

REACTIONS OF CORN VARIETIES TO DOWNY MILDEW
(SCLEROSPORA SPP.)

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In 1976, 20 corn varieties were tested at Nakorn Sawan province. Artificial inoculations with downy mildew were made twice. Spreader rows of the susceptible variety "tein" were planted around the test plots two weeks earlier than the test materials and inoculated with downy mildew. The percentage systemic infection of downy mildew of the test plants was recorded at two and four weeks after the second inoculation and again at tasselling time.

The result of this experiment showed that all corn genotypes became infected. Percent infection ranged from 17.5 and 22.6 percent in Thai Composite 3 and Thai DMR 6 to 100 percent in the susceptible sweet corn check entry (Table 1).

Table 1. Percent downy mildew infection of corn varieties in 1976 at Nakorn Sawan province.

Entries	Mean	DMRT ^{1/}
Thai Comp. #3 (S) C ₂	17.5	a
Thai DMR #6	22.6	ab
Caribbean DMR	23.6	ab
Thai Comp. #4	26.2	abc
Comp. L DMR	27.6	abcd
Cupurico x Flint Comp. DMR (F) C ₃	29.5	abcd
Thai Comp. #1 DMR (S) C ₃	30.3	abcd
Caripeno DMR	32.5	abcd
Thai DMR #4	32.8	abcd
Guatemala DMR	32.9	abcd
Thai DMR #2	33.3	abcd
Thai DMR #1	36.5	bcd
Thai DMR #3	41.1	bcde
(Cup. x Fl. Comp. DMR) x Thai Comp. DMR F (C ₁)	45.2	cde
Thai DMR #7	48.0	de
Centralmex DMR	55.3	e
Guatemala PB 12	78.8	f
P.C. 1602 DMR	83.4	f
P.C. 1504 DMR	93.4	g
Sweet Corn H-68 Var.	100.0	g
C.V. (%)	12	

^{1/} Duncan's multiple range test with no significant difference for the treatments that followed by the same letter.