Plant Disease and Insect Advisory

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Onion Disease and Crop Development Update

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Onion crops observed in Atoka, Osage and Hughes County are progressing well. However, there have been observations of plant development problems and disease infestation that can potentially reduce yield and quality. Regarding developmental problems, extensive bolting of onions planted from bare-rooted transplants has been observed in several varieties including Yellow Granex and 1015-Y. This is not a growth abnormality but, rather, it is a shift to the reproductive growth mode. It results from onion plants being exposed to certain temperature regimes after becoming larger than approximately pencil-diameter in size. Bolting was probably caused by conditions the plants were exposed to while in the transplant nursery or possibly following transplanting.

In Atoka, Purple Blotch disease caused by the fungus *Alternaria porri* was identified on onions two weeks ago. Because of the continued rainy conditions, onions are at risk of increased infection by purple blotch as well as infection by another common disease, Downy Mildew, which is caused by *Peronospora destructor*. Under the extended wet conditions we are experiencing in parts of the state these diseases are very likely to cause severe damage to onion foliage that is left unprotected.

Fungicide application is recommended to protect onion plantings from these diseases. Suggested fungicides for the control of these diseases in onions include several options. Fungicides that were found effective on both of these diseases in onion production areas outside of Oklahoma include Azoxystrobin (Quadris), Chlorothalonil (Bravo, Daconil), EBDC fungicides (Dithane, Manzate, Penncozeb and others), Pyraclostrobin (Cabrio) and Pyraclostrobin + Boscalid (Pristine). Iprodione (Rovral) is a good choice if Purple blotch is the

primary concern or if symptoms have already been observed on plants. Check fungicide labels carefully for Pre Harvest Intervals and for fungicide rotations that are recommended to reduce the risk of disease resistance to fungicide products.

When applying fungicides to control these diseases it is important to obtain good spray coverage of foliage. Again, follow fungicide product labels regarding recommended regarding gallon per acre spray volumes, spray adjuvants, and application frequencies.

Details on these onion diseases can be found at: www.ext.colostate.edu/pubs/CROPS/02941.html

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