

Reaction of *Solanum* (section *Lycopersicon*) accessions to *Phytophthora capsici* isolates / Reação de acessos de *Solanum* (Secção *Lycopersicon*) a isolados de *Phytophthora capsici*. R. Petry¹; M. L. Paz-Lima²; A.C. Café-Filho³; L. S. Boiteux⁴; A. Reis³. ¹UDESC-CAV, Lages-SC; ²IF Goiano, Campus Urutai, Urutai-GO; UnB, Depto. Fitopatologia, Brasília-DF; ⁴Embrapa Hortaliças, 70351-970, Brasília-DF, Brazil. E-mail: ailton.reis@embrapa.br

Members of the Solanaceae family are reported as hosts of the soil-borne pathogen *Phytophthora capsici*. Sources of resistance to *P. capsici* in tomato and related wild species are yet scarce. A germplasm collection [comprising 244 *Solanum* (section *Lycopersicon*) accessions] was evaluated against an array of *P. capsici* isolates in bioassays conducted under controlled greenhouse conditions. Initially, 35 day-old plants were inoculated at the collar area with a 3 mL spore suspension (2×10^4 zoospores per mL) using a *P. capsici* isolate obtained from infected *Capsicum* plants. Disease incidence (dead plants / total plants) was assessed 14 days after inoculation. The accessions were discriminated into five well-defined reaction groups: highly resistant, resistant, moderately susceptible, susceptible, and highly susceptible. The response to *P. capsici* in this *Solanum* (*Lycopersicon*) germplasm displayed a host species-dependent reaction with susceptibility being more often found in *S. peruvianum* accessions, whereas higher levels of resistance were identified among the cultivated tomatoes (*S. lycopersicum*) accessions. In two subsequent bioassays, a subgroup of the ten accessions identified with the highest levels of resistance in the first assay was evaluated for reaction to five *P. capsici* isolates. Differential reaction of these selected *Solanum* to distinct *P. capsici* isolates was observed. Sources of stable, wide-spectrum resistance were identified.

Key words: Tomato, *Phytophthora* wilt, resistance, soil-borne disease.