





Comparative study of susceptibility, growth & yield of two varietiessoybean [Glycine max (L.) Merrill] varieties Shohag and AGS-334 against development of root-knot nematode (Meloidogyne javanica) with treatment BINA-Biofertilizer, BAU-Biofungicide, a chemical Nematocide.

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## ABSTRACT

The study was carried out with four different treatments covering BINA-Biofertilizer, BAU-Biofungicide, a chemical nematicide (Curaterr) and a control to see Comparative study of susceptibility, growth & yield of two varieties soybean [Glycine max (L.) Merrill] varieties Shohag and AGS-334 against development of root-knot nematode (Meloidogyne javanica) with treatment BINA-Biofertilizer, BAU-Biofungicide, a chemical Nematocide. Among the treatments, BINA-Biofertilizer and BAU-Biofungicide were used as seed treatment and nematicide Curaterr was used as side-dressing to see their effect against the root-knot nematode (Meloidogyne javanica) infecting two soybean varietiesShohag and AGS-334. All the treatments with BAU-Biofungicide, BINA-Biofertilizer and Curaterr gave significantly higher response in plant growth characters like length of shoot and root, fresh weight of shoot, fresh weight of root with nodules, weight of pods per plant, number of nodules per plant, weight and number of seeds per plant compared to the control treatment. Simultaneously lower galling incidence, and egg masses as well as lower development of adult females, J2, J3 and J4 juveniles of M. javanica were observed with those agents. Varieties Shohag gave betterfresh weight of shoot and nodulation, compared to the variety AGS-334 other than higher J2 population in the variety Shohag, no significant differences were found among these two varietiesShohag and AGS-334 on the development of adult females, J3 and J4 juveniles of M. javanica. Interaction effects of the treatments and varieties were found significant in respect of length of shoot and root, fresh weight of shoot, number of nodules, number of seeds per plant and in cases of adult females and J2 population. In most of the cases positive responses were observed with the treatments with BINA-Biofertilizer, BAU-Biofungicide and Curaterr interacting with both of the varieties. Other than length and fresh weight of root with nodules, number and weight of seeds and nematode population the nematicidial treatment Curaterr gave more or less similar responses like that of BINA-Biofertilizer and BAU-Biofungicide.



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