

Vol. 17 No. 13

Pest Alert

July 14, 2000

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

JULY 10 VEGNET REPORT (P 1)

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During July of 2000, rainfall totaled less than 0.60 inches throughout Colorado, western Kansas, western Nebraska and southeastern Wyoming. Temperatures averaged in the mid to upper 90s at most sites during the first 10 days of July. The regional weather forecast predicts average to below average rainfall and above average temperatures for mid July.

There are still no reports of foliar disease problems on sugar beet, onion or bean at this stage. The widespread high temperatures and low rainfall patterns last week should have reduced the potential for foliar disease development, assuming no storm damage occurred to specific fields being scouted.

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

Samples of Alternaria blight and Early Blight continue to be sent in and observed in early potato fields throughout the Front Range and northeastern areas of Colorado, and should be managed with protectant fungicides such as the EBDCs (e.g., maneb, mancozeb, penncozeb, dithane, polyram, Quadris), super tin; Bravo may not be very effective against the Alternaria blight, but is effective against Early Blight.

Disease Model: with a May 1 emergence date, the early blight model (threshold of 300) is averaging nearly 440; and with a May 15 emergence (regrowth) date, the early blight model is averaging 365 throughout eastern Colorado as of July 9.

Colorado State University, U.S. Department of Agriculture and Colorado counties cooperating.
Cooperative Extension programs are available to all without discrimination.

The late blight model (threshold of 18) still remains below 7 at all reporting sites in Colorado, regardless of the early or mid May emergence date. The exception is for a May 1 emergence date at Wray, where the late blight model value is 11 as of July 9.

Since not all potato plants were frozen back in every field, it is probably better to use the earlier emergence date to schedule aggressive scouting calendars to detect the first signs of early blight before initiating and maintaining your fungicide program after row closure and during tuber bulking.

DRY BEAN

The bean rust model confirms that there is low potential for disease development based upon scattered outbreaks of light rust late in the 1999 season, no evidence of infected volunteer bean plants this spring, widespread planting of rust-resistant varieties, reduced bean acreage, high temperatures and dry conditions this spring, and forecasts for continued hot, dry conditions throughout the High Plains region in 2000.

If these high temperature periods persist throughout the vegetative and flowering periods, common bacterial blight will probably be the most reported foliar disease threat this season; especially if storms and/or contaminated irrigation water move the bacterium within and between bean fields. The early to mid-season copper-based bactericide program initiated during the vegetative period (preferably with a ground-rig) can reduce common blight (bacterial brown spot, halo blight) severity later during flowering and pod-set.

The hot, dry conditions this spring have contributed to continued reports of high thrips populations on dry bean plants in northeastern Colorado and surrounding region. Thrips are small, active, cigarette-shaped, yellow-to-brown insects. Onion thrips are most commonly associated with furrow irrigated beans grown in close proximity to winter wheat. Infestations commonly occur as the wheat matures and the onion thrips disperse in search of new food sources. Onion thrips feeding results in leaf cupping and distortion that is made severe by plant stress (low moisture and high temperature).

Consider treatment (Orthene, Disyston, Lannate) if there are more than 15 thrips per plant and damage is observed. Tap the plant on white cardboard or in a white container and then count the thrips that have been knocked off. Onion thrips infestations and damage are often more severe at field edges so be sure to assess the entire field before making a treatment decision. Western flower thrips feed in developing flowers and can cause flower and pod abortion. Five flower thrips per blossom can reduce the number of pods per plant.

ONION

Onion transplants continue to develop rapidly and exceed 3 - 4 inch diameters. 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.

Most seeded fields are also growing vigorously as they approach bulbing stages 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 a few early seeded fields that are moving beyond the early bulb stage, and these fields may benefit from additional fungicide protection as plant canopies create more favorable microclimates and as the plants become more susceptible physiologically. There are no reports of bacterial problems in transplanted or seeded onion

If one uses an April 1 emergence date for seeded onions, the Purple Blotch disease model (threshold value of 300) is averaging 360 in the Front Range and Fort Morgan areas, 300 in the Arkansas Valley, and 300 on the West Slope. Therefore, most onion areas are approaching or have exceeded the threshold and require aggressive scouting programs to detect early infection in the next 7 to 14 days in transplanted and/or seeded fields.

Pink root and Fusarium basal plate rot affected plants continue to be observed in many fields this year, due in large part to the ongoing high temperature stress. Avoid additional stress from root pruning (during cultivation and/or lay-by applications of fertilizer). (Schwartz)

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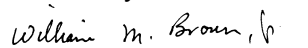
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Where trade names are used, no discrimination is intended, and no endorsement by the Cooperative Extension Service is implied.

Sincerely,


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