

Cárdenas, M.E.; Céspedes, M.C.; Bernal, A.J.; and Restrepo, S. 2010. *Phytophthora infestans* oospores: Production and viability in Colombia. *Phytopathology* 100:S21.

Phytophthora infestans is the causal agent of the late blight disease in potato (*Solanum tuberosum*) and other members of the Solanaceae family (*S. phureja*, *S. lycopersicum*, *S. betaceum*, *S. melongena*, *S. quitoense* and *Physalis peruviana* among others). In Colombia, the incomes of many people, mainly farmers, depend on most of these crops, mainly potato, tree tomato and cape gooseberry. Recently, the A2 mating type was reported for the first time in this country and opened the possibility to a higher genetic variation in the *P. infestans* population that could lead to changes in its fungicides susceptibility patterns, an increased virulence or a broadening of host range. However, last year, a *P. infestans* population survey showed that in Colombia this pathogen is clonal despite the presence of the A2 mating type. In order to understand the population dynamics of this pathogen in Colombia crosses between A1 mating type from different hosts and the Colombian A2 mating type from cape gooseberry were tested for the production, viability and germination of oospores. Apparently, the host adaptation is not an explanation to the reduced c.f. inexistent sexual reproduction of this pathogen in Colombia. Besides the isolation low frequency of the A2 mating type a post-mating incompatibility is suggested according to the low viability and therefore the germination percentages obtained.