International Conference on Contemporary Issues in Integrating Climate-The Emerging Areas of Agriculture, Horticulture, Biodiversity, Forestry; Engineering Technology, Fundamental/Applied Science and Business Management for Sustainable Development (AGROTECH-2017)

Present Status of Acarine Pest of Tea in Indian and its Management

*Choyang Sherpa, K. Karmakar, Sagarika Bhowmik and Dawjam Bhutia

Department of Agril.Entomology, Faculty of Agriculture Bidhan Chandra Krishi Viswavidyalaya, Mohanpur, Nadia, 741252, West Bengal, India. E-mail: beckyang789@gmail.com

Abstract—Tea (Camellia sinensis L.) is a queen of all beverages and grown as a major cash crop in India. Tea is grown in red laterlite soil where temperature ranging from -12°C to 40°C, annual rainfall from 938 to 6000 mm and relative humidity from 30 to 90%. It is grown over 2.71 million ha and major growing countries viz. Asia, Africa, Latin America, and Oceania 3.22 million metric tons annually (Hazarika et al., 2009). In India, tea is grown in Darjeeling, Assam and Nilgiri (Tamil Nadu), Kerala, Karnataka, Sikkim, etc and the adjacent plain areas of Dooars and Terai of West Bengal. Aristotle revealed that acarines come a long way which causes damaged upto 80% in agriculture crops.. Phytophagous mites four families' viz. Tetranychidae, Eriophyidae, Tenuipalpidae and Tarsonemidae have been reported as pests causing economic losses (Chhillar et al., 2007). Infestation leads to discoloration of leaves, often described as "coppery brown", "bronze glossy buff", "pale yellowish" or "purplish brown" depending on the pest species, untimately resulting in yield reduction. Of the various acarine pests attacking tea crop, Oligonychus coffeae, causes the highest loss but recently the Eriophyid group i.e. pink, purple and pale mite has also acquired the status of one of the major hindrance for tea cultivation causing considerable loss. Pest management tactics are plentiful. These include combined use of semiochemicals, trap crops, and deterrents for manipulating pest behaviour to develop IPM strategy. Extensive use of these chemicals leads to pesticide residue problems in the made tea (Muraleedharan, 1995) thus this strategy, application of selective pesticides of biological and mineral origin and pheromones may be the last option and a systems approach may give better results.

Key words: Tea, Acarine pest, Phytophagous mites, Management.

Refrences: Hazarika, L. K., Bhuyan, ,M. and Hazarika, B. N. 2009. Insect Pests of tea and their management. Ann. Rev Entomol., 54: 267-84.

Chhillar, B. S., Gulati, and Bhatnagar, P. (2007). Agricultural Acarology. Daya Publishing House, New Delhi, India, 355-378.

Muraleedharan N, Selvasundaram R (1995). Natural enemies of tea pests. In: Ecofriently Tea Farming – Planters' Alternative Approach, UPASI – KVK, Coonoor, Nilgiris, pp. 22-28.

ISBN-978-93-85822-49-0

178