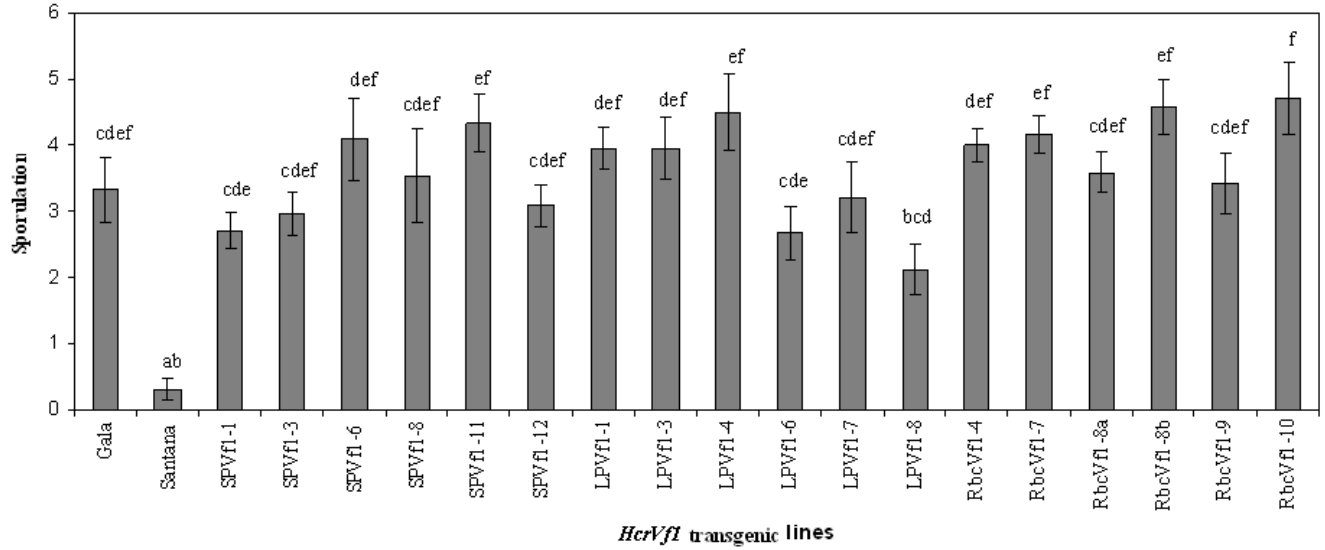
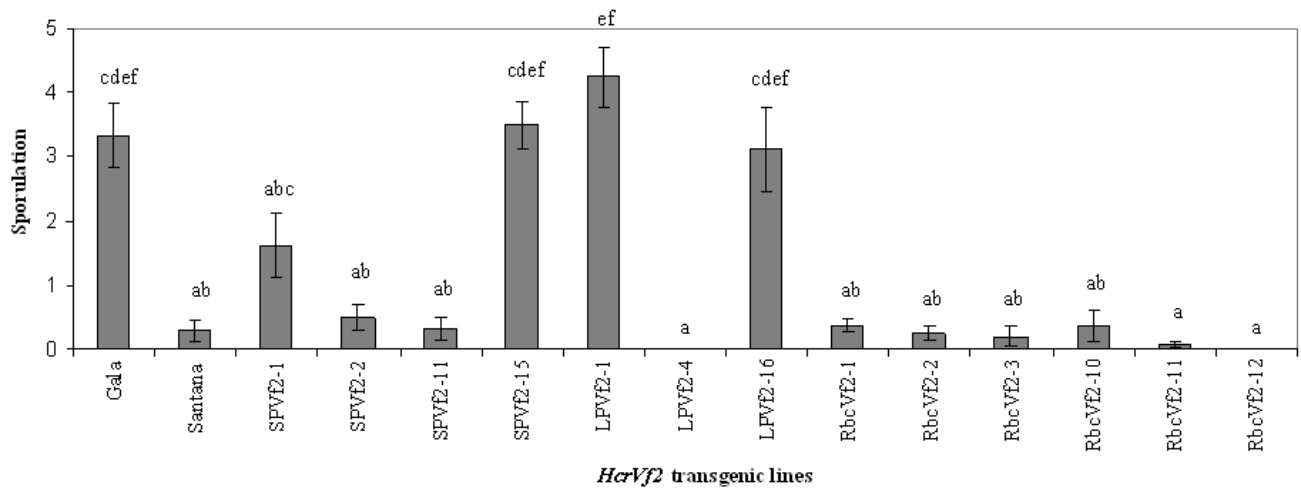


Supporting Information



1a



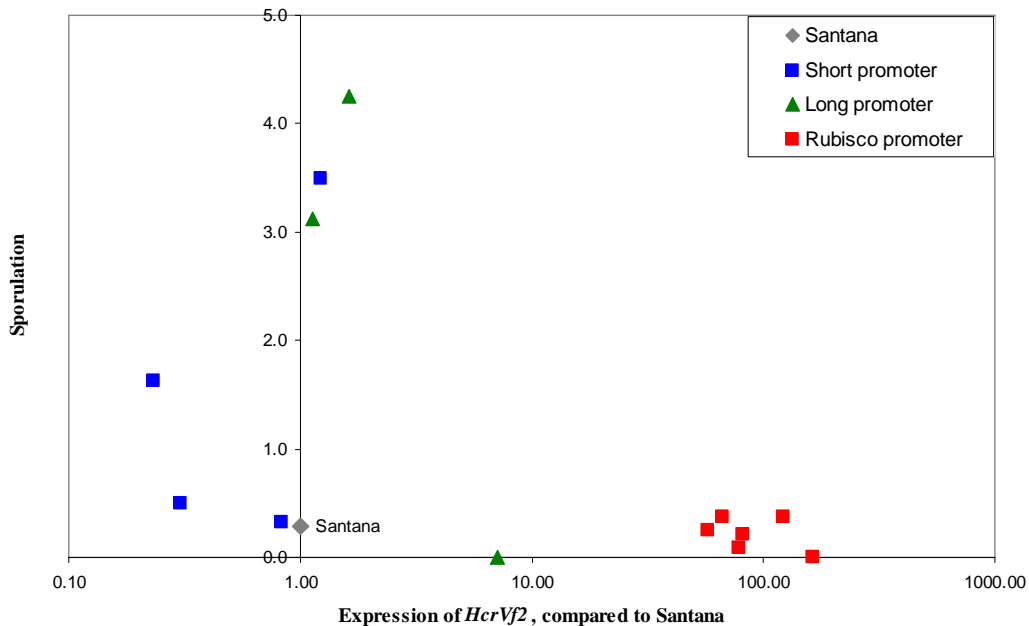
1b

Supplement 1a and 1b. Sporulation of the *Vf* avirulent monoconidial isolate EU-B05 of *V. inaequalis* on the leaves of *HcrVf* transgenic lines. Cvs. 'Santana' and 'Gala' were used as resistant control and susceptible control respectively. *Vf1* = *HcrVf1*, *Vf2* = *HcrVf2*, SP = Short promoter, LP = Long promoter, Rbc = P_{MdRbc}. The error bars represent the standard errors of the means.

Supplement 2. Mean expression of the *HcrVf1* and *HcrVf2* genes regulated by the different promoters.

Gene	Promoter	Mean \pm SD	SE
	'Santana'	1.00	
	'Gala'	0.00	
<i>HcrVf1</i>	SP	1.1 \pm 0.7	0.3
	LP	10 \pm 5.8	2.3
	P _{MdRbc}	355 \pm 212	87
<i>HcrVf2</i>	SP	0.6 \pm 0.4	0.2
	LP	3.3 \pm 3.3	1.9
	P _{MdRbc}	94 \pm 40	16

'Santana' = resistant control, 'Gala' = susceptible control, SP = short promoter, LP = long promoter, P_{MdRbc} = apple rubisco promoter, Mean of SP*HcrVf1*, LP*HcrVf1*, P_{MdRbc}*HcrVf1*, P_{MdRbc}*HcrVf2* is the average of six replications, mean of SP*HcrVf2* is the average of four replications, mean of LP*HcrVf2* is the average of three replications. \pm SD represents standard deviation of the mean, SE represents the standard error of mean



Supplement 3. Correlation between sporulation of *Vf* avirulent monoconidial isolate EU-B05 of *V. inaequalis* and expression of the *HcrVf2* gene in apple transformants. X axis is displayed in logarithmic scale. 'Santana' = resistant control.