

## **Effects of flowering behavior and pod maturity synchrony on yield of mungbean [*Vigna radiata* (L.) Wilczek].**

### **ABSTRACT**

A number of experiments were set up to assess the flower production and flowering pattern in synchrony with pod maturity and seed yield in twelve mungbean genotypes. Synchrony of pod maturity was measured based on percentage of mature pods at first harvest, where; synchrony (>90% mature pods), partial synchrony (80-90% mature pods) and asynchrony (<80% mature pods). Results revealed that genotypes that produced maximal opened flowers within 10-15 days, and ceased flowering within 15-20 days after first flowering (DAF), have synchrony in pod maturity. Additionally, seed yield was strongly correlated with the number of opened flowers and number of produced mature pods. Four genotypes showed synchrony in pod maturity which accompanied with cessation of flower production at 10-15 DAF, but produced lower yields due to fewer opened flowers. In contrast, the remaining genotypes showed partial synchrony or asynchrony in pod maturity due to longer flowering durations, with higher number of opened flowers and seed yield. These results indicate that synchrony in pod maturity and seed yield in mungbean is inversely related.

**Keyword:** Flower production; Flowering pattern; Synchrony in pod maturity; *Vigna radiata*; Yield.