bactericide/fungicide application (copper + EBDC product such as maneb, mancozeb, dithane, penncozeb) for the bacterial disease complex. There are still no reports of serious bacterial (or foliar fungal) problems, other than a few plants affected by bacterial soft rot, purple blotch and possibly a trace amount of downy mildew in the Front Range. Botrytis blast may appear at this stage of the season as small, whitish, sunken lesions usually beginning near leaf tips and progressing downwards.

Maintain the copper-based bactericide program, tank-mixed with an EBDC product on a 7 to 10 day interval to reduce problems with bacterial diseases and any fungal diseases (Purple Blotch, Botrytis Blast) that could develop as the plants continue to develop and mature in the next few weeks. Rovral could be added for enhanced protection against Purple Botch and/or

Botrytis if detected. Ridomil/Copper can be added for enhanced protection against Downy Mildew if detected.

If one uses an April 1 emergence date for seeded onions, the Purple Blotch disease model (threshold value of 300) is averaging 500 to 570 in the Front Range and Fort Morgan areas, 450 to 500 in the Arkansas Valley and West Slope areas. Therefore, our onion areas have exceeded the threshold and require aggressive scouting programs to detect early infection in the next 7 to 14 days in seeded fields; especially later fields of onions considering the cooler temperatures and greater rainfall du

## CONTRIBUTORS

**K. George Beck**, Extension Weed Specialist, Perennial and Range (970) 491-7568;  
gbeck@lamar.colostate.edu

**William M. Brown**, Extension Plant Pathologist, IPM and General (970) 491-6470;  
wbrown@lamar.colostate.edu

**Whitney S. Cranshaw**, Extension Entomologist, Urban and Horticulture (970) 491-6781;  
wcransha@ceres.agsci.colostate.edu

**Sandra McDonald**, Extension Specialist, Environmental and Pesticide Education (970) 491-6027;  
smcdonal@lamar.colostate.edu

**Scott J. Nissen**, Extension Weed Specialist, Row Crops (970) 491-3489;  
snissen@lamar.colostate.edu

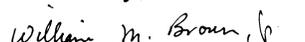
**Frank B. Peairs**, Extension Entomologist, Field Crops (970) 491-5945;  
fbpeairs@lamar.colostate.edu

**Howard F. Schwartz**, Extension Plant Pathologist, Row and Vegetable Crops (970) 491-6987;  
hfspp@lamar.colostate.edu

**Philip H. Westra**, Extension Weed Specialist, Row Crops (970) 491-5219;  
pwestra@ceres.agsci.colostate.edu

Where trade names are used, no discrimination is intended, and no endorsement by the Cooperative Extension Service is implied.

Sincerely,

  
William M. Brown, Jr.  
Extension Plant Pathologist