

B-09: Pest and disease resistant variety of mungbean , *Vigna radiata* L. for cultivation in the Dry Zone of Sri Lanka

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Cultivated varieties of mungbean are susceptible to diseases and pests. This study was conducted to select promising, pest and disease resistant varieties for the promotion of cultivation in the Dry Zone.

Sixteen mungbean varieties were evaluated under field conditions in Mahaweli System B during the period from Maha 1990/91 to 1992/93.

The variety AWS-1 (a selection line of tested genetic materials) was more tolerant to yellow mosaic virus (YMV), cercospora leaf spot, rust and powdery mildew, beanfly (*Ophiomyia phaseoli* Tryon) and pod borer damage than recommended varieties, Harsha and MI-5. This variety matured early (55-65 days) and possessed a higher yield potential (1-2.5 t per ha) than that of the recommended varieties (0.9-1.7 t per ha). It showed more adaptability to Yala cultivation over recommended varieties. The variety AWS-1 possessed peculiar plant characteristics that contrasted to other varieties. These include indeterminacy, scattered arrangement of peduncles on axillaries along the stem, scattered and less compact arrangement of flowers and pods on the peduncle, prominent phase with shorter flowering and pod setting period and less reproductive canopy cover. These characters may be associated with pest and disease resistance.