

Evaluation of the insecticidal activity of two local plants aqueous extracts (*Azadirachta indica* (Meliaceae), *Cassia siamea* (Cesalpiniaceae)) on termites during the growth of Rice Nerica 1

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ABSTRACT:

This survey was conducted on an experimental parcel of the Agronomic High School of the National Polytechnic Institute Félix HOUPOUËT- BOIGNY (ESA-INPHB) of Yamoussoukro (Côte d'Ivoire). It aims to evaluate the insecticidal effect of 2 local plants aqueous extracts on termites (*Azadirachta indica* and *Cassia siamea*) dosed at 131.25 g powder/ L compared to a chemical pesticide (Chlorpyrifos ethyl) dosed at 480 g / L. A total of 11 termite species were collected from the plots. The fungus-growers with 6 species are the most dominant group. Four soil-feeder species and one wood-boring species were also collected. Only fungus-growers are present in the areas treated with plant extracts and chlorpyrifos ethyl. It was observed a high abundance of termites in heading stage of the rice growth. In maturity stage, ie 4 months after sowing the efficiency of chlorpyrifos ethyl decreased as plant aqueous extracts remain effective. Among the two tested plants, *Azadirachta indica* seems to be the most effective compared to *Cassia siamea* against termites. Chlorpyrifos ethyl could be used as a cure for its swift action on termites while *Azadirachta indica* could be used preventively and for crops whose destructive action is long term.

Keywords:

Rice Nerica, *Cassia siamea*, *Azadirachta indica*, Chlorpyrifos ethyl, Termites.