

In a five-year intercropping experiment (1978-82) in Kenya, 0, 2, 4 and 8 dry bean rows were interplanted in high density arabica coffee (planted in 1971 and thinned in 1978 to spacing 2×1 m) and received 0, 80 and 160 kg N/ha per bean crop. There were significant bean yield responses to the bean row numbers and nitrogen fertilizer rates, but coffee yields were not significantly affected. High bean yields were obtained only in the first two years after coffee stumping (in 1977). Intercropping Yield Advantage Ratio is proposed as a measure of yield achievable when an annual crop is interplanted in a perennial crop. It is recommended that up to four dry bean rows may be intercropped in high density arabica coffee for two years after block stumping the coffee, provided the soil fertility is high and appropriate to both intercrops.