EFFECT OF WEED CONTROL TREATMENTS AND CUTTING FREQUENCY ON
WEED DRY MATTER AND BIOMASS IN RELATION TO THE GROWTH AND
YIELD OF FLUTED PUMPKIN (TELFAIRIA OCCIDENTALIS HOOK F)

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ABSTRACT
Two experiments were conducted during the rainy seasons of 2012 and 2013 at the Teaching and Research Farm of
the Department of Crop Science, University of Nigeria, Nsukka, to evaluate the growth and leaf yield of Telfairia
occidentalis Hook F, as influenced by weed control treatments and cutting frequencies. The experimental design was
a randomized complete block arranged in a split plot with three replications. The cutting frequencies (0, 2 and 4
weekly cuttings) represented the main plot, while the sub-plots were six weed control treatments namely weed free,
weedy check, hoe weeding at 4 weekly intervals, pre-emergence application of pendimethalin at 2.25 kg a.i./ha,
black polyethylene mulch and sawdust mulch at 57.2 tonnes/ha. The results of the two years were pooled after
Bartellet tests for significance. Data on weed density, weed biomass, weed control efficiency, vine length, number of
vines per plant, number of leaves per plant, leaf area, fresh leaf weight per plant and leaf yield were subjected to
analysis of variance. Cutting intervals were not significant in most of the parameters assessed. Plots mulched with
black polyethylene significantly (p < 0.05) performed better than the other weed control treatments in terms of
lower number of weeds (3.11/m²), lower weed biomass (3g/m²) higher weed control efficiency (98.61%), higher crop
fresh leaf yield per hectare (2.34kg ha⁻¹). Cutting frequency at 4 weekly interval and mulching with black
polyethylene within the confines of the study was therefore, recommended for leaf yield production of Telfairia
occidentalis.

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