

**REACTION OF SOME MUNGBEAN CULTIVARS TO
INFECTION BY *MELOIDOGYNE INCOGNITA* AND
*ROTYLENCHULUS RENIFORMIS***

A.E. ISMAIL

*Nematology Lab., Plant Pathology Department,
National Research Centre, Dokki, Cairo, Egypt.*

Abstract

Reaction of nine mungbean (*Vigna radiate*) cultivars to infection by *Meloidogyne incognita* root-knot nematode and *Rotylenchulus reniformis* reniform nematode was studied under greenhouse conditions. On the basis of eggmass index of *M. incognita*, mungbean cv., VC 1000 was found highly susceptible (HS), cvs: VC 2010, VC 1628 A, King and T44 moderately susceptible (MS) and cvs., Kawmy 1, VC 2719, VC 3476 B and NCM 7 least susceptible (S). On the basis of *R. reniformis* females infection per plant cvs., VC 2719 and T44 were highly susceptible; cvs., Kawmy 1, VC 3476B and King susceptible whereas cvs., VC 1000, VC 1628A and NCM 7 were rated as moderately resistant. Positive regressions were found between the inoculum levels of *M. incognita* and each of galls, eggmasses numbers (galls: $Y = 18.05 + 0.02 X$; eggmasses: $Y = 8.28 + 0.007 X$). The rate of *R. reniformis* buildup was negatively correlated with the progressive increase in the inoculum levels ($Y = 93.07 - 0.008 X$). Positive relationships existed between the inoculum levels of both *M. incognita* and *R. reniformis* and percentage reduction of the growth of shoots and roots.