

Gobena, D.J.; Roig, J.; Hulvey, J.; and Lamour, K. 2010. Genetic diversity of the vegetable pathogen *Phytophthora capsici* in Argentina. *Phytopathology* 100:S41.

Phytophthora capsici is an oomycete plant pathogen that attacks solanaceous and cucurbit hosts worldwide. In the U.S., populations from single fields often exhibit extensive genotypic diversity. However, in Peru a single A2 mating type clonal lineage dominates over a wide area. Here we present data on 43 isolates of *P. capsici* recovered from pepper, paprika and pumpkin hosts in 2006, 2007, 2008 and 2009 from different regions in Argentina. All of the isolates were the A1 mating type. The isolates were assayed for population specific single nucleotide polymorphism (SNP) and AFLP profiles. The SNP's were identified by re-sequencing single copy genes in two isolates from the Argentina populations and were assessed for all isolates using high resolution DNA melting analysis. Our preliminary data indicates four unique genotypes with one clonal lineage comprising 86% of the population and two other clonal lineages with only two isolates. An overview of the marker development, application and resultant findings will be presented.