

NURSERY PEST RESISTANCE OF *MANSONIA ALTISSIMA* SEEDLINGS TO *GODASA SIDAE* ATTACK IN THE RAINFOREST ECOLOGICAL ZONE OF NIGERIA

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The establishment of plantations of *Mansonia altissima* has been constrained by the insect pest *Godasa sidae* that causes extensive damage to the seedlings in the nursery. This study was carried out at Forestry Research Institute of Nigeria nursery site, using 120 seedlings with the aim to prevent *Godasa sidae* attack on *Mansonia altissima* seedlings in order to achieve an ecologically based pest resistance management strategy. Seedlings were placed in a screen house (SHS); in the open treated with a methanoic extract from *Gliricidia sepium* once a week (MTH); also, in the open treated with a low concentration (0.05 percent) of water-based insecticide (Lambda-Cyhalothrin) once a week (CHM), all replicated 30 times. Growth data recorded were subjected to ANOVA and DMRT (post mortem). The results revealed that the SHS, MTH, and CHM were all effective in the control of the studied insect pests except the experimental control. However, the results revealed a significant difference at 5 percent level of probability among the treatments in terms of seedling height, collar diameter, and leaf production with highest mean value of 15.41 ± 2.36 cm observed for seedling height for SHS, followed by CHM (14.11 ± 2.18 cm) and MTH (13.87 ± 2.16 cm). The values of collar diameter were 0.49 ± 0.05 mm, 0.43 ± 0.03 mm and 0.40 ± 0.03 mm for SHS, CHM, and MTH respectively. Also, the mean number of leaves in each treatment was 23 ± 3.23 , 20 ± 3.15 and 19 ± 3.10 for SHS, CHM and MTH, respectively. It was concluded that the screen house (SHS) performed best. However, because of cost implications, an alternative is suggested. Due to the hazardous effects of the chemical on the environment, the methanoic extract which can be a potent pesticide should be adopted for the control of insect pest of *Mansonia altissima* at nursery stage.

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