Seed treatment with bio-agents : An environmental suitable approach for management of maize cyst nematode, *Heterodera zeae* on maize

R.N. Kumhar, B.L. Baheti, B.S. Chandrawat and Om Prakash Gurjar

Received January 20, 2018 and Accepted March 6, 2018

ABSTRACT : Maize cyst nematode, *Heterodera zeae* causes significant losses in Rajasthan due to monocropping of maize, favourable soil type, environmental conditions and ignorance of management practices. Looking to its importance, present investigations were undertaken to find out the effect of bio-agents viz. Pochonia chlamydosporia, Glomus fasciculatum and Metarhizium anisopliae at 1, 2 and 4% w/w against maize cyst nematode, *H. zeae* on maize. Results showed that *Pochonia chlamydosporia* at 4 per cent was found most effective followed by *P. chlamydosporia* at 2 per cent and *G. fasciculatum* at 4 per cent to enhance plant growth of maize and to reduced the infection of *Heterodera zeae* on maize.

Key Words : Maize (Zea mays L.), cyst nematode, Heterodera zeae, efficacy of bio-agents, Trichoderma viride, Pochonia chlamydosporia, Glomus fasciculatum, Metarhizium anisopliae.