

## **Artificial hybridization in Chickpea (*Cicer arietinum* L.) under field conditions as influenced by subtending leaf and weather conditions**

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Artificial hybridization in chickpea (*Cicer arietinum* L.) is a tedious resulting in a low success rate. The present study showed that percent hybrid pod set was significantly increased and showed to be influenced by the maturity index and size of the sub-tending leaf on each floral bud. Percent hybrid pod set to the total flowers crossed in chickpea ranged from 1.20 to 34.40 per cent depending upon the maturity index of complete or half pruned sub-tending leaf of each floral bud. The fully matured complete subtending leaf floral bud gave 33.40 per cent hybrid pod set; whereas fully matured half pruned subtending leaf floral bud gave 25.40 per cent hybrid pod set. The lower hybrid pod setting was observed in case of fully emerged and leaf immature subtending conditions. The size of hybrid pod and number of hybrid seed per pod was significantly higher when fully matured complete subtending leaf floral bud was used for artificial hybridization. The weather conditions during the crossing period had great influence on the hybrid pod setting on the floral bud of fully emerged and immature subtending leaf than on the fully matured subtending leaf floral bud. It was also observed that primary and secondary branches had no influence on the percent hybrid pod set.