

Inheritance of resistance to cowpea aphid, *Aphis craccivora* Koch, in three resistant cultivars of cowpea, *Vigna unguiculata* (L.) Walp, was studied. The parents, F<sub>1</sub> and F<sub>2</sub> population were grown in an insect-proof screenhouse. Each 3-day-old seedling was infested with 10 apterous adult aphids. Seedling reaction was recorded when the susceptible check was killed. The segregation data revealed that the resistance of ICV11 and TVU310 is governed by single dominant genes. All the F<sub>2</sub> seedlings of the cross ICV10xTVU310 were resistant, indicating that they have the same gene for resistance. However, the F<sub>2</sub> populations from the crosses ICV10xICV11 and ICV11xTVU310 segregated in a ratio of 15:1, indicating that the dominant genes in ICV11 and TVU310 are non-allelic and independent of each other. The resistance gene of ICV10 and TVU310 is designated as Ac<sub>1</sub> and that of ICV11 as Ac<sub>2</sub>.