

RELATIVE IMPORTANCE OF WEED AND INSECT PEST CONTROL IN COWPEA PRODUCTION

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Studies were conducted the early and late cropping seasons of 1986 at Ile-Ife, Nigeria to evaluate the relative importance of the control of weed and insect pests in the production of two varieties of cowpea *Vigna unguiculata* (L.) Walp). A weed-free situation in the cowpea ecosystem supported higher populations of *Ootheca mutabilis* Sahib; *Aphis craccivora* Koch and *Empoasca* spp., whereas a weedy situation supported higher populations of lepidopterous pod borers *Marcuca testulalis* (Geyer) and *Cydia ptychora* Mayrick, true bugs *Riptortus dentipes* F; *Mirperus jaculus* Thnb, *Acanthomyia* sp. And *Anoplocnemis curvipes* F. Higher population of *Bracon hancocki* Wilkinson, an ectoparasite of *C.ptychora* was also recorded in the weedy cowpea plot. Reduced cowpea biomass, flowers, pods and grain yield were associated with cowpea plots where weed and/or insect pests were not controlled. Weed control without the control of insect pests led to more than 90% loss in cowpea biomass, flowers, pods, and grain yield. On the other hand, insect pest control without weed control resulted in about 50% reduction in cowpea flowers, pods and grain yield. It is concluded that an integrated pest control strategy should be employed for successful cowpea production in this ecosystem.