

NOTE: BEGINNING JANUARY, 2001, PEST ALERT WILL ONLY BE AVAILABLE ON THE WEB.
FOR ELECTRONIC NOTIFICATION, PLEASE EMAIL YOUR ADDRESS TO bspm@lamar.colostate.edu. (Check out our complete web site!)

POTATO UPDATE (P 1)
ONION UPDATE (P 2)
DRY BEAN UPDATE (P 2)
NEW FACT SHEET ON FUSARIUM WILT (P 3)
EPA PUBLISHES FINAL TOLERANCE REVOCATIONS FOR FIVE PESTICIDES (P 3)
SCIENTIFIC REPORT ON STARLINK CORN AVAILABLE (P 3)

POTATO UPDATE

July 30, 2001 UPDATE: There are still no confirmed reports of Late Blight in our region, presumably due to clean seed pieces and/or hot dry conditions, even after the threshold was crossed in most locations earlier this season. See Pest Summary at http://www.csuag.com

Potato Early Blight Models are above the threshold level of 300 at all locations across northeastern Colorado. See Pest Summary. Maintain the protectant fungicide program on a weekly basis with products which include EBDCs (maneb, mancozeb, Penncozeb, Dithane, Polyram), Bravo/Equus, SuperTin, Quadris with an adjuvant if recommended on the fungicide label.

Last week's weather was cooler and dry throughout eastern Colorado, and wet in northeastern Colorado. More moisture with continued high temperatures are forecast for all Colorado areas this week. Scout fields and continue an aggressive program with your protectant fungicides.

Most of the early fields are near or in harvest. Remember to achieve good vine kill, and allow the vines to dry for a couple of weeks prior to harvest to reduce tuber contamination by spores (especially of Late Blight if it should occur in your field).

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



ONION UPDATE

July 30, 2001 UPDATE: Purple Blotch forecast models are well above the threshold level of 300 throughout Colorado, so scout aggressively for early signs of disease. The disease was confirmed on seeded onions from the Front Range area last week. Aggressively scout fields in these areas and initiate protectant programs. There are still NO reports of Downy Mildew on transplanted or seeded onions, but a fungicide program may be beneficial if the threat and cooler and/or moister weather conditions occur during early August.

Effective fungicides for Purple Blotch and Botrytis include Bravo, EBDC (maneb, mancozeb, ManKocide, penncozeb, Dithane), and Ridomil package mixes (with EBDC, copper, Bravo/Equus). Bravo/Equus, ManKocide and EBDCs are protectants that may have to be applied every 7 - 10 days, while the Ridomil provides protection against Downy Mildew for 14 days or longer in the threat persists. The EBDC and Bravo/Equus products, Quadris and Rovral are effective against Purple Blotch. Quadris and Rovral will provide extended protection for more than 7 – 10 days. Add an adjuvant if recommended on the fungicide label to improve plant coverage.

Bacterial soft rot or other bacterial diseases are now present in most fields in eastern and southern Colorado, and you should include a copper-based bactericide (Champ, NuCop, Kocide, ManKocide, etc) plus EBDC and adjuvant as older transplants begin to bulk up. Our research has shown that the addition of an EBDC fungicide (low rates early in the season, changing to high rates after bulbing when fungal diseases threaten) provides more control of bacteria from the copper. As onions begin to increase bulb size, the bacterial disease complex will become more prevalent.

Most of the transplant fields are near or in harvest. Remember to cure the onions before and/or after topping to reduce disease spread, especially of Bacterial Soft Rot, Black Mold and Botrytis. Use air curing in the storage shed to further dry out the exposed neck and outer, soft scales.

DRY BEAN UPDATE

July 30, 2001 UPDATE: Bean rust was confirmed on volunteer beans northeast of Haxtun, CO in early June. A survey to northwestern Nebraska detected volunteer beans, but no signs of overwintered rust in fields that were infected in 2000. When rust is confirmed in new crop fields this year, fungicide options include Maneb/Manex (30 day preharvest interval), Bravo (14 day interval), and Tilt (28 day interval); Tilt will have a Section 18 label for 2001 in Colorado until August 31. Aggressively scout new crop fields for evidence of early development by these pests before implementation of pesticide programs. Monitor COAGMET weather patterns and pest forecast models, and share pest sightings with VEGNET personnel.

The cooler and wetter weather last week in eastern Colorado will bring on a flush of bacterial disease. Aggressively scout fields and continue the protectant program with copper bactericides through flowering and early pod set. Bacterial disease management with copper-based bactericides such as Champ, Kocide, and NuCop should be initiated as a preventive program at 30, 40 and 50 days post-planting. Add an adjuvant if recommended on the bactericide label. Initiate or continue copper sprays on hail-damaged fields of beans; wait a few days if more than 50% of the canopy was stripped by storm damage to allow new

Pest Alert ~ Vol. 18 No. 09 ~ August 3, 2001 ~ Page 3

growth to emerge and benefit from the protection. Do not use sulfur-based products as curatives for wounds, sulfur will just burn tissue and act as a defoliant at high rates; wounded tissue will dry out naturally and not be a further disease threat to surviving tissue.

Fields with a history of white mold should be managed by the timely application of appropriate fungicides such as Topsin at 100 % flowering (every plant with 1 or more open blossoms) to full bloom. The objective is to get the fungicide on to flowers to protect them from being colonized by fungal ascospores on the soil surface and within the plant canopy. Fungicide coverage and penetration into the canopy are critical; 25 – 30 gal/A with a ground rig, 10 gal/A by air, and less than ¼ inch/A during chemigation. Irrigation management with extended intervals between applications can keep the soil surface and plant canopy dry without stressing pod set and seed fill and reduce losses from white mold. (Schwartz)

NEW FACT SHEET ON FUSARIUM WILT

A new Fact Sheet no. 2.950 entitled, "Fusarium Wilt & Yellows of Sugar Beet & Dry Bean", is now available from Colorado State University. This information was written by Drs. H. Schwartz, L. Panella, M. Brick and P. Byrne as a result of a multi-year, multi-disciplinary and multi-agency effort. Fusarium Yellows, also known as Fuarium wilt, is a fungal disease caused by Fusarium oxysporum with presumed host-specific strains that attack sugar beet (F. o. f. sp. betae) or dry bean (F. o. f. sp. phaseoli). Check out the Fact Sheet for information on the pathogen, disease cycle and management recommendations. (Schwartz)

EPA PUBLISHES FINAL TOLERANCE REVOCATIONS FOR FIVE PESTICIDES

On July 26, 2001, EPA published a final rule revoking 24 tolerances for the pesticides diazinon, parathion, disulfoton, ethoprop, and carbaryl (Federal Register Volume 66, Pages 38950-38955). EPA first proposed these tolerance revocations in the Federal Register on May 24, 1999 (64 FR 27947). In addition, four tolerances are being removed because they are covered by other tolerances. These revocations become effective on October 24, 2001. Tolerances for these chemicals are being revoked because the pesticides are no longer used on crops produced in the United States and no commenters identified a need to retain them for import purposes, or because the crops are no longer considered a significant animal feed item. Tolerances for boysenberries and dewberries for diazinon, and youngberries and dewberries for parathion are being removed because they are covered by the tolerance for blackberries. The review of these tolerances is part of the tolerance reassessment process that EPA is conducting under the Food Quality Protection Act. The Federal Register notice describing these tolerance revocations is available on EPA's web site (www.epa.gov/fedrgstr). Information on tolerance reassessment is available at www.epa.gov/fedrgstr). Information on tolerance reassessment is available at

SCIENTIFIC REPORT ON STARLINK CORN AVAILABLE

An independent Scientific Advisory Panel (SAP), convened to evaluate new data regarding potential allergenicity and exposure to StarLink corn, has completed its assessment and has provided its final report to EPA. The evaluation has provided new recommendations and reaffirmed key conclusions previously reached by the panel. The report, released July 27, 2001 by EPA, summarizes the findings of 16 medical experts and scientists.

In their findings, the SAP reaffirmed key conclusions from their previous report on StarLink, including that there is a "medium likelihood" that StarLink protein is a potential human allergen, and that there is sufficient evidence that there is a "low probability of allergenicity" in the exposed population based on levels of StarLink in the U.S. diet. The Panel also stated that, since there is inadequate information to establish a reasonable scientific certainty that exposure would not be harmful to public health, they could not recommend establishing a specific tolerance level for StarLink. Therefore, based on the panel's recommendations and the available scientific assessment on dietary exposure and allergenicity, establishing a tolerance (legal residue limit) for StarLink in human food products is not currently supported.

"EPA sincerely appreciates the high level of scientific expertise this panel has provided on this important issue," said Stephen L. Johnson, EPA Assistant Administrator for the Office of Prevention, Pesticides and Toxic Substances. "Bringing the best science to the table, and evaluating it in a transparent manner, is fundamental as we continue the important work ensuring protection of public health and maintaining consumer confidence in the integrity of the food supply."

For the near future, EPA, the Food and Drug Administration, and the U.S. Department of Agriculture will maintain their efforts to divert StarLink corn away from the human food supply. The federal government is continuing to work with agricultural interests and the grain industry to ensure that corn is tested for the presence of the StarLink protein, and to direct any StarLink corn grain to approved animal feed and industrial uses.

In addition to reaffirming their previous conclusions about potential allergenicity and exposure, the Panel endorsed EPA's conclusion that the process of wet-milling corn removes virtually all of the StarLink protein (called Cry9C) from products made for human food. This supports EPA's determination that there is no public health risk from eating products manufactured from StarLink corn through the wet-milling process, provided that corn utilized in the wet-milling process does not contain significant levels of StarLink. The SAP also agreed with EPA estimates that StarLink corn would essentially be eliminated from the corn grain supply by 2002, provided that the current efforts to test for and contain StarLink grain and seed are maintained. The SAP agreed with EPA estimates that the Cry9C protein in the domestic corn supply will decline rapidly after the 2001 crop is harvested and with each subsequent production year.

In April 2001, Aventis, the manufacturer of StarLink corn, petitioned EPA for a tolerance of 20 part per billion, which would allow StarLink corn in processed food. The SAP was asked to provide a new scientific analysis of the recent information submitted by Aventis. The complete SAP report is available at: www.epa.gov/scipoly/sap/.

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

Pest Alert ~ Vol. 18 No. 09 ~ August 3, 2001 ~ Page 5

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