

EVALUATION OF FOURTEEN ACCESSIONS OF SESAME (*SESAMUM INDICUM* L.) FOR RESISTANCE TO *MELOIDOGYNE INCOGNITA*

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Sesame (*Sesamum indicum* L.) is an annual crop typically found in tropical and dry habitats. Aside from its use across various industries like food, health and cosmetics, sesame contributes to Nigeria's foreign exchange earnings and those of other countries around the world. However, its production is limited by diseases caused by plant parasitic nematodes which are small microscopic pathogens often referred to as the farmers hidden enemy which pose a threat to the plant's health. This study focused on the evaluation of some sesame accessions for resistance to the southern root-knot nematode *Meloidogyne incognita* (Kofoid and White, 1919) Chitwood (1949). A screen house experiment was conducted to determine the host status of fourteen accessions of sesame to *M. incognita*. The experiment consisted of 14 accessions and *M. incognita* (0 and 5000 eggs levels) as factors. With a total of 28 treatments comprising all the sesame accessions inoculated with 0 or 5000 nematode eggs at two weeks after emergence. Each treatment was replicated 6 times. The standardized method of screening and reporting resistance of crop germplasm to root-knot nematode at 60 days after planting was used in combination with the modified version that includes yield at harvest. The first phase of the experiment assessed the growth and yield while the second phase determined the host status (resistance designation) of the sesame accessions to the nematode based on gall index, reproductive factor and yield. This study established that out of the 14 accessions screened; only 3 were hyper-susceptible while the others were nematode resistant and this is in corroboration with the work of other scholars in the field. It is therefore recommended that field trials be conducted on these accessions to confirm their resistance to *M. incognita*.