Stress Combination and Website link- http

$Stress\ Combination\ and\ their\ Interactions\ in\ Plants\ (SCIP)\ Database$

Website link- http://www.nipgr.ac.in/scipdb.php

Effect on maize/corn cultivars (Zea mays L.)

The interaction between the fungus and insect pathogens under the combined stress treatment at the plant interface

Stress 1: Fusarium graminearum

Stress 2: Corn borer (*Pyrallsta nubilalis*)

Stage of plant: One week prior to

tasseling

The table shows the interaction between the fungus *F. graminearum* and insect *P. nubilalis* affecting the development of insect *P. nubilalis* and causing necrotic lesion on corn cultivars

Cultivar	Treatment	Response under combined stress (Type B parameters*)						
		Necrot ic tissues (%)	Larv ae (%)	Popula 2nd larval instar	3rd larval instar	orn bore 4th larval instar	5th larval instar	
WF9×M 14	F. graminearum + P. nubilalis (20 eggs per mass) + 2 week interval (Sequential stress)	27	58	4.075	46.24	20.26	11.15	
	P. nubilalis (20 eggs per mass) + 2 week interval	16	73	14.81	45.11	N/A	17.04	
	F. graminearum + P. nubilalis (20 eggs per mass) + 4 week interval (Sequential stress)	29	51	_				
	P. nubilalis + 4 week interval(20 eggs per mass)	25	53	_			_	
Oh43×O h51A	F. graminearum + P. nubilalis (20 eggs per mass) + 2 week interval (Sequential stress)	27	72	N/A	49.99	38.29	25.11	
	P. nubilalis (20 eggs per mass) + 2 week interval	17	65	8.64	47.17	22.10	5.05	
	F. graminearum + P. nubilalis (20 eggs per mass) + 4 week interval (Sequential stress)	27	49					



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P. nubilalis + 4 week interval(20 eggs per	23	44	_	 	
mass)					

(*N/A- Not available*)

For raw data—Click here (.xlsx file)

Reference—Chiang HC, Wilcoxon RD (1961) Interaction of the European corn borer and stalk rot in corn. J. Econ. Entomol. **54:** 850–852

Note: Values represented 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: Chiang *et al.*, 1961 studied the interaction between the fungus *F. graminearum* and insect *P. nubilalis* in corn cultivars WF9×M14 and Oh43×Oh51A. The pre-inoculation of fungus increased the percentage of insect larva and resulted in the more rapid development of the larvae in the cv. Oh43×Oh51A in comparison cv. WF9×M14. The overall observation concludes that cv. Oh43×Oh51A favoured insect development more than cv. WF9×M14.