Phenotypic characterization of Mexican isolates of *Phytophthora infestans*

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Mexico is speculated by many to be the origin of the causal agent of late blight disease known as *Phytophthora infestans*. In a recent study conducted by Giovanna Danies, germination rates of US strains of *P. infestans* were analyzed at various temperatures in order to find the prime temperature at which zoospores were released. With so many different strains in Mexico, this sparked an investigation to test some strains to compare results with the US strains. The initial test was to determine if there was diversity for temperature effects on zoospore release from sporangia. Thin circles of water agar were made on glass microscope slides and 20µL of a sporangium suspension was to be placed on the water agar and then incubated at 4C, 10C, 15C, 20C, 25C. At the times of 0, 30 minutes, 120 minutes, and 960 minutes, a slide from each temperature was to be placed under a microscope in order to count the number of sporangia and place them into the categories of direct germination, indirect germination, and no germination. In order to obtain sporangia from stored Mexican cultures, *P. infestans* was grown on an agar plug on pea agar with antibiotics. From there a mycelial plug was taken from the plate and transferred to Rutgers tomato or to Yukon Gold potato leaves. Sporangia from these lesions was to be used for the assay. Unfortunately, I had significant difficulties in getting sporangia from these cultures and therefore have not yet obtained data for the Mexican strains. Efforts to obtain sporulating cultures are in process.