



Effect on soybean cultivars (*Glycine max* L.)

The interaction between the UV-B radiation and insect under the combined stress treatment at the plant interface

Stress 1: Thrips (*Caliothrips phaseoli*)
Stress 2: Solar UV-B
Stage of plant: Full grown plants

The table shows the effect of solar UV-B radiation on thrips density on soybean cultivars

Cultivars	Treatment	Response under combined stress (Type B parameters*)
		Thrips density (Insects/leaf)
All cultivars combined (A5308, Williams, Charata-76, and Dekalb 458)	Solar UV-B + Thrips (natural infestation) (Field study)	2.24
	Thrips only	5.41
	Solar UV-B + Thrips (Sequential stress) (Laboratory study)	10.98
	Thrips only	23.66

Reference– Mazza CA, Zavala J, Scolpel AL, Ballare CL (1999) Perception of solar UVB radiation by phytophagous insects. Behavioral responses and ecosystem implications. Proc. Natl Acad. Sci. USA **96**: 980 – 985

Note: Values are presented as it is from the source article without subjecting to the calculation.

*- For more information on parameters classification, please refer to 'methodology' tab

The inference from the study: Mazza *et al.*, 1999 studied the interactive effect of ultraviolet B radiation and thrips on soybean cultivars such as A5308, Williams, Charata-76, and Dekalb 458 in the field as well as laboratory. All the soybean cultivars attracted a lesser density of thrips when pre-treated with UV-B radiation compared to the plants treated with thrips only.