Effect on field mustard varieties (*Brassica rapa* L.)

A. The net impact of individual and combined stress on the plan

Stress 1: Ozone (80 ppb)
Stress 2: *Plutella xylostella* L.
Stage of plant: Four-week old plants

The table shows the impact of individual and combined stress on the total volatile organic compounds emitted from wild field mustard varieties

Variety	Treatment	Response under combined stress (Type C parameters*)	
		Total VOC Emission rate (ng/g/h)	HIPV Emission rates (ng/g/h)
Wild	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	166.95	75.79
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	229.56	115.92
	Ozone (80 ppb)	215.65	N/A
	Ozone (15-20 ppb)	128.69	N/A
Cordelia	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	410.43	325.47
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	518.26	463.69
	Ozone (80 ppb)	128.69	N/A
	Ozone (15-20 ppb)	135.65	N/A
Legato	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	532.17	428.02
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	553.04	450.31
	Ozone (80 ppb)	97.39	N/A
	Ozone (15-20 ppb)	166.95	N/A
Petita	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	800	214.01
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	706.08	160.51
	Ozone (80 ppb)	222.60	N/A
	Ozone (15-20 ppb)	354.78	N/A
Valo	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	1220.87	84.71
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	570.43	22.29

	Ozone (80 ppb)	201.73	N/A
	Ozone (15-20 ppb)	205.21	N/A

(*N/A-Not available*)

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*

B. The interaction between the ozone and insect under the combined stress treatment at the plant interface

The table shows the effect of ozone on *P. xylostella* consuming field mustard varieties

Variety	Treatment	Response under combined stress (Type B parameters*)
		Area consumed
Wild	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	11.94
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	9.76
Cordelia	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	7.54
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	4.40
Legato	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	10.14
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	9.26
Petita	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	2.44
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	2.71
Valo	Ozone (80 ppb) + *P. xylostella* for 48h (Sequential stress)	4.47
	Ozone (15-20 ppb) + *P. xylostella* for 48h (Sequential stress)	3.55

Reference– Brosset A, Saunier A, Mofikoya AO, Kivimaenpaa M, Blande JD (2020) The Effects of Ozone on Herbivore-Induced Volatile Emissions of Cultivated and Wild *Brassica Rapa*. Atmosphere **11:**1213

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*

Inference from the study: Brosset *et al*., 2020 studied the effect of ozone on the *P. xylostella* induced volatile emission in wild and cultivated varieties such as Cordelia, Legato, Petita, and Valo of field mustard plants. The results showed that cultivated varieties showed a high emission of volatile compounds than the wild variety when treated with combined stress of ozone and *P. xylostella*. **The overall observation concludes the more vigorous inducible defence in cultivated varieties than wild type.**