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Effect of different inoculum levels of Maize Cyst Nematode, *Heterodera zeae* on Sweet Corn (*Zea mays* L. *saccharata*)

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ABSTRACT: An experiment was conducted to find out the effect of different inoculum levels of *Heterodera zeae* on plant growth of sweet corn and nematode multiplication. Seeds of sweet corn (variety- Madhuri) sown in earthen pot and after 10 days of germination 1000, 2000, 4000 and 8000 larvae of *H. zeae* were inoculated in rhizosphere of plants. Results revealed gradual decline in plant growth characters as the inoculum level increased. However, significant reduction in plant growth characters was observed at and beyond 4000 larvae level. Maximum reproduction (R_f -13.61) of *H. zeae* was observed at 1000 inoculum level and minimum (R_f -2.73) at 8000 inoculum level. Under the experimental conditions, an initial inoculum of 4 larvae/g soil proved as threshold level of *Heterodera zeae* on sweet corn.

Key Words : Pathogenicity, *Heterodera zeae*, inoculum level, sweet corn.