

**Inheritance of Resistance to Cowpea Aphid-
Borne Mosaic Virus and Southern Bean
Mosaic Virus in Cowpea. Vigna
Unguiculata S. SP. Unguiculata (L)
Walp.**

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Abstract:

The mode of inheritance of resistance to cowpea aphid-borne mosaic virus (CAMV) and southern bean mosaic virus (SBMV) was determined in the following cowpea (Vigna unguiculata s.sp. unguiculata (L) Walp) varieties: A44/2, TVu 222, TVu 612 all resistant to CAMV and TVu 1948, which is resistant to both CAMV and SBMV. Crosses were made between each of the resistant varieties and C20-55, a cowpea variety susceptible to CAMV and SBMV. The parents, F₁, F₂, B₁ and B₂ progenies of each cross were raised in the greenhouse and inoculated with the appropriate virus.

The results showed that two recessive genes control resistance to CAMV in A44/2, a single dominant gene controls resistance to the same virus in TVu 222, while a single recessive gene was responsible for resistance in each of the varieties TVu 612 and TVu 1948. Results of allelic tests among the F₁ and F₂ progenies of crosses among A44/2, TVu 612, and TVu 222 indicated that each of them possesses different genes for resistance to CAMV. Resistance to SBMV was under the control of a single dominant gene in TVu 1948.

Keywords: cowpea aphid-borne mosaic virus (CAMV)/ southern bean mosaic virus (SBMV)

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