

From the Editorial Office ...

New year tidings from the Editorial Board of *International Journal of Tea Science* are brought to the readers of the journal and the members of the International Society of Tea Science by the fourth issue of the volume nine.

Now, a peep into the contents of this issue ...

Jayesh Patil *et al.* reported improvement in callus induction in *in vitro* shoot generation by modifying the medium in an effort to buttress vegetative propagation of tea clones, which in their contention is ineffective. Clonal propagation of tea by vegetative means is by far the most effective and successful method amongst all plantation crops, but remains inadequate in generating enough planting material of newly released clones. Multiplication of adequate planting material for distribution to establish mother bush plots of newly released clones in different tea growing regions takes more than a decade by traditional means. It is here that biotechnologists can play a significant role by popularizing tissue culture techniques and making them user-friendly for rapid mass multiplication of new clones; certainly, it would be cost-effective for this limited purpose.

Genotype preferences and varying ability to accumulate micronutrients have been reported by Omwoyo *et al.*; clonal variation in micronutrient content within the plant tissue is reported to be influenced further by the region. These findings raise a fundamental question as to whether a uniform recommendation on the rate of application of micronutrients – nay, any nutrient – to all cultivars in all the regions is valid ?!

Positive indications do exist that are now reiterated by this work, on the need for cultivar-specific and region-specific nutrition; possibility of its practical application should be explored at the field level.

Carbon accumulation in both subterranean and aerial parts of organically cultivated tea has been found, by Subramanian *et al.*, to be far higher compared to that under conventional practices. While such finding may be of immense interest to academicians, does not enthuse tea growers since, unfortunately, carbon sequestration in tea plantations does not offer relief by way of carbon-credits. In fact, such massive accumulation of biomass in the bushes does not even translate into higher crop since it is not partitioned into the product of commerce, *i.e.* crop shoots! So much for carbon sequestration in tea plantations which lock up large quantities of carbon.

Mohammad Ali *et al.* presented data on the effect of the soil applied fungicide, tridemorph (Calixin) and a few herbicides on fungal and mycorrhizal activity in soil. Tridemorph is applied to soil only to control root pathogen(s) when present and obviously is of prime importance to facilitate survival/establishment of tea bushes rather than to facilitate mycorrhizal activity. Herbicides, when applied on weed populations and not on bare soil, do not greatly interfere with soil micro-flora; even if they do, it is for the purpose of growing the target crop.

From amongst the herbal extracts tested for the control of “Red Spider Mite”, *Parthenium hysterophorum*, *Clerodendrum viscosum*, *Chromolaena odorata* and *Ipomea carnea* were reported by Ibetombi Devi *et al.*, as having controlled the pest “reasonably well”; the extent of control is not quantified.

An enthusiastic Hemal de Silva from Sri Lanka, is strongly in favour of growing *Pentadesma butyracea* as shade tree in tea fields because of its various economic attributes. However, certain important aspects such as root profile in relation to that of tea bushes, its nutrient requirements, CEC of the roots *vis-a-vis* tea roots and shade pattern offered by the species and its impact on the growth of tea should be studied for over a decade or more before taking any decision on any tree species for use as shade in tea. *Pentadesma butyracea* being self-sowing in nature may cause serious problem in tea fields. Perhaps, this species could be grown in fallow land for additional revenue.

Saibal Moitra and Gargi Sen advocate proper nutrition and hygiene and medical awareness amongst tea estate workers to bring down incidence of a variety of diseases among them. Importance of such an awareness cannot be contested; cost–benefit ratio seems to be overtly tilted towards the latter deserving the attention of the managements.

Ian Bresten's book entitled "*Tea for the 21st Century*", reviewed by V. Ramaswamy, takes the cake in this issue. He traces the history of making 'infusion' at different periods culminating in the present day practice(s), all of which according to him are not apt. He advocates an entirely novel method of infusing tea for which he even developed his own filters. The book is 'a must read' for all tea lovers.

The Editorial Board is grateful to all the expert referees who graciously set apart time to review the articles and give their valuable comments in furtherance of the publication.

We from the Editorial Board of the IJTS wish the readers, members of ISTS, researchers and the entire tea fraternity in the world a very happy, healthy, highly productive and immensely satisfactory NEW YEAR .

V.S. Sharma
EDITOR-IN-CHIEF