## Pythium Wilt Project Underway

JP Dundore-Arias and Richard Smith, Professor of Plant Pathology, CSU, Monterey Bay and Farm Advisor UCCE, Monterey County

Pythium wilt is becoming an increasing concern in the Salinas Valley and has been responsible for significant lettuce yield losses. The disease appears to be spreading, and currently we have limited knowledge about its biology and epidemiology. The California Leafy Greens Research Board funded a project this year to explore the following aspects of the disease: 1) monitor the geographic distribution of Pythium wilt to better understand areas that may have greater incidence and the conditions that may lead to greater infection; 2) evaluate the sensitivity of isolates of Pythium to commercial fungicides; and 3) characterize Pythium isolates to confirm if previously identified Pythium uncinulatum is the lone species affecting lettuce or if other species are also involved. All of these objectives will feed into our ultimate goal of developing a rapid and accurate diagnostic technique for identification.

In order to carry out this project we need your help. We need Growers and PCA's to bring samples of suspected Pythium wilt to the UC Cooperative Extension office. Richard Smith will collect and prepare the samples for delivery to JP's lab at CSU, Monterey Bay. Given the current situation with COVID-19, we have a box in front of our office where the samples can be dropped off. Please fill out the green form and place the sample in a plastic bag. Be sure to provide a location where the sample was collected.

To help with distinguishing samples that are suspect for Pythium wilt, look for stunted plants that may have yellowing lower leaves (Photo 1). The older leaves of the plant may be yellowed or necrotic and may be wilted, particularly in the afternoon. Dig up the plants and look for dark discoloration on the feeder or tap root (often lower down on the tap root, Photo 2). If a plant has these symptoms, it is highly suspect for Pythium wilt and we would appreciate a sample.

We appreciate your help on this important project. If you have any questions, do not hesitate to call or text Richard at 831-596-7086.



Photo 1. Note small plants in foreground with wilted older leaves



Photo 2. Note dark colored and rotted main roots