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Performance of Groundnut (*Arachis hypogaea* L) Varieties as Affected by Weeding Frequencies

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Abstract: The field experiment was conducted at Ebonyi State University, Abakaliki during 2014 and 2015 farming seasons to investigate the effect of weeding regime on the growth and yield of three groundnut varieties. The experiment was laid out in 3 x4 factorial in a randomized complete block design. The majority of weeds in the experimental site were the broad leaves (dicotyledons), while grasses (monocotyledons) were in a lesser density. The dominant weeds flora infesting groundnut during growing season were *Physalis angulata*, *Spigelia anthelma* and *Cleome viscosa* with relative weed density of 27, 21 and 11 per cent, respectively. Samnut 21 produced the lowest number of branches, number of leaves and days to 50 per cent flowering while Samnut 10 produced the tallesst plant, heaviest pods and seeds, highest number of seeds and total yield. Weeding at 3 weeks produced the tallest plant, highest leave area index, number of seeds, 100 seed weight and total yield. The plots without weeding (control) produced the lowest in all the parameters showing that weeds has negative effect on the crop yield. The result of this research work showed that Samnut 10 with 3 weeks weeding intervals demonstrated highest seed yield and can be recommended for the farmers in the study area.

Keywords: Groundnut, Dicotyledons weeding, Frequencies, Samnut 21