B-63: Effect of lime and molybdenum on growth nodulation and yield of Mungbean (*Vigna radiata* (L) Wilczek)

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Effect of lime and molybdenum on growth, nodulation and yield of mungbean (*Vigna radiata* (L) Wilczek) was studied during October to December 1997 at the Research farm of the Faculty of Agriculture, Mapalana. A pot experiment was conducted with and without lime, using mungbean variety MI-5. Both limed

(lime application at the rate of 2t ha) and unlimed treatments had 5 molybdenum levels i.e. 0, 2, 4, 6 and 8 ppm. The experiment was arranged in a Randomized complete block design with 4 replicates. Growth and nodule characteristics were taken at 3 week intervals starting from 3 weeks after planting. Seed yield was recorded at harvesting.

Statistical analysis of the results showed that, there was a significant difference in plant growth, nodulation and yield of mungbean between limed and unlimed plants, but molybdenum treatments did not produce any significant effect on the same parameters. The dry weight of shoots and roots increased in both limed and unlimed plants upto 9 weeks and started to decrease thereafter and the above parameters in limed plants were significantly higher than the unlimed plants. Seed yield also was significantly higher in limed plants than in unlimed plants.

Nodules were observed 3 weeks after planting in limed plants, but in unlimed plants they were observed only at 6 weeks after planting. Dry weight of nodules peaked at 6 weeks in both limed and unlimed plants and declined thereafter. The nodule dry weight in limed plants were significantly higher than the unlimed plants.