

Oospores Associated with Tomato Seed May Lead to Seedborne Transmission of *Phytophthora infestans*

Evgenia Rubin¹ and Yigal Cohen^{1,*}

Tomato fruits at the green mature stage were inoculated with a mixed sporangial suspension of A₁ and A₂ isolates of *Phytophthora infestans*. Other fruits were inoculated with either A₁ or A₂ sporangia. Seeds were extracted from the blighted fruits and sown in soil or on agar media to test for the transmission of late blight to the emerging seedlings. Only 23 (0.09%) of approximately 25,000 seedlings developed symptoms. All blighted seedlings originated from fruits inoculated with mixed A₁ + A₂ sporangia. Isolates of *P. infestans* recovered from the emerging blighted seedlings were seemingly of oosporic origin, as they differed phenotypically (mating type, virulence, sensitivity to metalaxyl) from the parent isolates used to inoculate the fruits. The results suggest that transmission of *P. infestans* might occur by seeds extracted from fruits carrying oospores and less probably by seeds extracted from fruits having no oospores.

KEY WORDS: Potato late blight; epidemiology; genetics; seed pathology; *Lycopersicon esculentum*.

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¹Faculty of Life Sciences, Bar-Ilan University, Ramat Gan 52900, Israel. *Corresponding author [Fax: +972-3-5354133; e-mail: coheny@mail.biu.ac.il].