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EFFECTS OF FORMULATED MIXTURE OF BENTAZONE AND ACIFLUORFEN ON WEEDS IN GUINEA GRASS (*Panicum Maximum Jacq.)* /COOK STYLO *(Stylosanthes guianensis Aubl.(Sw)* MIXED SWARD

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ABSTRACT

The effects of formulated mixture of bentazone and acifluorfen on weeds in guinea grass (Panicum maximum Jacq) and cook Stylo (Stylosanthes guianensis Aubl. (Sw.) mixed swards were studies in greenhouse and filed experiments. Two greenhouse trials to screen for the most suitable herbicide application rate and two subsequent field trials to determine the efficacy of the selected rate on weed control and forages were conducted. Formulated mixture of bentazone and acifluorfen at 0.87 Kg ai/ha favoured the growth of the forage palnts as measured by the number of tillers and leaves of guinea grass, as well as number of seedlings of stylo in the greenhouse. Generally, bentazone and acifluorfen at 0.87 kg ai.ha had the highest number and dry weight of stylo and guinea grass. Therefore, bentazone and acifluorfen at 0.87Kg ai/ha was selected for further trials on the field. The results of the field trials showed that there were significant reductions in the dry matter yields of broadleaf weeds and sedges up to 18WAP. The total dry matter yields of weeds were significantly reduced only at 20WAP (Weeks After Planting) of the second trial. The dry matter yield of guinea grass was significantly increased only at 47WAP of the first trial. In conclusion, bentazone and acifluorfen effectively controlled broadleaf weeds and sedges up to 18 WAP but not grasses with an insignificant increase in the dry matter yield of guinea grass without significantly reducing the cook stylo.

Keywords: Herbicide mixture, weed control, mixed sward.