Under the Scope: Vegetable Storage Rots

A few vegetable samples submitted in December 2012 and January 2013 showed evidence of decay. These vegetables had been in storage when the problems were noted.

In the first case, numerous potato tubers exhibited dark lesions on the surface and dark but shallow internal decay when cut. Based on symptoms and isolations from the tissue, this problem was identified as Early Blight, caused by the pathogen *Alternaria solani*, and it was later confirmed that Early Blight have been observed in the field during the growing season.

Photos show (L to R) external symptoms, internal tissue discoloration, and variation of isolates in culture.

The discoloration of the agar is associated with growth of *Alternaria solani.* More information on Early Blight may be found in the *Compendium of Potato Diseases,* 2nd ed., APS Press, or in the feature article on Early Blight on the Vegetable MD Online web site at: http://vegetablemdonline.ppath.cornell.edu/factsheets/Potato_EarlyBlt.htm.

In our second example, we received a portion of a head of cabbage exhibiting various gray to black spots on the surface of the leaves, In most cases, these spots were noted to be more severe on one side of the leaf, and concentrated closer to the mid-rib. We found no microscopic evidence of a pathogen on the tissue, and isolations from the tissue also produced no potential pathogen. In this case, damage is suspected of being due to a physiological disorder commonly known as Pepper Spot or Black Speck.

More information on this disorder may be found in the *Compendium of Brassica Diseases*, APS Press or as part of a feature article on "Non-pathogenic Disorders of Cabbage" on the Vegetable MD Online website at: http://vegetablemdonline.ppath.cornell.edu/factsheets/Crucifers_Nonpathogenic.htm.

Additional online fact sheets that may provide information on this topic include: http://edis.ifas.ufl.edu/pdffiles/HS/HS35200.pdf and http://ucce.ucdavis.edu/files/datastore/234-241.pdf.