Embellisia Skin Blotch of Garlic

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History
Garlic (hardneck: *Allium sativum* var. *ophioscorodon* and softneck: *Allium sativum* var. *sativum*) is susceptible to a large number of fungal pathogens. Garlic is widely grown in Maine and recently has become a significant source of income for many diversified vegetable farms.

Causal Organism
Embellisia Skin Blotch of Garlic is caused by the fungal pathogen *Embellisia allii* (*Helminthosporium allii*). The pathogen is widely distributed in Maine as well as elsewhere in the world. Embellisia Skin Blotch of Garlic is typically a cosmetic issue for garlic vendors and is easily managed.

Disease Cycle
*Embellisia allii* overwinters in plant debris, infested soil, and diseased bulbs and cloves. Embellisia Skin Blotch of Garlic is more of a problem in wet years, or in years with poor drying conditions after harvest. The disease can also be a problem if garlic is stored or marketed under moist conditions.

Symptoms
Disease symptoms start as small water-soaked lesions on the bulbs and develop into brown to black lesions generally underneath the bulb epidermis. Generally, *Embellisia allii* causes cosmetic damage on the bulb only. Left unchecked, the disease may progress into cankers on the cloves.

Figure 1. Bulb symptoms of Embellisia Skin Blotch of Garlic (Photo by S. Johnson)

Figure 2. *Embellisia allii*, casual agent of Embellisia Skin Blotch of Garlic (Photo by B. Watt)
Control

The wide distribution of the pathogen in Maine limits the value of crop rotation as a management tool for disease control. Proper drying conditions and storage conditions with relative humidity less than 70 percent will greatly reduce the potential for the disease. Sorting and removal of diseased bulbs is recommended. When the disease is present, removing the affected outer scales on garlic bulbs before sale or use is usually sufficient.