



## EFFICACY OF PENDIMETHALIN AS WEED CONTROL ON IRRIGATED ONION IN LOKO, SONG LOCAL GOVERNMENT AREA, ADAMAWA STATE, NIGERIA

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## ABSTRACT

Field experiments were conducted in 2013/2014 dry season under irrigation at Loko *Fadama* area, Song Local Government Area, Adamawa State, Nigeria, to determine the effects of Pendimethalin on the performance of onions (Allium Cepa). The experimental plots size were measured 2m x 3m (6m<sup>2</sup>) and a distance of 1m between replication; and 0.5m between plots with net plot size of 1.6m x 2.2m (3.52m<sup>2</sup>). The experiment consisted of three different rates of Pendimethalin of 2. 02, 4.77 and 7.33 a.i/ha, along with hoe-weeded and unweeded checks, and replicated three times in Randomised Complete Block Design (RCBD). Results revealed that application of 4.77 and 7.33kg a.i/ha Pendimethalin rates significantly reduced weed density at 3, 6 and 9 WAT, but enhanced bulb diameter, bulb weight and yield; and economic returns. However, seedling establishment was not affected by the treatments.

Keywords: Experiment, irrigation, Nigeria, Onions, Pendimethalin.