



केंद्रीय कॉफी अनुसंधान संस्थान

CENTRAL COFFEE RESEARCH INSTITUTE

February – 2026

Issue No – 02/2026

Monthly e - Technical Advisory



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CULTURAL PRACTICES - FEBRUARY 2026

Summary

Established Blocks

- ✓ Take up pruning in Arabica
- ✓ Provide blossom irrigation for Robusta after harvest preferably during second fortnight of this month and take up blossom manuring
- ✓ Collect soil samples for lime and fertilizer application
- ✓ Apply lime to correct soil pH based on soil test values
- ✓ Install Broca traps around drying yard and in the field (10 traps per acre) to manage coffee berry borer
- ✓ Take up control measures against shoot mealy bugs if incidence is noticed
- ✓ Spray systemic fungicide hexaconazole 5% EC @ 400 ml/200 litres of water in coffee leaf rust disease affected Arabica plantations
- ✓ Continue the harvesting and processing of Robusta (Use picking mats to avoid gleanings)
- ✓ Collect Arabica gleanings and disinfestations/disposal of berries infested with berry borer
- ✓ Collect left over fruits from Robusta plantation



Nursery

- ✓ Preparation of secondary nursery beds, filling and arranging of polybags and transplanting

New clearings

- ✓ Initiate preparation of land for new planting
- ✓ Provide irrigation for young coffee plants

AGRONOMICAL PRACTICES

For established Arabica plantations:

- Take up light pruning (removal of diseased, old and dried branches)
- If dry weather prevails, take up the pruning on receipt of blossom showers



For established Robusta plantations:

- Provide blossom irrigation during 2nd fortnight of February @ 38 - 40 mm (1.5 inches) to ensure proper and uniform flowering



Polybag filled with nursery mixture

Polybag (basket) nursery:

- Polybags of size 22.5 x 15 cm (9"x 6") with 150-gauge thickness with 10 - 12 holes (3 mm hole size) should be used
- Fill the polybags with nursery mixture i.e., Forest soil/Farm Yard Manure : Compost : Sand @ 6:2:1 ratio and arrange them in rows (10 bags/row)
- Transplant the coffee seedlings at button stage (45 days after sowing) into the polybags immediately after removing from nursery bed
- Nip off the tap root while transplanting
- Transplanted seedlings should be watered daily either in the morning or in the evening hours



Button stage seedlings



Uprooting of button stage seedlings



Dipping of seedlings in cow dung slurry

For young plants:

- ✓ **New planting** : Initiate land preparation
- ✓ **Protection** : Provide hutting to prevents sun scorching
- ✓ **Irrigation** : Irrigate young coffee plants @ 4-5 litres per plant per week to avoid mortality
- ✓ **Fertilizer** : Apply 20:20:0:13 @ 20-30 g per plant to boost the growth of coffee seedlings



Land preparation



Hutting with natural material



Hutting with artificial material

SOIL SAMPLING IN COFFEE PLANTATION

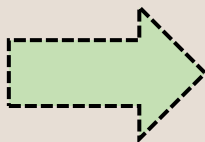
Method of collection of soil samples:

- ✓ Each sample should represent 2 ha of area

1



Collect soil sample from middle of 4 plants



2



Remove all the litter; dig a hole of 22 cm (9") depth using an auger or sabbal



4

Collect & mix soil from 20 spots to get uniform mixture

3



Scrape the soil around the hole from the top to the bottom all along the side

5



Employ quartering technique to get 500g of composite sample

6



Pack sample in clean cloth / polythene bag, label & submit the sample for analysis

DO'S AND DON'TS:

- ✓ Ideal time for collecting soil samples is January – May
- ✓ Collect separate samples from problematic blocks
- ✓ In case of wet samples, dry them under shade
- ✓ Pack sample in clean cloth bag
- ✓ Label each sample with name of estate, block and date of collection
- ✓ Submit sample along with the information sheet
- ✓ Keep the record of the area sampled
- ✓ Leave a gap of 60 days from recently limed or manured blocks
- ✓ Do not collect samples during rainy season



SOIL ACIDITY MANAGEMENT IN COFFEE PLANTATION

Liming:

- ✓ Apply lime based on soil test recommendation (please refer table for soil testing lab) to improve the soil pH level
- ✓ Soil test should be done once in two years for very high rainfall areas and once in three years for low to medium rain fall areas
- ✓ Apply lime, if soil pH goes less than 6.1
- ✓ In coffee plantations, most commonly used liming materials are **Agricultural Lime** and **Dolomite**



- 
- ✓ Don't apply **burnt lime** and **slaked lime** as it injures tender roots, due to its caustic action and affect the soil micro flora and fauna
 - ✓ Analyse liming materials before applying to the field for its purity
 - ✓ Use liming materials with calcium carbonate equivalence (% NV) around 80% and above

- ✓ The ideal time for application of liming materials is November to March for North-East monsoon area.
- ✓ Apply lime when there is sufficient moisture (60% WHC) in the soil for quick reaction



On-spot mobile soil testing campaign

- ✓ To create awareness among the coffee growers on the importance of soil test based nutrient management, Coffee Board is conducting On-Spot Mobile Soil Testing Campaign at village / hobli level
- ✓ The growers may utilize this facility to get their soil samples analyzed on payment basis and obtain lime recommendation on the spot
- ✓ For availing on-spot campaign in your area, the growers may contact nearest Extension officers (or) Divisional Head / Scientist of Soil Science and Agricultural Chemistry Division, **CCRI**.

IRRIGATION AND NUTRIENT MANAGEMENT IN COFFEE

During backing irrigation, application of water-soluble fertilizers, especially phosphorus (DAP or SSP) is very critical as it helps in good fruit set and retention. In irrigated plots, fertilizers can be applied just prior to irrigation and should be properly mulched before irrigation.

Essentially fertiliser application should be made based on soil test values. But as a general recommendation, for Robusta coffee (those who are applying 3 rounds), considering average yield of 700 kg of clean coffee (28 bags of dry cherry) per acre, as first dose, grower is suggested to apply 45 kg Urea, 50 kg DAP and 50 kg MOP per acre (@ 200 g per plant). Alternatively, 65 kg Urea, 144 kg SSP and 50 kg MOP per acre (@ 325 g per plant) can be applied.

In order to improve the fruit retention, additional foliar nutrient spray can be given 20 days after blossom. Foliar spray of the nutrient mixture comprising 1 kg 19:19:19 + 0.5 kg Zinc sulphate + 100 g Boric acid or 250 g of Borax + 250 g Magnesium sulphate + 50 g of Ammonium Molybdate + 50 ml of Planofix along with wetting agent (70 ml APSA or 200 ml local wetting agent) in 200 litres of water is recommended. This foliar spray would also be helpful for the grower who do not have facility for backing irrigation.

CHARGES FOR ANALYTICAL SERVICES

Services	Charges per sample (Rs.)	
	Small & medium grower sector (<20 ha)	Large growers and corporate sector (>20 ha)
1. Soil Samples		
Analysis of sample for pH - Lime Recommendation	25/-	25-
Analysis of sample for pH, Organic carbon content, available N, P & K - Lime & fertilizer Recommendation	150/-	150/-
Analysis of sample for pH, Organic carbon content, available N, P & K, available Secondary (Ca, Mg, S) and Micronutrients content (Fe, Cu, Mn & Zn) - Lime & fertilizer Recommendation, Secondary & micronutrient recommendations	600/-	650/-
2. Leaf samples		
Analysis for major nutrient content (N, P & K)	800/-	850/-
Analysis for major nutrient content (N, P & K), available Secondary (Ca, Mg, S) and Micronutrients content (Fe, Cu, Mn & Zn)	1500/-	1600/-
3. Agro-Chemicals		
Liming materials (Agricultural Lime, Dolomite, Spray Lime, Shell lime, Minshakthi), Copper Sulphate and Single nutrient fertilizers (Urea, Single Super Phosphate, Rock Phosphate and Muriate of Potash)	500/-	550/-
Organic Manures - Analysis for pH, EC OC (%) and major nutrient content (N, P & K)	600/-	650/-
Organic Manures - Analysis for pH, EC OC (%) and major nutrient content (N, P & K), available Secondary (Ca, Mg, S) and Micronutrients content (Fe, Cu, Mn & Zn)	1100/-	1200/-
Chemical fertilizers (More than one nutrient)	1000/-	1100/-

SHADE MANAGEMENT

- ✓ Complete the clean harvesting (stripping) of both Arabica and Robusta and make the plant free from crop load and ready to receive the first showers
- ✓ Regulation or lopping of lower branches of permanent shade trees and clean the chapped material
- ✓ Completely remove all barren, wiffy wood and soil touching tertiary branches which are looking as hanging branches and no new bearing nodes
- ✓ Take up mulching with leaf litter material fallen on the estate roads
- ✓ Strictly protect the plant population and shade trees and biota from unwanted or accidental fire incidents in the estate
- ✓ Provide the blossom irrigation (1 to 1.5 inch) from 2nd week of the February to Robusta coffee and give priority to the less shade and open condition blocks and also young coffee plants and within 20 days provide backing irrigation without fail



PEST MANAGEMENT

Management of Coffee Berry Borer:

- ✓ Use picking mats while harvesting Robusta to reduce gleanings
- ✓ If Arabica harvest is completed, collect gleanings, left over berries and dispose infested berries by burying in soil (9 inches deep) or disinfest by dipping in boiling water for 2-3 minutes
- ✓ Install Broca traps around drying yard and in the field (10 traps per acre)



Using of picking mats while harvesting



Broca trap

Management of Shot hole borer:

- ✓ Install traps with Xycom lure (12 traps per acre) in the field or refill the traps with Xycom lure



Management of mealybug in Robusta plantation:

- ✓ If shoot mealybugs are present, release parasitoid, *Leptomastix dactylopii* (10,000 per acre in two or three splits)
- ✓ Remove or destroy ant nest from the field and the plants



Leptomastix dactylopii



Shoot mealybugs



Ant nest in coffee



Maintenance of apiaries:

- ❑ The frames in the brood chambers are completely developed, place super chambers with frames (frames with foundation sheets for easy comb development). Once the combs are developed, bees store honey inside
- ❑ Once the frames of the super chambers are filled with honey it can be harvested using extractor. After filling honey, each cell of the comb is capped/ sealed by bees and this indicates the honey is mature and ready to harvest
- ❑ Clean bottom boards of the boxes to remove debris and developmental stages of wax moth (once in ten days) using hive tools and brush



Capped cells with honey

DISEASE MANAGEMENT

- ✓ If **Coffee leaf rust** disease is noticed in Arabica plantations, advised to spray systemic fungicide hexaconazole 5% EC @ 400 ml/200 L of water.
- ✓ Most of the coffee growing regions experiencing dry period, in this situation, plants showing drooping, yellowing and wilting of leaves and followed by defoliation leading to death of plant is observed, may be suspected for **root disease** problem.



Yellowing of leaves



Wilting symptoms



Death of root disease plant

The following control measures may be adopted for effective management of root disease.

1. Uproot and destroy the affected shade trees/coffee plants to reduce the inoculum.
2. Isolate the affected area by making trenches including one row of apparently healthy adjoining plants all around with 2 ft. depth and 0.5 ft. width.
3. Soil taken out from the trenches should be placed inside the infected area, apply agricultural lime inside the trench. The trenches should be cleaned at least once in three months.
4. Apply 2 to 3 kg of agricultural lime and turn the soil in the pits where affected coffee plants and shade trees were uprooted.
5. Take up the cover digging during the dry period to expose the pathogen to sunlight.
6. Drench the base of plants showing initial wilting symptoms with propiconazole 25% EC @ 2 ml/L. The fungicide solution should be drenched @ 15 to 20 litres per plant each time based on size and age of the bush.
7. Apply **Trichoderma** enriched compost / farmyard manure (100 kg compost enriched with 10 kg *Trichoderma harzianum*) to the neighbouring healthy coffee plants in the affected area twice in a year when sufficient soil moisture exists.



Trichoderma harzianum

IMPROVEMENT OF COFFEE QUALITY THROUGH ON-FARM PROCESSING

As Indian coffee is primarily an exported commodity with over 75% of its annual production being exported to various destinations around the world, it is imperative to maintain the coffee quality for better competitiveness and realization of values in the international market.

The Research Department of the Coffee Board has developed a set of Good Agricultural Practices (GAPs), Good Manufacturing Practices (GMPs) and Good Hygiene Practices (GHPs) for the preparation of quality parchment coffee (wet processing) and cherry coffee (dry processing).

A. Recommended Practices for Coffee Processing by Wet Method:

- ✓ In wet method, it is recommended to pick coffee cherries as and when ripe.
- ✓ The ripe cherries should be pulped as quickly as possible (within 6 hours) as prolonged storage encourages pre-fermentation of ripe fruits.



Harvesting of coffee berries



Sorting of harvested fruits

- ✓ Inferior cherries (overripe/tree dried/diseased) if any should be separated out before feeding into the pulper through flotation/siphon tank arrangements.
- ✓ All coffee processing machineries (pulper and washer) should be kept clean and in good working condition (properly adjusted/calibrated) to avoid pulper cuts and pulper nipped beans.
- ✓ Fermentation vat and post-wash tank should be kept clean and tidy.



Post-wash soaking of wet parchment

- ✓ Fruits skin/pulp should not be present in the fermentation vat and fermenting coffee bean, as it spoils quality
- ✓ Close monitoring of fermentation process is essential (optimal fermentation is must and should)
- ✓ Clean water should be used for pulping and washing of fermented coffee beans
- ✓ Soaking of wet parchment under clean water for about 6 to 8 hours improves coffee quality
- ✓ Wherever possible, dry the wet parchment initially on wire mesh bottom trays for 24 to 48 hours before shifting them to the drying yard
- ✓ Dry the wet parchment samples on a clean cemented or tiled drying yard
- ✓ Dry the wet parchment slowly by spreading 4 to 7 cm thickness for efficient and uniform drying
- ✓ The wet parchment should regularly be raked to facilitate uniform drying (once an hour)



- ✓ The wet parchment should be covered with a clean plastic sheet during night hours to prevent rewetting of coffee samples



Heaping of the coffee mass



Covering the coffee lots

- ✓ Dry the wet parchment to the recommended moisture level of 10%. The forlit weight (kg/40 liter) should be 15.5 kg, 16.5 kg, 17 kg and 18 kg for Arabica Parchment, Robusta Parchment, Arabica Cherry and Robusta Cherry, respectively.
- ✓ In case of on-farm storage, pack the parchment coffees in clean gunny bags and stack the bags in well-ventilated godown/warehouse over the wooden dunnage.



Test weight measurement



Storing of dry parchment on wooden dunnage

- ✓ Do not store at the estate level for long duration (beyond end of May) as the wet monsoon conditions not ideal for coffee storage.

B. Recommended Practices for Coffee Processing by Dry Method:

- ✓ In dry method, it is recommended to pick the coffee cherries when about 85% to 90% of cherries are ripe.
- ✓ Avoid heaping (or) storing of fresh coffee fruits in gunny bags for longer time, as it enhances the likelihood of mould growth and subsequent spoilage of coffee quality.
- ✓ Sort out all the unripe berries (greens), over-ripe, tree-dried and damaged coffee cherries before spreading for drying.
- ✓ Over-ripe, tree-dried and damaged coffee cherries are potential source of mould contamination which results in the production of “mouldy” coffee and these mouldy coffee imparts “mouldy/musty” taste in the cup.
- ✓ After sorting, spread the coffee cherries evenly to a thickness of not more than 4 cm for the first 3 to 4 days of drying on a clean drying yard. After 3 to 4 days of drying, thickness can be increased not more than 8 cm.
- ✓ Dry the coffee cherries on a clean cemented or tiled drying yard. Do not dry coffee cherries on bare soil. Coffee cherries dried on bare soil imparts “earthy” taste in the coffee liquor besides coffee cherries getting contaminated with mould spores present on the bare soil.

- ✓ Do not mix the freshly harvested coffee cherries with the previous day's coffee cherries, as it results un-even drying of cherries.
- ✓ During the course of drying, the coffee cherries must be regularly raked/stirred (6 to 8 times per day) to facilitate uniform drying of cherries.



Manual raking for drying of cherry coffee

- ✓ After 3 to 4 days of initial drying, the coffee samples should be covered with a clean plastic sheet during night hours to avoid rewetting of coffee samples.
- ✓ Dry the coffee cherries to the recommended forlit weight/bushel weight of 18 kg (which correspondence to a moisture level of 11% to 12%). At estate level, the forlit weight of dry cherry lot should not exceed beyond the said recommended limit, to minimize risk of mould contamination.
- ✓ After completion of drying process, clean the dried cherry lots by winnowing to remove the all the extraneous matters (dried leaves, twigs, dirt etc.,) before bagging them into clean gunny bags.



Manual Winnowing of cherry coffee



Mechanical Winnowing of cherry coffee

- ✓ In case of on-farm storage, store the cherry bags in a well-ventilated godown without letting in the moisture and rain water. The cherry bags should be stored on a raised wooden platform to ensure circulation of air underneath the bags and also away from the wall to avoid to re-hydration of dried cherries & subsequent development of mould growth.
- ✓ Do not store the coffee sample at the estate level for long duration (beyond May) as the wet monsoon conditions prevailing in plantation areas during June to October are not ideal for coffee storage.

Information on Moisture Standards for coffee

Sl. No.	Sample Type	Forlit Weight (kg/40 liter container)	Moisture Standards (%)
1.	Arabica Parchment	15.5 kg	10.0 (+ 0.5)*
2.	Robusta Parchment	16.5 kg	10.0 (+ 0.5)*
3.	Arabica Cherry	17.0 kg	11.0 (+ 0.5)*
4.	Robusta Cherry	18.0 kg	11.0 (+ 0.5)*

* A tolerance limit of + 0.5% is allowed for each type of coffee

Outturn standards prescribed by Coffee Board & International Coffee Organization

Sl. No.	Sample Type	Coffee Board's Standards (%)	ICO Standards (%)
1.	Parchment Coffee	80 - 85	80.0
2.	Cherry Coffee	50 - 54	50.0

Proximate outturn percentage of coffee samples at different stages of coffee processing

Sl. No.	Descriptions	Arabica	Robusta
Wet processing			
1.	Fruit to beans with mucilage	55 - 60	50 - 55
2.	Fruit to wet parchment	40 - 45	45 - 50
3.	Fruit to dry parchment	19 - 22	22 - 25
4.	Fruit to green coffee bean	16 - 19	19 - 21
5.	Fruit to clean coffee ratio	5.5:1 to 6:1	4.5:1 to 5:1
Dry processing			
1.	Fruit to dry cherry	35 - 40	40 - 45
2.	Fruit to green coffee bean	16 - 19	19 - 21
3.	Fruit to clean coffee ratio	5.5:1 - 6:1	4.5:1 - 5:1

Calibration of Digital Moisture Meter:

- ☐ It is a standard practice that digital moisture meter should be calibrated every year.
- ☐ Calibration of moisture meter is done at the Analytical Laboratory, Coffee Board, Head Office Bangalore and the calibration charge is Rs. 1000/-.

SPECIAL ADVISORY NOTE FOR BETTER COFFEE OUTTURN

Sorting of Harvested Cherries - A Good Manufacturing Practice (GMP) to Improve Outturn and Quality

Outturn (OT) refers to the “Quantity of Clean Coffee obtained from Parchment or Cherry Coffee”. Outturn is an important factor in coffee trading, as the coffee price is determined based on the outturn percentage (greater the OT percentage higher the coffee price).

Under Indian condition, the outturn for parchment and cherry coffees ranges from 80% to 85% and 50% to 54%, respectively. As per the International Coffee Organization (ICO) recommendation, the minimum outturn for parchment and cherry coffee should be 80% and 50%, respectively.

There is a notion among the coffee planters that presence of greens (unripe fruits) in the harvested lot results in higher outturn percentages. Though this notion is partly true, it is prudent to understand the two aspects of outturn:

a) fruit to dry cherry

b) dry cherry to clean coffee or green coffee



The results of the long-term experimental trails conducted at CCRI revealed that when the harvested lot contain greens/unripe fruits (to the tune of 30% to 40%), the amount of fruits required to produce a bag of cherry (i.e. 50 kg) will be 125 kg. When the harvested lot contains only ripe fruits, then the amount of fruits required to produce a bag of cherry will be 111 kg. There is a difference of 14 kg fruit (125 – 111= 14) which will give 2.8 kg clean coffee (in case of Robusta, 5 kg fresh fruits yield 1 kg clean coffee). **Thus, the planters are losing 2.8 kg clean coffee per bag of cherry.**

On the other hand, when the harvested lot contain greens/unripe fruits (to the tune of 30% to 40%), the amount of clean coffee obtained from a bag of dry cherry (i.e. 50 kg) will be 26.5 kg. When the harvested lot contains only ripe fruits, then the amount of fruits required to produce a bag of dry cherry will be 24.5 kg. There is a difference of 2 kg clean coffee (26.5-24.5) per bag of cherry.

Thus, the planters are gaining 2 kg clean coffee per bag of cherry.

❑ **Fruit to Dry Cherry** - Planters are losing 2.8 kg clean coffee per bag of cherry

❑ **Dry cherry to Clean Coffee** - Planters are gaining 2 kg clean coffee per bag of cherry

Considering the two aspects of outturn, Planters are losing 0.8 kg clean coffee per bag of cherry

Further to the above, several agronomical practices influence the outturn percentage which include bush management (especially pruning), optimal & timely supply of the recommended nutrients (for proper filling & maturation of



beans) and timely management of pest & disease incidences (CWSB infestation result in floaters formation; coffee berry borer feeds on the bean which weakens the bean and thus reduces OT percentage; diseased plants produce poorly developed beans).

Therefore, timely implementation of the recommended agronomical technologies in the field and adoption of the recommended post-harvest technologies in particular **“sorting of harvested coffee lots to remove greens, over ripe and tree dried cherries”** are very much essential for not only achieving a better outturn percentage but also to improve the coffee quality.

*More The **Greens Berries** in the Harvested Lot,
More The Loss of **Money** and **Quality** as Well*

Impact of receipt of unusual rainfall in Coffee zones of Karnataka during the first fortnight of January 2026 and measures to be adopted (in Karnataka region)

General observations on blossom and berry setting:

A rainfall of 20 cents (5 mm) to 1.5 inches (37 mm) during the first fortnight of January 2026 was reported from various coffee zones of Karnataka.

The harvesting of Robusta coffee fruits is in progress and many plantations which have both Arabica and Robusta coffee, the harvest in Robusta coffee has been started after harvesting very good crop in Arabica coffee.

Adequate and well distributed natural showers received in March 2025 in most coffee areas resulted in good fruit set. The fruit matured and ripened uniformly across plants, which led to over ripening and drying on the bushes due to harvest delays and labour shortages.

As some of the zones had received good rainfall during December and many of the plantations received last rainfall during November 2025. This resulted in lot of variations in the advancement of flower buds and also in the percentages of blossom.

However the receipt of early and insufficient shower had resulted in high percentage of blossom without any abnormalities in the flower buds of **Robusta** plants in spite of the harvesting of crop is yet to be completed in majority of the plants.

The percentage of blossom in the Robusta plants varied from 5% to 60% depending upon the plant status under shade, release of crop strain, exposure, total quantum of rainfall received during 2025 (depending upon sub-soil moisture status) and the gap of number of days between the last rainfall to the date of shower received.

However, the blossom was healthy and good in majority of the areas, although strained blossom with small size flowers have also been observed in few plantations. The major reason attributed for the advancement more numbers of flower buds inclusive immature flower buds was due to sudden drift in the atmospheric temperature by decreasing more than 4°C from the prevailing high day temperature of more than 26°C for a long period.





Due to immaturity of flower buds, the blossom in Robusta plants was not uniform for a single blossom and eventually there was no blossom on 8th day from the date of receipt of rainfall. The blossom was noticed on 9th day and continued for another 2 to 3 days for completing the blossom in Robusta plants.

Although the blossom was healthy on 9th day with good normal and big size flowers, there was no fragrance and also dehiscence of anthers was less or nil in some of the plantations which did not attract the Honey Bees in spite of installing more numbers of Bee Hives.

Further some of the plantations had very heavy mist at the time of blossom, wetting the flowers completely which will affect the cross pollination to some extent resulting in failure/partial fruit set.

However, dehiscence of anthers was normal in the blossom of next day and subsequent days with 82% viability of pollen grains along with good fragrance attracting large number of Honey Bees. In such case, the fruit set will be good in the blossom of 10th day and on later days, as cross pollination might have been good with the activities of Honey Bees in large numbers.



In spite of good rainfall, the flower buds in the tip nodes (1st & 2nd pairs of nodes) are yet to get advanced for blossom due to immature flower buds in majority of the plantations due to late initiation of flower buds during November / December / first week of January.

Nevertheless, the correct fruit set percentages will be known after 30 to 40 days from the date of blossom.

On the other hand, in **Arabica** plants, higher percentage of the blossom was observed in the plants which had matured flower buds in large numbers which may result in good fruit set due to self-pollination nature. However, overall, the percentage of blossom was less than 10% in Arabica, although some exposed plants had more percentage of blossom.

Since the immature flower buds of Arabica plants will not response to the rainfall and irrigation, there will not be any problem in Arabica coffee and as such no paddyng of flower buds was noticed on receipt of insufficient showers.

Recommendations:

In this back drop the following are the suggestions to upkeep the plantations:

FOR ROBUSTA COFFEE:

1. As far as possible, deploy more workers, complete the crop harvest before the fruits are getting dried up on the plants resulting in more fruit drop to the ground.
2. In the areas, where there was insufficient blossom showers and took more than 10 days for blossom, give irrigation of 1.5 inches rainfall (38 mm) by starting 3 days after completion of blossom to maintain the fruit set without any further damages.
3. In the blocks, which had more than 30 to 40 % blossom and also the exposed patches especially to the afternoon sun and exhibiting incipient wilting, give a backing irrigation of 1.5 inches rainfall (38 mm) within 20 days from the date of receipt of showers after relieving the crop before irrigation if harvesting crop was not completed.
4. It is advisable to give a foliar spray of 1 kg urea, 1 kg SSP, 0.75 kg MOP and 50 ml Planofix per 200 liters of water to the lower surface of leaves **of all non-irrigated areas irrespective of blossom percentages observed and also the areas, which had less percentages of blossom below 15 to 25%** by commencing the spray with a gap of 3 days from the date of completion of blossom and before the plants exhibit any incipient wilting to avoid the damages to the fruit set irrespective of the stage of crop harvest.
5. In the blocks, which resulted in 5 to 10% blossom, speed up the crop harvest and complete it early. Give a gap of 15 days from the date of completion of crop harvest for the immature flower buds to develop and attain maturity to have better and uniform blossom in a single day for ensuring proper fruit set. Then commence blossom irrigation of 1.5 inches rainfall (38 mm).
6. It is suggested to apply the first split dosages of fertilizers on the day of irrigation but before commencing the irrigation to achieve the desired results of improvement in the fruit set and promoting the formation of new shoots which will be the cropping wood of next season.



7. Do installation of Broca traps within 20 days from the date of receipt of showers to trap the beetles of Coffee Berry Borer (**CBB**) which are likely to emerge from the gleanings and left over fruits on the plants.
8. Undertake collection of gleanings very effectively to minimize the incidences of CBB, as the fallen fruits / parchment coffee to the ground were high during heavy monsoon period and also delay in carrying out the crop harvest, which had resulted in drying and falling off to the ground in addition to damages caused to the ripe fruits by monkeys and birds.



9. Carry out the light pruning, de-suckering, centering and removal of dried wood with a gap of 10 days from the date of completion of crop harvest and complete it before the first week of May to promote the new shoots formation very effectively in the plants.

10. In the absence of any further rainfall, all the irrigated blocks could be given backing irrigation / sustenance irrigation of one inch rainfall (25 mm) within 20 days from the date of irrigation **or** the suggested foliar spray

of NPK combination with Planofix could be given to sustain the no rainfall scenario after blossom.

FOR ARABICA COFFEE:

1. As the receipt of rainfall during the period of December - January will aggravate the incidences of leaf rust in Arabica plants, it is advisable to give a foliar spray of 400 ml Contaf in combination with the nutrients of NPK and Planofix to control the incidences very effectively and to promote the growth of new shoots, improve the fruit set along with development of remaining flower buds on the plants to have maturity.
2. In order to regain the reserve status which was utilized by the developing fruits take up light pruning, de-suckering, centering and removal of dried wood with a gap of 30 days from the date of completion of crop harvest of the plants. Ensure that this activity gets completed before the first week of May which will promote the new shoots formation very effectively in the plants.



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