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

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JULY 3 VEGNET REPORT

During June of 2000, rainfall totaled less than 0.50 inches throughout western Colorado and Kansas, and less than one inch throughout western Nebraska and southern Colorado. Northeastern Colorado sites totaled less than 1.75 inches at all reporting stations. Temperatures averaged in the low to mid 80s at most sites during the last week of June. The regional weather forecast predicts average to above average rainfall and average to above average temperatures for early July.

There are still no reports of foliar disease problems on sugar beet, onion or bean at this stage. The widespread lower temperatures and low rainfall patterns last week may contribute to some disease development in the following weeks as plant canopies continue to develop and mature.

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 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 Alternaria blight, but is effective against Early Blight.

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



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<u>Disease Model</u>: with a May 1 emergence date, the early blight model (threshold of 300) is averaging nearly 400; and with a May 15 emergence (regrowth) date, the early blight model is averaging 330 throughout eastern Colorado as of July 3.

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 9 as of July 3.

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 recent 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, etc) 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.

Recently, there have been some reports and samples of herbicide damage (carryover and/or applied) causing stunted, yellowed and small-leafed plants; especially in combination with minimum-till corn systems where high amounts of corn debris contributed to more cool and moist soil conditions which delayed bean plant emergence and increased exposure to various herbicides.

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<u>ONION</u>

Onion transplants continue to develop rapidly and exceed 3-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 growing vigorously as they approach early-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 330 in the Front Range and Fort Morgan areas, 290 in the Arkansas Valley, and 275 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 are being observed in many fields this year, and probably the incidence is due in part to the early-season high temperature stress. Avoid additional stress from root pruning (during cultivation and/or lay-by applications of fertilizer). (Schwartz)

SUNFLOWER RUST FUNGICIDE

The Colorado Department of Agriculture and Bayer Corporation are pleased to announce that Folicur 3.6F (EPA Reg. No. 3125-394) has been granted a Section 18 Emergency Exemption for use at the rate of 4 fl. oz (1.8 oz. a.i.)/Acre against red rust of sunflower in Colorado. The label states that the product should be applied to susceptible varieties at the earliest sign of rust pustules or when weather conditions are conducive for rust development. Repeat applications at 14-day intervals if necessary to maintain control of rust; apply in sufficient water (i.e., 20 gal/A by ground and a minimum of 5 gal/A by air) and surfactant for thorough coverage.

A maximum of 8 fluid ounces of Folicur may be applied per acre per year. Folicur may be applied up to 50 days before harvest. A maximum of 75,000 acres of sunflowers in Colorado may be treated. A rotational crop restriction of 120 days applies to crops not currently listed on the registered label; currently only peanut and grasses grown for seed are labeled. Since the emergency condition is dependent on weather favorable to disease development, final approval of the use of Folicur (tebuconazole) will be determined by the State's expert(s). (Schwartz)

ONION FUNGICIDE CANCELLATION

BASF Corporation announced on July 3, 2000 that they would propose cancellation of **Ronilan** (vinclozolin) on onion effective July 15, 2000. Use on onion will be allowed until January 1, 2001. Commodities legally treated up to January 1, 2001 would be allowed into the channels of trade past January 1, 2001 in accordance with FFDCA Section 408(1)(5). There will be no product recalls.

This action has been taken by BASF to comply with the new Food Quality Protection Act safety standards and not by any new data concerning vinclozolin. BASF emphasizes that Ronilan is safe and effective when used in accordance with label directions. The environmental safety and health profile of vinclozolin is well understood and sound safety margins have been in place since it was first introduced to the market place.

These actions are a strong effort to balance the new FQPA safety standards with the preservation of vinclozolin as a tool for other crops for which few or no other options are available, such as lettuce, snap beans, and canola. For more information, contact Jerry Minore, BASF Market Manager, at 919-547-2000. (Schwartz)

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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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