

## Effect on tomato (*Solanum lycopersicum*) genotypes

### Interaction between salt stress and bacterial infection at plant interphase

Crop: Tomato  
 Stress 1: *Pseudomonas syringae* pv. *tomato* (Pst)  
 Stress 2: Salt stress  
 Stage of the plant: 5 weeks old

Table showing an effect of salinity treatment on *Pseudomonas syringae* pv. *tomato* (Pst) colonization in two cultivars of tomato

Genotype	Salt stress	Bacterial pathogen	Response to combined stress Type B parameter *
			<b>Bacterial colonization (log CFU/leaf area (cm<sup>2</sup>)) **</b>
New Yorker	No Salt	Pst ( $1 \times 10^7$ CFU/mL)	$5.46 \times 10^7$
New Yorker	0.2 M NaCl + 0.02 M CaCl <sub>2</sub>	Pst ( $1 \times 10^7$ CFU/mL)	$6.82 \times 10^7$
Rheinlands Ruhm	No Salt	Pst ( $1 \times 10^7$ CFU/mL)	$6.52 \times 10^6$
Rheinlands Ruhm	0.2 M NaCl + 0.02 M CaCl <sub>2</sub>	Pst ( $1 \times 10^7$ CFU/mL)	$8.3 \times 10^6$

CFU- Colony forming units

For raw data – Click here (.xlsx file)

Reference- Pye *et al.*, 2013

#### Note:

‘\*’ - For more information on parameters classification, please refer to ‘methodology’ tab.

‘\*\*’ Values presented as it is from the source articles without subjecting them to the calculation.

**Inference from the study:** Pye *et al.*, 2013 observed that salt stress treatment enhanced Pst colonization in both New Yorker and Rheinlands Ruhm cultivars of tomato. Rheinlands Ruhm was more sensitive to Pst infection and effect of salinity stress on Pst infection was more severe in this variety as indicated by more bacterial colonization.

*Salinity exacerbates Pst infection in tomato.*