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EDITORIAL

TEA RESEARCH – EMERGING ISSUES



During last decade and a half, tea industry has passed through a difficult time. The demand for high quality tea in the market, problem of high price realization crippled the tea industry in the country during early part of this century. In view of perennial nature and long gestation period, it is difficult to address many issues in tea with ease and speed. Tea being an important plantation crop, special emphasis need to be given for its improvement to meet the challenges in the present scenario. Being recalcitrant, different approaches for its improvement is necessary as compared to annual crop. Tea industry needs scientific support in terms of plant improvement, cultivation practices and processing techniques to remain competitive. The industry has ushered in major improvement in method of cultivation and inputs with the support from Tocklai Experimental Station during last few decades.

Tea breeding is an important part of R&D activities with regard to service to the tea industry for providing

superior planting material. Since inception of tea breeding as early as 1930s phenotypic selection and controlled hybridization followed by field trial for assessing both yield and quality has been the main method of developing improved cultivars. So far, Tocklai has developed 31 TV clones, 153 garden series clones and 14 biclonal seed stocks. Application of molecular breeding using DNA based genetic markers has become an integral part of plant breeding in tea at present. It is important to be upto date in frontier areas to face future challenges of tea. Non tarrif barrier like chemical residue has been emerging as a major challenge for researchers as well as producers in tea seen in recent time. At the same time, we need to be quite conscious of the fact that benefit of research should reach the end users.

Broadening of genetic base of breeding lines, enhancement of seed production rate from artificial cross pollination, development and use of reliable selection criteria etc. are to be given top priority for sustainability of the tea industry.

Sustainability of the tea industry also depends on developing strategy for combating stress both biotic and abiotic. Conflicting views come sometime on the climate crisis. The fact remains that there has been significant

change in weather parameters. As observed from 90 years meteorological data generated at Tocklai, minimum

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temperature has risen by 2°C and the rainfall has reduced by 200 mm. These changes have altered pest dynamics in tea ecosystem. Extreme events like high rainfall continue to bother during tea growing period. Tea plant is likely to be the early causality in case of climate crisis. It not only receives stress due to climate variables, it also is subjected to periodical mechanical stress through pruning etc.

Knowledge is important, but imagination is no less important as it encircles a larger periphery. Tea being a

commodity to commerce, research requires an holistic approach to deal with consumer heterogeneity and forces influencing consumer attitude. To a large extent the tea market of this country is influenced by European Consumer's attitude. Changing consumer attitude need to be addressed while we look into the research programmes in tea. □

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