

BANGLADESH TEA RESEARCH INSTITUTE

Srimangal-3210, Moulvibazar

Monthly Report- July, 2018

(A) Director's visit

Date	Purpose
2 nd July	Visited Monipur T.E for solving emergent problems of tea plantation.
3 rd – 6 th July	Attended the 102 nd coordination meeting of BTB, Chattogram.
	Visited BTRI-Substation, Fatickchari, Chattogram.
10-13 th July	Attended the meeting on annual procurement plan for the financial year 2018-2019 of BTB, Chattogram.
15-17 th July	Attended the meeting on annual procurement plan for the financial year 2018-2019 of BTB, Chattogram.
21 st July	Visited Rashidabad, Hafiz and Shabazpur T.Es for solving emergent problems of tea plantation.
27 th July	Visited Nahar T.E for solving emergent problems of tea plantation.

(B) Divisional Research and services/ activities

Activities	Agro	Bot	Biochem	Ento	Plant Path	Soil Sci	Stat & Eco	Tea Tech	Total
Number of experiments	08	32	-	07	06	07	03	-	63
No. of experimental visits	15	14	-	06	04	03	-	-	42
Advisory visits									16
Correspondences	02	02	-	07	07	18	01	-	37
Official visits	-	01	-	-	02	01	-	-	04
Workshops									06
Tea Tasting Session	-	05	-	-	-	-	-	-	05
Tea sample Tasting	-	03	-	-	-	-	-	-	03
MTC Modules (hrs)	12	-	-	03	-	12	-	-	27
Publications	-	-	-	-	-	-	-	-	-
Soil analysis for nutrient	-	-	-	-	-	156	-	-	156
Soil analysis for nematode	-	-	-	-	-	-	-	-	-
Fertilizer analysis	-	-	-	-	-	02	-	-	02
Compost analysis	-	-	-	-	-	02	-	-	02
Water analysis	-	-	-	-	-	-	-	-	-
Pesticide efficacy analysis	-	-	-	-	-	-	-	-	-
Fungicide efficacy analysis	-	-	-	-	-	-	-	-	-
Herbicide efficacy analysis	-	-	-	-	-	-	-	-	-
Residue analysis (Expt.)	-	-	-	-	-	-	-	-	-
Residue analysis (garden)	-	-	-	-	-	-	-	-	-

General comments: Divisional research and activities are satisfactory.

C. Research

Division: Agronomy **Total number of experiments** : 08
Total experimental visits : 15

Sl. No.	Name of the experiments	No of visits	Activities during the reporting month
1	Effect of different pruning cycles on the yield of different mature clonal tea	-	Three round of data has been collected during the reporting month.
2	Comparative study on yield and yield related parameters of different clones released from BTRI	-	Data collection is going on.
3	Development of tools for easy and effective transplanting of tea saplings in the nursery.	-	It is going on under the supervision of SSO.

4	Effect of integrated nutrient management for raising of clonal tea plants through direct poly-bag planting method.	-	Data collection is going on.
5	Effect of different types of pruning on yield and quality of clonal tea.	-	100 shoot fresh and dry weight, number of plucking point/bush and green leaf yield data of three round has been collected.
6	Study on different climatic parameters to observe the impact of climate change in relation to tea production in Bangladesh.	-	Rainfall and temperature data of last 15 years of Balisera valley is collected.
7	Effect of different types of plucking policies on yield and quality of tea.	-	Plucking data of three round has already collected during the reporting month.
8	Effect of different types of compost on growth and development of clonal tea.	-	Morphological data collection is going on.

N.B: All of the above 8 experiments are conducted at the BTRI main Farm, Srimangal. So, all of the experimental visits were accomplished at BTRI Farm by the divisional scientists at different dates to collect data and for intercultural operations.

Division: Botany

Total number of experiments

: 32

Total experimental visits

: 14

Sl. No.	Name of the experiments	No of visits	Activities during the reporting month
1	Selection of Vegetative Clones at Shumshernugger T. E., Section Main Div. Sec. No. 9		1. Selection has been continued. 2. Cuttings in the nursery are kept under observation in order to find out their rooting ability.
2	Selection of Vegetative Clones at Amo T. E., Section No. 1		1. Selection has been continued. 2. Cuttings in the nursery are kept under observation in order to find out their rooting ability.
3	Selection of Vegetative Clones at Baraoorah T. E., Section No. 8	-	1. Selection has been continued. 2. Cuttings in the nursery are kept under observation in order to find out their rooting ability.
4	Yield and Quality Trial of Test clones Selected from Shumshernugger and Amo T. Es., Test clones Sh/D/11/313, A/8/8, A/17/7 and A/22/39 against Control BT1.		Weekly data has been recorded.
5	Yield and Quality Trial of Test clones Selected from Amo T. E. Test clones A/8/01, A/17/22, A/22/27 and A/22/40 against Control BT1.		Weekly data has been recorded.
6	Yield and Quality Trial of Test clones Selected from Chandpore, Shumshernugger and Amo T. Es.; Test clones C/J1/10, Sh/B/6/59, Sh/B/6/62 and A/8/24		Weekly data has been recorded.

	against Control BT2.		
7	Yield and Quality Trial of Four Test clones Selected from Shumshernugger T.E.; Test clones Sh/B/6/36, Sh/B/6/38, Sh/B/6/55 and Sh/B/6/67 against Standard BT1.		Weekly data has been recorded.
8	Yield and Quality Trial of Six Test clones – MZ/39, E/4, D/13, B2T1, BR2/97 and SDL/1 against Standard BT2.		Weekly data has been recorded.
9	Yield and Quality Trial of Four Test clones Selected from Amo T. E.; Test clones – A/8/37, A/8/55, A/8/62 and A/8/66 against Standard BT2.		Weekly data has been recorded.
10	Yield and Quality Trial of Four Test clones Selected from Phulcherra, Amo and Shumshernugger T. Es.; Test clones – A/17/16, Ph/9/1, Ph/9/9 and Sh/B/6/46 against Standard BT1.		Weekly data has been recorded.
11	Yield and Quality Trial of Four Test clones Selected from Phulcherra and Hybrid Progeny; Test clones– Ph/9/4, Ph/9/25, Ph/9/40 and BS/67 against Standard BT5.		Weekly data has been recorded.
12	B2-44: Yield and Quality Trial of Three Test clones Selected from Amo and Phulcherra T. Es.; Test clones– A/8B/1, Ph/9B/1, Ph/9/11 and against Standard BT1.		Weekly data has been recorded.
13	Yield and Quality Trial of Three Test clones Selected from Amo, Phulcherra and Shumshernugger T. Es.; Test clones- A/8/61, Ph/9/68A, Sh/D/11/18 (retrial from Expt. B2-26) and One Introduced Clone SC/12/28 against Standard BT2.		Weekly data has been recorded.
14	Yield and Quality Trial of Four Test clones Selected from BTRI Farm (Dulia Section); Test clones – D1/18, D/6, D/10 and D/12 against Standard BT5.		Weekly data has been recorded.
15	Yield and Quality Trial of Four Test clones Selected from Phulcherra T. E. and BTRI Germplasm Bank; Test clones-Ph/9/92, BS/3, Ph/9/108 and G/61/8 against Standard BT15.		Weekly data has been recorded.
16	Yield and Quality Trial of Four Test clones Selected from Shumshernugger and Amo T. Es. Test clones – A/8/124, Sh/10/2, A/8/125 A/11/38 against Standard BT2.		Weekly data has been recorded.
17	Yield and Quality Trial of Four Test clones Selected from Shumshernugger T.E. (Sh/10/5, Sh/D/13/4 and Amo T. Es. Test clones – A/8/128, BS/91/6, against Standard BT2.		Weekly data has been recorded.
18	Yield and Quality Trial of Four Test Clones Selected from Baraoorah T.E., Shumshernugger T.E. and Amo T. Es. Test Clones – B/8/79, Sh/9/43 and A/8/194 against Standard BT2 and BT17.		Weekly data has been recorded.
19	Yield and Quality Trial of Two Test Clones Selected from Baraoorah T.E., and Shumshernugger T.E. Test Clones – B/8/79 and Sh/9/71 against Standard BT2, BT17 and BTS1.		Weekly data has been recorded.
20	Yield and Quality Trial of Two Test Clones Selected from Baraoorah T.E., and Shumshernugger T.E. Test Clones – B/8/66 and Sh/8/61, against Standard BT2, BT17 and BTS1.		Weekly data has been recorded.
21	Yield and Quality Trial of Four Test Clones Selected from Baraoorah, Shumshernugger and Mirzapure		Newly established long term experiment.

	T.E. (T1, T2, T3 and T4 against Standard BT2.		
22	Controlled Pollination between Selected Clones/Agrotypes and Selection of Generative Clones for the Establishment of Clonal Seed Reserve.		-
23	Establishment of a Biclinal Seedbarie with Clones TV18 and BT3.		-
24	Comparative Yield and Quality Trial of BTRI Released Biclinal Stock BTS1, Biclinal Stock T18B3, Allynugger Polyclonal Stock (ANPS), Phulbari General Seed Stock (PBS) and Clone BT1.		Weekly data has been recorded.
25	Comparative Trial of 4 Biclinal Seed Stocks (BTS1, BTS3, TV18 × BT3 & TS463) and 3 Parental Clones (BT1, TV1 & TV19).		Weekly data has been recorded.
26	Survey and Conservation of Gene Resources of Tea in Bangladesh.		Plucking is continued and kept under observation.
27	Morphological characterization of BTRI released clones, some test clones and wild genotypes.		Data has been recorded.
28	Developing a sustainable and cost effective protocol for manufacturing health benefitted green tea and its derivatives (value added green tea).		Data has been recorded.
29	Study on seasonal effect and different clonal effect on recovery percentages of green tea.		Data has been recorded.
30	Screening of drought tolerant variety of tea at the nursery level.		Weekly data has been recorded.
31	Screening of drought tolerant variety of tea in the field condition upto 3 years of planting.		Weekly data has been recorded.
32	B4.4. Effect of different types of mulching materials on morpho-physiological characteristics of tea.		This experiment will be started very soon (upcoming drought period)

N.B: Two (02) experimental visits were accomplished at Shumshernugger and Amo T.E and twelve (12) experimental visits were accomplished at BTRI Farm by the divisional scientists at different dates to collect data and for intercultural operations.

Division: Entomology

Total number of experiments

: 07

Total experimental visits

: 06

Sl. No.	Name of the experiments	No of visits	Activities during the reporting month
1	Evaluation of sticky traps against Thrips & Looper caterpillar	-	Yellow sticky trap had been set against thrips in residue plot of BTRI farm. Data on no. of Thrips captured in those traps are being collected.
2	Evaluation of some indigenous plant extracts against thrips in tea	-	Five indigenous plants viz., Akonda, Castor bean, Garlic, Nishinda and Tobacco were evaluated against thrips at 5.0, 7.5 and 10% (w/v) conc. Among them, Tobacco showed maximum mortality percentage.
3	Evaluation of commercial biopesticides against red spider mite in tea	-	Two Entomopathogens: <i>Metarhizium anisopliae</i> and <i>Pseudomonas fluorescens</i> were tested against red spider mite at 24, 48 and 72 HAT in laboratory condition. <i>M. anisopliae</i> showed highest efficacy on mortality than <i>P. fluorescens</i>

4	Screening of tea clones for major insect pests in tea	-	Studies were done through monitoring and observing the degree of infestation against <i>Helopeltis</i> & RSM in tea clonal block (BT1-BT20) at BTRI. <i>Helopeltis</i> infestation was found comparatively less in BT2, BT8 & BT17. Whereas BT5, BT6 & BT12 were found less infested by RSM.
5	Screening of pesticides against <i>Helopeltis</i> , Red spider mites, Termites, Nematodes and Thrips in tea	-	No trail had been done during reporting month
6	Determination of residue level of commonly used pesticides in tea	-	The pesticides named Deltamethrin & Quinalphos had been sprayed in the exp. plots & samples were made at different interval after spraying.
7	Study on the compatibility among different pesticides in tea	-	To find out the combined effects for both <i>Helopeltis</i> and red spider mite. Tundra and Magister were applied singly against <i>Helopeltis</i> and red spider mite, respectively. Combination of these two insecticides was also applied against to these pests. More than 80% efficacy was found in combined application plot against those pests in separately.

N.B: All of the above 7 experiments are conducted at the BTRI main Farm, Srimangal. So, all of the experimental visits were accomplished at BTRI Farm by the divisional scientists at different dates to collect data and for intercultural operations.

Division: Plant Pathology Total number of experiments : 06
Total experimental visits : 04

Sl. No.	Name of the experiments	No of visits	Activities during the reporting month
1	Management of tea diseases (Black rot and Red rust) with Plant Growth Promoting Rhizospheric microbes.	-	There are four microbes like <i>Bacillus</i> , <i>Pseudomonas</i> , <i>Streptomyces</i> , <i>Trichoderma</i> were applied on fruiting bodies of Red rust disease. Among these microbes less disease severity are being observed in <i>Trichoderma</i> treated plots.
2	Advent and Economic Importance of Epiphytic Red Rust of Tea: Assessment, Causes and Remedies.	-	Causal organism of the disease, dissemination of pathogen, infection site of the disease were identified. Severity of the disease was observed by applying penetrating fungicides rather than simple contact fungicides.
3	Identify the potential source of infection of different tea diseases and capabilities for disease development.	-	Source of infection of both parasitic and epiphytic Red rust was seen old aged unproductive banji branches of tea plant remaining after LP and DS pruning. Maximum disease severity was observed in sections that were not cleaned properly.
4	Identification of VAM and determination of their potentiality in tea cultivation.	-	20 plant species were investigated for mycorrhizal colonization, among them 8 plant species like <i>Leucas aspera</i> (Setodron), Marigold, <i>Albizia lebbek</i> ,

			<i>Derris robusta</i> , Guatemala, <i>Albizia odoritissima</i> , <i>Mimosa invisa</i> and <i>Indigofera sppare</i> found responsive.
5	Screening of new fungicides and herbicides against different diseases and weeds in tea	-	Received fungicides and herbicides from different pesticide companies through PTASC were applied against respective diseases and weeds in BTRI and BEF farm. Data are being recorded on severity of diseases and weeds. Primarily, the efficacy was observed as similar as standard.
6	Studies on Integration and Economics of Nitrogen fertilizer and Integrated Weed Management in young mature tea.	-	The experiment was set up in section no 8 of BEF. Different doses of N, P, K were applied as main treatment and different methods of weeding were practiced as second treatment in following Split plot design. Data are being recorded on growth and development of young tea plant.

N.B: All of the above 6 experiments are conducted at the Bilashcherra Experimental Farm, Srimangal. So, all of the experimental visits were accomplished at BTRI Farm by the divisional scientists at different dates to collect data and for intercultural operations.

Division: Soil Science

Total number of experiments

: 07

Total experimental visits

: 03

Sl. No.	Name of the experiments	No of visits	Activities during the reporting month
1.	Response of dolomitic lime and its effect on the changes of soil properties and yield of mature tea	-	Data are being collected
2.	Effect of vermicompost on soil properties , growth and yield of mature tea	-	Data are being collected
3.	Status of Micronutrients (B, Mo, Zn, Mn, Fe & Cu) in some selected tea soils & its effects on the growth and yield of young Tea and mature tea	-	Micronutrient analysis of the collected 50 (fifty) soil samples of BTRI farm, Bilashcherra Experimental farm and Luskerpore Tea Estate has been done. Zinc, Iron, Manganese and copper analysis of the soil samples has been completed. Minimum content of Zn, Fe and Cu were 0.053, 0.14 and 0.015 ppm respectively. Among 50 soil samples Manganese content of 19 soil samples were in Below Detection Level (BDL). Maximum content of Zn, Fe, Mn and Cu were 1.64, 16.99, 6.54 and 0.47 ppm respectively. Soil samples collection from different tea estates are under process.
4.	Studies on physical properties of some selected tea	-	Soil sample collection and

	soils of Bangladesh and their influence on chemical properties and yield of tea.		laboratory analysis is going on.
5.	Present status of toxic heavy metals (Pb, Cd, Hg, Cr) in tea soils, green leaves and made tea in Bangladesh	-	Not started yet due to the technical error in Atomic Absorption Spectrophotometer.
6.	Uses of Bio char as a soil amendment and its effect on tea soil properties	-	Site selection and soil samples collection has been completed. Initial soil analysis is going on. Bio-char collection is under process.
7.	Determination of critical values of nutrients in tea soil and plant leaf in Sylhet, Chittagong and Panchagarh region.	-	Soil samples collection and analysis is going on.

N.B: Three (03) experimental visits were accomplished at Bilashcherra Experimental Farm by the divisional scientists at different dates to collect data and for intercultural operations.

Division: Statistics and Economics

Total number of experiments : 03
Total experimental visits : -

Sl. No.	Name of the experiments	No of visits	Activities during the reporting month
1	Economics of optimum fertilizer dose for some selective clones at BTRI farm	-	The data were rearranged and tabulated to analysis. The partial budget analysis was done and the result has been presented in the 74 th RSC meeting.
2	Adoption and comparative performance of sBTRI innovative technologie	-	Out of 164 gardens (T.Es.) 88 have sent the field-up questionnaires and the data of other T.Es. were collected from the monitoring report of PDU. Partial of the data was compiled and presented in the 74 th RSC meeting. The rest of the data are being under compiling.
3	Economics of some selected bought leaf factories at Panchagarh	-	The preparation of data collection sheets, questionnaire is now under supervision and in progress.

D1. Advisory Visit: 15

SL. No.	Name of T.E.	Date of visit	Nature of problem(s) observed	Suggested remedies/ recommendations	Name of Scientist(s)
1.	Monipur T.E.	02/07/18	<i>Helopeltis</i> & Red spider mite	Control measures suggested	Dr. Mohammad ali, Director Mr. Md. Jahangir Alam, SO
2.	Zareen T.E	02/07/18	Charcoal Stump rot disease	Control measures suggested	Mr. Md. Syeful Islam,SSO Mr. Apu Biswas, SSO

3.	Madhupur T.E.	03/07/18	Ascertain the condition of all sections specially pest and disease infestation.	Control measures suggested	Mr. Md. Syeful Islam,SSO Mr. Md. Jahangir Alam, SO
		04/07/18			
4.	Rashidabad T.E.	21/07/18	Leaf rust, Die back, <i>Helopeltis</i> & Red spider mite	Control measures suggested	Dr. Mohammad Ali, Diector Mr. Md. Syeful Islam,SSO Mr. Shovon Kumar Paul, SO
5.	Sabazpur T.E.	21/07/18	Die back & Termite	Control measures suggested	Dr. Mohammad Ali, Director Mr. Md. Syeful Islam,SSO Mr. Shovon Kumar Paul, SO
6.	Hafiz T.E	21/07/18	Leaf rust, Die back, <i>Helopeltis</i> & Red spider mite	Control measures suggested	Dr. Mohammad Ali, Director Mr. Md. Syeful Islam,SSO Mr. Shovon Kumar Paul, SO
7.	Rajnagar T.E.	22/07/18	<i>Helopeltis</i>	Control measures suggested	Mr. Shovon Kumar Paul, SO
8.	Tarapur T. E.	23/07/18	Weeds in young tea plantation etc.	Control measures suggested	Mr. Md. Ismail Hossain, CSO
9.	Lakkaturah T. E.	23/07/18	Lack of shade trees, helopeltis infestation etc.	Control measures suggested	Mr. Md. Ismail Hossain, CSO
10.	Alibahar T. E.	23/07/18	Improper plantation of shade trees etc.	Control measures suggested	Mr. Md. Ismail Hossain, CSO
11.	Khadim T. E.	23/07/18	Vacancies in young tea plantation etc.	Control measures suggested	Mr. Md. Ismail Hossain, CSO
12.	New somonbag T.E.	24/7/18	Plucking round, Nursery, water logging, red rust, <i>Helopeltis</i> , Red spider mite & Thrips	Control measures suggested	Dr. Toufiq Ahmed, PSO Mr. Apu Biswas, SSO Mr. Md. Jahangir Alam, SO
13.	Patharia T.E.	24/07/18	Plucking round, red rust,weeds, dense shade, <i>Helopeltis</i> & Red spider mite	Control measures suggested	Dr. Toufiq Ahmed, PSO Mr. Apu Biswas, SSO Mr. Md. Jahangir Alam, SO
14.	Nahar T.E	27/07/18	Leaf rust, Die back, <i>Helopeltis</i> & Red spider mite	Control measures suggested	Dr. Mohammad Ali, Diector
15.	Amrail T.E	30/7/18	Collar rot disease	Control measures suggested	Mr. Md. Syeful Islam, SSO

D2. Advisory activities under substation: 01

Date of Visit	Name of the T.E/ Small grower	Name of Scientist(s)	Nature of problem observed	Suggested remedies / recommendations
08/07/2018	Mr. Md. Shamsul Alam	Dr. Mohammad Shameem Al Mamun	Collar rot disease	Control measures suggested

E. Correspondence

Name of the Division	No. of Correspondence	Date of Correspondence	Name of the T.E (s) / Organization	Official visit
Agronomy	02	31.07.18	New Samanbagh T.E	-
		31.07.18	Patharia T.E	
Botany	02	31.07.18	Naval Head Quarter	01
		31.07.18	Army Head Quarter	
Biochemistry	-	-	-	-
Entomology	07	03.07.18	Monipur T.E.	-
		15.07.18	Madhupur T.E.	
		26.07.18	Rashidabad T.E.	
		26.07.18	Sabazpur T.E.	
		23.07.18	Rajnagar T.E.	
		31.07.18	New samanbagh T.E.	
		31.07.18	Patharia T.E.	
Plant Pathology	07	05.07.18	Zareen T.E	02
		08.07.18	Sabari T.E	
		10.07.18	Balishera Division	
		15.07.18	Madhupur T.E	
		26.07.18	Rashidabad T.E	
		26.07.18	Shabazpur T.E	
		31.07.18	Amrail T.E	
Soil Science	18	03.07.18	Amo T.E	01
		03.07.18	Hooglicherra T.E	
		03.07.18	Balisera T.E	
		03.07.18	Daragaon T.E	
		03.07.18	Balisera T.E	
		03.07.18	Hatimara T.E	
		05.07.18	Hafiz T.E	
		05.07.18	Ayeshabagh T.E	
		08.07.18	Junglebari T.E	
		08.07.18	Chandpore T.E	
		08.07.18	Rahmania T.E	
		11.07.18	Rungicherra T.E	
		15.07.18	All divisions of BTRI (Fertilizer application schedule of BEF)	
		15.07.18	BTB	
		22.07.18	Jagcherra T.E	
		24.07.18	Balisera T.E	
		31.07.18	Clevedon T.E	
		31.07.18	Clevedon T.E	
Stat. & Econ	01	22.07.18	Bangladesh	-

			Meteorological Department, Dhaka.	
Technology	-	-	-	-
Total	37			04

F. Reports on soil and fertilizer analysis

Name of T.E	No of soil analyzed	No. of fertilizer analyzed	Date of reporting	Recommendations
Amo T.E	06	-	03.07.18	Fertilizer Recommendation
Hooglicherra	23	-	03.07.18	Fertilizer Recommendation
Balisera	27	-	03.07.18	Fertilizer Recommendation
Daragaon	03	-	03.07.18	Fertilizer Recommendation
Balisera	01	-	03.07.18	Fertilizer Recommendation
Hatimara	05	-	03.07.18	Fertilizer Recommendation
Hafiz	03	-	05.07.18	Fertilizer Recommendation
Ayeshabagh	08	-	05.07.18	Fertilizer Recommendation
Junglebari	04	-	08.07.18	Fertilizer Recommendation
Chandpore	12	-	08.07.18	Fertilizer Recommendation
Rahmania	18	-	08.07.18	Fertilizer Recommendation
Rungicherra	12	-	11.07.18	Fertilizer Recommendation
Jagcherra		Compost-02	22.07.18	Quality assessment
Balisera	04	-	24.07.18	Fertilizer Recommendation
Clevedon	30	-	31.07.18	Fertilizer Recommendation
Clevedon	-	TSP- 01	31.07.18	Quality assessment
	-	MOP- 01		
Total	156	04		

G. Distribution of planting materials and production of BTRI

Distribution from	Distribution of planting materials			Production		
	Fresh cuttings	Rooted cuttings	Improved seeds (kg)	Green leaves (Kg)		
				BTRI	BEF	
BTRI	-	3162	-	10978	38468	49446
Fatickcherri	4,18,500	-	-			8823
Kaliti	70000	-	-			4300
Total	4,88,500	3162	-			62569

General comments: Distribution of planting materials depends on the demand of the tea estates/ tea growers

H. Balance sheet of made tea (Black Tea)

Month	Reserve (Kg)			Consumption (Kg)				Present Balance
	BF	Production	Total	Local	BTB Sales Centre	Invoiced	Total	
July, 2018	12888	10450	23338	201	-	15400	15601	7737
July, 2017	23971	33840	57811	209	-	33000	33209	24602

Jan – July, 18	22625	32020	54645	7513 (TW=4700)	70	39325	46906	7737
Jan – July, 17	19386	91235	110621	2789	400	82830	86019	24602

I. Balance sheet of made tea (Green Tea)

Month	Received green leaf (kg)	Produced green tea (kg)	Progressive total (Kg) (January to July' 2018)
July, 2018	488	73.20	179.71

J. Balance sheet of made tea (White Tea)

Month	Received green leaf bud (kg)	Produced white tea (kg)	Progressive total (Kg) (January to July' 2018)
July, 2018	-	-	0.31

K. Weather report for meteorological station, Srimangal

Month	Temperature (°c)		Rainfall of the month (mm)	Nos. of rainy days	Total rain fall up to the month (mm)	Evaporation of the month (mm)	Sun shine Hrs	R.H. %	Dew point (°c)
	Max ^m	Min ^m							
July, 18	33.7	25.9	173	20	1466	134	4.6	79.7	25.8
July, 17	32.5	25.7	237	26	2364	122.6	3.3	81.6	24.8

General comments: Weather report varies from season to season

L. Delivered lecture hours for postgraduate diploma / certificate course at MTC

Divisions	Date of lecture	Course Title	Resource Person	Time of the month (hrs)
Agronomy	22/07/2018	Principles of tipping and plucking	Dr. Toufiq Ahmed	12
		Plucking rounds – planning organization & control		
		Prepare a plucking programme for a season, Plucking practice in the field (Practical)		
	23/07/2018	Tipping in Light Skiff, Medium Skiff, Deep Skiff, Light Pruned area- Theory		
		Plan a Plucking Programme for one season		
Biochemistry	-	-	-	-
Botany	-	-	-	-
Entomology	26/07/2018	Common tea insects in tea plantation	Mr. Shovan Kumar Paul	03
		Pest management in tea		
Plant Pathology	-	-	-	-
Soil Science	24/07/2018	Manuring Mature Tea covering all nutritional aspects	Mr. Abdul Qayyum Khan	12
		Fertilizer Dose Calculation- Theory		

		Fertilizer Dose Calculation- (Practical)		
	25/07/2018	Compost Making	Mr. Apu Biswas	
		Organization of fertilizer application to tillah and flats		
		Sorting & mixing fertilizer: apply fertilizer to a given area practice foliar application		
Stat. & Econ				
Technology				
Total				27

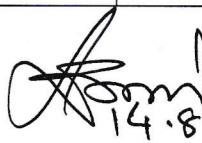
M. Training workshops for small tea grower: -

Sl. No.	Date	Venue	Subject matter	Resource person	Participants	How tea industries will be benefited
-	-	-	-	-	-	-

N. Workshops conducted: 6

Sl. No.	Date	Venue	Subject matter	Resource person	Participants	How tea industries will be benefited
1	1/7/2018	Monu Dholoi Valley Club	Insect pests and disease management in tea plantations	Mr. Shovon Kumar Paul, SO Mr. Moshiur Rahman Akonda, SO	The Managers, Assistant Managers, Tillah babu & Sarders of NTC Ltd.	Managers, Assistant managers and other staff personnel of tea estates were awarded regarding major insects pests of tea- <i>Helopeltis</i> , Red spider mite, thrips & source of infection, dissemination of pathogens, time of infection, favorable environment of the diseases; so that they are able to take necessary
2	2/7/2018	Chundicherra Tea Estate		Mr. Shovon Kumar Paul, SO Mr. Moshiur Rahman Akonda, SO	The Managers, Assistant Managers, Tillah babu & Sarders of NTC Ltd.	

						actions for controlling different tea pest & diseases in proper time and proper ways.
3	28/7/2018	Chandpur Tea Estate	Disease management in tea plantations	Mr. Md. Syeful Islam, SSO	Managers, Assistant managers of tea estates of Duncan Brothers under Lauskorpore valley.	Managers, Assistant managers and other staff personnel of tea estates were awarded regarding source of infection, dissemination of pathogens, time of infection, favorable environment of the diseases; so that they are able to take necessary actions for controlling different tea diseases in proper time and proper ways.
4	29/7/2018	Sagarnal Tea Estate			Managers, Assistant managers of tea estates under Juri valley.	
5	30/7/2018	Chatlapore Tea Estate			Managers, Assistant managers of tea estates of Duncan Brothers under Monu Dholoi valley.	
6	31/7/2018	Etah Tea Estate			Managers, Assistant managers of tea estates of Duncan Brothers under Lungla valley.	


14.8.18

(Dr. Mohammad Ali)
Director