

Determining an effective way to control weeds in the Olam Palm, Kango (Gabon) using herbicide treatment

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ABSTRACT:

The fight against weeds in forest areas is a major constraint to agricultural production; indeed, the loss of production there are around 25%. The use of herbicides for control remains common. This study aims to propose an appropriate herbicide against weeds in the young palms of central Gabon region.

The protocol is based on the observation and analysis of the effects of three herbicide formulations ($T_1 = 30$ ml Finish + 2g Ally; $T_2 = 50$ ml Roundup + 2g Ally and $T_3 = 100$ ml of "mixing 150 ml of Finish + 150 ml water 2g + Ally") on the dominant weeds and their impact on the growth of palm trees. The data are collected on the time taken for drying of weeds, time of recurrence of weeds, the growth of leaves and changing the size of the arrows.

The treatment T_2 is the most effective way to induce speed drying of weeds, their period of resurgence and growth of oil palm seedling. However, the species *Marantochloa purpurea* Ridl., perennial broadleaf weed is the most common resistant. This characteristic is related to the length of the leaves protecting the base of the screw-to-weed herbicide and screw to advanced growth stage. In addition, this species has a higher resistance compared to grasses (*Centotheca lappacea* L. and *Paspalum conjugatum* Berg).

In conclusion, treatment with the molecules of glyphosate and metsulfuron methyl are most suitable for weed control in the palm of OLAM Palm, Kango.

Keywords:

Palm oil, Efficiency, Weeds, Herbicides, Growth, Dryness, Growth.