

A PROSED SCHEME FOR A MULTIPLE DISEASE
RESISTANCE PROGRAM IN PEPPER

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Based on data generated in order to detect possible interactions between pathogens (see 3 other reports in this issue of P.N.), the scheme below is proposed for the evaluation of pepper genotypes to these three pathogens: potato virus Y (PVY), Xanthomonas campestris pv. vesicatoria (Xcv) and Phytophthora capsici (Pc). This methodology has been used, with reproducibility, on the evaluation of breeding material. The only restriction, so far, is that only resistance to Xcv in the hypersensitive form can be detected.

DAY	ACTIVITY
0	→ Sowing
25	→ PVY inoculation mechanical inoculation 1:100 (w:v)
39	→ PVY evaluation mosaic presence - susceptibility absence - latex test → (+) resistance (-) immunity
40	→ Xcv inoculation 5×10^8 cfu/ml infiltration in 2nd pair of true leaves
	→ Pc inoculation $\geq 10^4$ zoospores/ml 3 ml at stem base
41/42	→ Xcv evaluation hypersensitive reaction presence → resistance absence → resistance susceptibility
54/56	→ Pc evaluation 0 = lack of symptoms → resistance 1 = stem base discoloration without wilt → susceptibility 2 = wilted plant → susceptibility 3 = dead plant → susceptibility