

Status of wheat cyst nematode problem in India and its management

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ABSTRACT : A wide range of organisms infect wheat, of which the most important being bacteria, fungi and viruses affecting the quality and quantity of produce. The yield of wheat crop is affected mainly by diseases including rusts, smuts and plant parasitic nematodes. Among the plant parasitic nematodes infecting wheat crop, cereal cyst nematode (CCN), *Heterodera avenae*, Woll. the causal organism of “Molya disease” and the seed gall or ear-cockle nematode, *Anguina tritici*, Steinbuch, are considered to be the key pests, causing an annual loss of Rs. 97.28 million per year in India (Jain *et al.*, 2007). Cyst nematodes are sedentary and highly specialized endoparasites of plants. The CCN is widely distributed in most parts of Europe, Australia, Russia, Israel, India and Pakistan. In India, it has been reported from Rajasthan, Haryana, Delhi, Himanchal Pradesh, Jammu and Kashmir, Madhya Pradesh, Punjab and Uttar Pradesh. Total yield loss caused by this nematode is in the range of 50-90% in certain areas with an annual monetary loss of Rs. 80 Million in the state of Rajasthan alone (Gaur and Pankaj, 2009). The symptoms appear early in the season as pale green patches with the lower leaves of the plant becoming yellow and the plants generally have few tillers. Infected plants grow poorly and in uneven patches. Infected roots have bushy-knotted appearance.

Key Words : Cereal Cyst Nematode (CCN), wheat, patches, management, resistant varieties.