

Supplementary Materials: Whole-genome re-alignment facilitate development of specific molecular markers for races 1 and 4 of *Xanthomonas campestris* pv. *campestris*, the cause of Black rot disease in *Brassica oleracea*

Mehede Hassan Rubel, Arif Hasan Khan Robin, Sathishkumar Natarajan, Joana G. Vicente, Hoy-Taek Kim, Jong-In Park, Ill-Sup Nou

Table S1. Resistance accessions developed in *Brassica oleracea*.

SI	Cultivars	Resistant against races	<i>Brassica</i> species	Country	Reference
1	PI436606	2	<i>Brassica oleracea</i>	USA	[14]
2	SI, Badger Inbred 16, Kinkei DHOI, Reiho DHOI, Fujiwase I; Fujiwase DHOI, 02, 05; Harukei DHOI	1 and 2			
3	DH M9606; Aichi dai Bansei DHOI, 02	race 2	<i>Brassica oleracea</i>	Russia	[15]
4	Reiho DHOI, 03; Fujiwase DH03, 04; Matsunami DH22	2 and 4			
5	Matsunami DH77; DH M9602, 9603	4			
6	Miracle F1	2, 3, 5, 8 and 9	<i>Brassica oleracea</i>	UK	[3,10]
6	Three cultivars	10 and 11	<i>Brassica oleracea</i>	Portugal	[11]

Table S2. Differential cultivars used for detection of *Xcc* races (adapted from Vicente and Holub, 2013).

SI	Differential Cultivars	Resistant against races	Species	Reference
1	Wirosa F1	Susceptible	<i>Brassica oleracea</i>	
2	Just Right Hybrid Turnip	4 and 9	<i>Brassica rapa</i>	
3	Cobra (COB60)	4 and 9	<i>B. napus</i>	
4	Seven Top Turnip	2, 8 and 9, but variable resistance to races 4, 5	<i>Brassica rapa</i>	[3,5,9,10,11,32]
5	Florida Broad Leaf Mustard (FBLM2)	1, 3, 4, 7, 8 and 9	<i>Brassica juncea</i>	
6	PI 199947 (PIC1)	1, 3, 4, 8 and 9	<i>B. carinata</i>	
7	Miracle F1	2, 3, 5, 8 and 9	<i>B. oleracea</i>	