

ASC meeting held at DTRDC, Kurseong

Kurseong, 13th October: A meeting of the Area Scientific Committee (ASC) of TRA, Darjeeling was held on 13th October, 2017 here at DTR&DC, Kurseong. The meeting was attended by some senior planters and managers from the Darjeeling tea industry like Mr. S. K. Saria, Mr. A. Bansal, Mr. B.N. Mudgal, Mr. A. K. Jha, Mr.

J.D. Rai and others including scientists from NBRDC, Nagrakata and DTRDC, Kurseong to discuss on the strategy on how to overcome the present crisis of the industry following 104 days of bandh and to resume the normal practices of plucking and other agricultural operations for now and next season.



The participants discussed in details on various issues like cleaning & weeding of the entire garden,



plucking for the rest of the season, managing overgrown bushes and pest management under present scenario. Discussions were also made on the prospect of first flush crop & quality in next year i.e. 2018.

Planters also shared concern on the availability of workers for all these operations

to complete within stipulated time in view of progressively higher rate of absenteeism. They urged scientists to work and explore on mechanization of agro practices for Darjeeling tea industry.

A write-up from DTRDC on the field practices to be followed in the days ahead was circulated to all the participants.

Recommendation from DTR&DC for Darjeeling Tea Industry:

Weed management:

- Weeds should be removed by hand pulling and sickling only.
- In case of manpower shortage, weeds can be removed by machines. But due care should be taken so that collar region of the bushes don't get damaged.
- Do not spray any herbicides at this time.
- After sickling, the ground can be well mulched with these weed materials.
- While practicing strip weeding in slopes the uncontrolled strip should be subjected to manual slashing.
- Weeding should be started on priority basis initiating from the sections having leaf to pluck (if any) followed by RP section, than pruned section and so on.

Pruning:

- Pruning and Skiffing should be done depending on the cultivar, thickness of stem, altitude, climate, starch reserve etc.
- Bring down bush height to an optimum level by height reduction pruning (HRP) at 60-70 cm, or medium prune (MP) at 40-45 cm above ground whichever is applicable depending upon the cultivar.
- Deep skiffing (DS) of tea bushes to be done normally between 10- 15 cm above the last Light Pruning (LP) mark. Medium skiffing (MS) at 5 cm over last Deep skiff mark. This will regulate crop distribution, reduce the ill effects of drought, reduce the incidence of excessive banjhi formation and reduce the over height of plucking table.
- Newly planted tea with 3-5 good laterals should be decentred in end January at 20 cm above ground.
- After pruning, the pruning litters should be spread evenly over the ground and do not allow removal of pruning litter from the field. It will increase organic matter status as well as carbon dioxide concentration during the decomposition process and it will be help in conserving existing soil moisture.
- The whole exercise should be done under strict supervision to ensure minimum bush damage and maximum recovery of bush for next season.

Soil and Nutrient management:

- In those sections which are to be light pruned this year, application of about 1/3rd of recommended dose of organic manures and/or fertilizers (Inorganic gardens) in early October is advisable. This will help in increase of starch reserve in root for succeeding flush. Organic manures/Fertilizers should apply only through bend placement.
- The organic manure with Rock phosphate may be applied through bands on half upper side of the plant in sloppy immediate after removal of weeds.
- Organic manures/Fertilizers should be applied after proper weed management or in and along with weed control to reduce man days and nutrient loss.
- In case of insufficient labour, Organic manures/Fertilizers may be applied during slack time in March on the availability of soil moisture. However, it will not have any immediate reflection on first flush yield.
- The foliar application of nutrient enriched vermibed wash, aqueous extract as nutrient supplement with some micronutrients will be beneficial for early recovery of bushes.

Water Management:

- Mulching of teas (especially newly planted tea) should be undertaken from October to conserve existing soil moisture. This can be done by putting the removed weeds (now) and pruning litter (after pruning).
- Subsoil irrigation may be given for young tea plants during draught period (November to April) if sufficient soil moisture is absent and provision of irrigation facility is there.
- Regular watering of seed bari during water stress condition, etc. subject to availability of resources.

Plant Protection:

- Since tea bushes are to be prepared for pruning in coming months, proper monitoring of existing pest incidence should be taken.
- Pruning and skiffing will automatically reduce and remove the exiting population of different insect pests. Hence, avoid pesticide application at this stage until it is very much required. Detection and marking of the initial pest-build up sites/sections can help containing and managing the pest through spot spraying only.
- For inorganic gardens, PPC prescribed pesticides should be followed whereas for organic ones, certification agency recommended formulations may be followed.
- Removal of weeds is essential to contain the pest population build up and infestation in the next season. Where required, side branches/ “Matidal” of bushes have to be removed to improve ventilation and reduction of pest population build up.
- For insects pests like trips and green flies, caustic washing of the trunk of the bushes after cleaning the mosses and lichens and stirring of soil around the collar region will help in reducing the pest attack in next season.
- Careful removal of all dead wood at each pruning and subsequent protection of the pruning cuts with protective paints/sprays is necessary to avoid disease infestation.
- Apply COC or *Trichoderma* bioagents at pruning cuts. For painting of large pruning cuts soon after rejuvenation, 80 litres of 20% *Trichoderma* spore suspension using 16 L or kg of the bioagent formulation/ha is required (considering 8000 plants/ha). For spraying of entire bush frame after light pruning, 400 litres of 5% *Trichoderma* spore suspension using 20L or kg of the bioagent formulation/ha is required using a NMD 60/450 nozzle.
- Spray copper oxychloride (1:400) or hexaconazole/ propiconazole (1:1000) at 14 days interval in blister blight affected sections if required at present. Spraying should be targeted to the upper surface of the leaves.