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Diallel Analysis of Earliness in Cowpea

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Abstract
Early maturity is an important agronomic trait for the adaptation of annual crops, including cowpea (*Vigna unguiculata* (L.) Walp) to any agro-ecological zone. The nature and magnitude of gene action involved in the expression of this trait is important in establishment of a systematic crop improvement programme. This study was conducted to provide information on the inheritance and genetic control of earliness in cowpea using diallel procedures. Eight cowpea genotypes and their 28 F, generations (excluding reciprocals) were evaluated. General Combining Ability (GCA) was significant for days to flowering and maturity ($P < 0.01$), while specific combining ability (SCA) were significant ($P<0.01$) for days to maturity only indicating that days to flowering is influenced by additive genetic effects and days to maturity by additive-dominance gene actions. Estimates of narrow sense heritability (h^2_n) were low (<20%) for both earliness traits.

Keywords: combining ability, cowpea earliness, gene action, hybridization, *Vigna unguiculata*

Yield Component Analyses and their Implications for the Breeding of West African Okra (*abelmoschus caillei* (A. Chev) Stevel)