

Intercropping *Coffea canephora* Pierre ex Froehner with Food Crops at Establishment Stage in Nigeria

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SUMMARY

Coffee was intercropped with selected food crops at establishment stage in Nigeria in 2001. The five crop combinations investigated were: coffee/sweet potato/maize, coffee/cassava/maize, coffee/cassava, coffee/cocoyam/okra/pepper and coffee sole. The above combinations were laid out in a Randomized complete block design (RCBD) in three replicates. Results on vegetative growth between 2001 and 2003 respectively showed coffee in cocoyam/okra/pepper mixture to be the best in height (59.91.83.8, 116.8) girth (0.065, 1.2, 2.5) number of leaves (18.4, 114. 301.8) , Leaf area (69.63,, 134.90 & 183.70 and as well as number of branches (2.0, 14.4 & 47.8). The lowest value was however obtained from coffee/cassava combination by the third year of cultivation- height (45 cm), girth (1.5), number of leaves (101.3), Leaf area (78.84 cm² and braches 914.3). Yields from the food crops component are: Cocoyam (6.0 t/ha); cassava in coffee/cassava/maize (24.8 t/ha), cassava in coffee/cassava (23.7 t/ha; in coffee/sweet potato/maize (2.04 t/ha), pepper (1.22 t/ha) and okra (1.70 t/ha). Coffee clean bean yield by 2005 range between 257.5-315 kg/ha with cocoyam/pepper/okra combination producing the highest. Land equivalent Ratio (LER) indicated beneficial effect of the intercrops.

Keywords: Coffee, intercropping, Growth, Yield, Food crop