

Commercial Control of *Xanthomonas campestris* pv. *vesicatoria* races in pepper

<i>X. c. v.</i> Pepper Race	Functional avirulence gene carried by <i>X. c. vesicatoria</i>	BS resistance genes				
		ECW (No R gene)	ECW 10R BS ₁ gene	ECW 20R BS ₂ gene	ECW 30R BS ₃ gene	PI 235047 BS ₄ gene
0	<i>avrBS</i> ₁ , <i>avrBS</i> ₂ , <i>avrBS</i> ₃ , <i>avrBS</i> ₄	S	HR	HR	HR	HR
1	<i>avrBS</i> ₂ , <i>avrBS</i> ₃ , <i>avrBS</i> ₄	S	S	HR	HR	HR
2	<i>avrBS</i> ₁ , <i>avrBS</i> ₂	S	HR	HR	S	S
3	<i>avrBS</i> ₂ , <i>avrBS</i> ₄	S	S	HR	S	HR
4	<i>avrBS</i> ₃ , <i>avrBS</i> ₄	S	S	S	HR	HR
5	<i>avrBS</i> ₁	S	HR	S	S	S
6	<i>avrBS</i> ₄	S	S	S	S	HR
7	<i>avrBS</i> ₂ , <i>avrBS</i> ₃ ,	S	S	HR	HR	S
8	<i>avrBS</i> ₂	S	S	HR	S	S
9	<i>avrBS</i> ₃	S	S	S	HR	S
10	none	S	S	S	S	S

ECW = Early Cal Wonder

ECW 10R, ECW 20R, and ECW 30R are near isogenic and differ solely by the presence of the BS₁, BS₂, and BS₃ genes, respectively.

S = Susceptible reaction to *Xanthomonas campestris* pv. *vesicatoria*

HR = Hypersensitive-resistant reaction to *Xanthomonas campestris* pv. *vesicatoria*

R = Resistant (non-hypersensitive) reaction to *Xanthomonas campestris* pv. *vesicatoria*

Note: Hypersensitive resistance is dominant to susceptibility.

Avirulence is dominant to virulence.

PI 235047 (*Capsicum pubescens*): BS₄ gene confers hypersensitive resistance to *Xcv*P6 and differentiates *Xcv*P1 from *Xcv*P7, *Xcv*P3 from *Xcv*P8, *Xcv*P4 from *Xcv*P9, and *Xcv*P6 from *Xcv*P10.