

# **Inheritance of leaf mark, pod dehiscence and dry pod colour in crosses between wild and cultivated cowpeas**

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## **ABSTRACT**

The inheritance of three traits, inverted V-shaped mark on leaves, pod dehiscence and dry pod colour, was studied in crosses between wild, weedy and cultivated varieties of cowpea, *Vigna unguiculata* (L) Walp. By cross-pollinating only open flowers that failed to produce pollen, successful crosses were obtained on wild cowpea as female parents in contrast to previous attempts. Inheritance data collected on the parents, F<sub>1</sub>, F<sub>2</sub> and backcross progenies, indicate that each of the three traits is controlled by a single dominant gene in the crosses that were examined. The wild and the weedy lines carry dominant genes while the recessive alleles reside in the cultivated varieties but the genes controlling the traits, in both wild and weedy cowpea lines are allelic. The symbols Vsm, Dhp and Bk-2 are assigned to the dominant genes that govern the presence of the inverted V-shaped mark on leaves, pod dehiscence and black dry pod colour, respectively. The significance of these results in cowpea improvement is discussed.

Key Words: Cowpea genetics, *Vigna unguiculata*, dominant genes