

**EFFECTS OF HERBICIDE APPLICATION AND TILLAGE  
ON WEED POPULATION IN SOWN GUINEA GRASS  
(*Panicum maximum* Jacq. Var. *Ntchisi*) AND  
OXEYFINESTEM STYLO (*Stylosanthes guianensis* Aubl.  
Sw) PASTURE**

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**ABSTRACT**

Greenhouse and field experiments were carried out between 1995 and 1997 at the University of Agriculture, Abeokuta (Latitude 6°0' 20" N and longitude 2°0' 40" W), Nigeria to determine the effects of herbicide application and tillage on weed control and dry matter yields of sown pastures. The greenhouse experiment involved three levels each of Primextra (metolachlor + atrazine), Pursuit plus (imazethapyr + pendimethalin), Galaxy (bentazone + acifluorfen) and Fusilade (fluazifop-butyl). Galaxy at the rate of 0.87kg ai/ha was selected for weed control in field sown guinea grass/stylo mixed swards. Tillage significantly affected the density of all the weed types only in October 1995 when grass weeds were reduced by 25% but broadleaf weeds and sedges were increased by 61% and 34%, respectively. Herbicide application increased the density of grass weeds significantly in June 1995, July 1996 and May 1997 but reduced broadleaf weeds and sedges by 17-84% and 27- 100%, respectively. Also, herbicide application significantly reduced the dry weights of broadleaf weeds and sedges by 29-83% and 68-100% respectively.

**Keywords:** Sown pasture, Herbicide, Weed population, Tillage.