

EFFECT OF DIFFERENT LEVELS OF FERTILIZERS ON THE INCIDENCE OF 'LITTLE LEAF' DISEASE OF BRINJAL (*Solanum melongena* L.)

Foster (1967) observed that the balance of nutrients had an important influence on the number of local lesions produced by the cucumber mosaic virus in *Chenopodium amaranticolor* L. It has been observed that at higher levels of nitrogen fertilization, the virus disease of ragi, which produced streaking, mottling and also mosaic symptoms, increased two to three folds, whereas under no nitrogen fertilization, the disease incidence was as low as 2.66 per cent (Reddy et al. 1975).

With a view to find out the effect of different levels of fertilizers on the incidence of 'little leaf' disease of brinjal, a field experiment was laid out in a 3³ confounded factorial design with 3 replications. The brinjal variety S. M. 68 was used for the investigation.

The plot size was 9 sq m with a spacing of 45 x 30 cm between and within rows. Forty plants were maintained per replication. The treatments were N, P₂O₅, K₂O at 75:35:20 and 150:70:40 kg/ha and one control with no fertilizers.

The 'little leaf incidence' was recorded on the 45th, 75th, 105th, 135th and 170th days after planting and the results are presented in Table 1. It could be seen that none of the fertilizer doses had any significant influence on the incidence of little leaf disease.

Table 1
Interaction of NPK on the incidence of the little leaf disease in brinjal
(Transformed values $\sqrt{x + 0.5}$)

	P ₀	P ₃₅	P ₇₀	K ₀	K ₂₀	K ₄₀
N ₀	1.346 (1.312)	1.659 (2.252)	1.749 (2.559)	1.648 (2.216)	1.445 (1.588)	1.661 (2.259)
N ₇₅	1.256 (1.078)	1.004 (0.508)	1.607 (2.082)	1.488 (1.714)	1.317 (1.234)	1.062 (0.628)
N ₁₅₀	1.395 (1.446)	1.073 (0.651)	1.597 (2.050)	1.431 (1.548)	1.381 (1.407)	1.255 (1.075)
PO				1.454 (1.614)	1.541 (1.875)	1.003 (0.506)
P ₃₅				1.008 (0.516)	1.330 (1.269)	1.399 (1.457)
P ₇₀				2.106 (3.935)	1.271 (1.115)	1.576 (1.984)

Figures in parentheses denote percentage values

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വളപ്രയോഗത്തിൽ വരുത്തിയ വ്യതിയാനങ്ങൾ വഴുതനയുടെ 'കൊച്ചില' രോഗത്തിന്റെ (വൈറസ്) രൂക്ഷതയെ ബാധിക്കുന്നില്ലെന്നു കണ്ടു.

References

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