

In a trial in the long-rains season of 1974, maize/bean (*Phaseolus vulgaris*) mixtures and pure stands of each crop sown at low, medium or high plant densities were compared. Grain/seed yields of maize and beans in pure stand increased with increase in plant density. In mixtures, maize yields were not significantly different from pure stands at any plant density, but bean yields were much reduced. The apparent yield advantage of mixtures over pure stands was attributed solely to increased population pressure in the mixtures. The implication of this finding for other published work with cereal/legume mixtures is discussed, and a distinction is drawn between those sites in East Africa where a conclusive yield advantage from mixed cropping has been found and those where any apparent advantage might be explained by the higher population pressure.