Keynote Address

226th Experiments and Extension Forum

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Tea Production 2012

Elevation	2011	2012	Difference
	Qty (Mn kg)	Qty (Mn kg)	%
High	78.22 (23.88%)	72.74 (22.29%)	(7)
Medium	52.59 (16.06%)	52.29 (16.02%)	(0.6)
Low	196.72 (60.06%)	201.24 (61.66%)	2.3
Total	327.53	326.29	(0.4)

Source: Sri Lanka Tea Board

Tea Production 2012
According to the Agro-Climatic Regions

Agro-Climatic Region	Qty (Mn kg)		
	2012	2011	Change %
(A) Nuwara Eliya	3.56	4.66	(23.61)
(B) Westerns	52.36	56.54	(7.40)
(C) Mediums	44.91	50.17	(10.48)
(D) Uda Pussallawa	7.67	6.55	17.10
(E) Uva	25.26	28.47	(11.27)
(F) Low Growns	192.52	181.96	5.80
Grand Total	326.28	327.53	

Source: Sri Lanka Tea Board

Update on MRL Issue

TRI Recommended Pesticide List – 22 Chemicals
PU1 Circular (Revised in June 2012)

Fungicides	Weedicides	Insecticides
Bitertanol	2,4-D	Carbofuran (N)
Copper Hydroxide	Diuron	**Chlorfluazuron**
Copper Oxide	Glufosinate Ammonium	Diazinon
Copper Oxychloride	Glyphosate	Dazomet (N) - Use in nurseries
Hexaconazole	MCPA	Imidachloprid
Propiconazole	Oxyfluorfen	**Fipronil**
Tebuconazole	**Paraquat**	Metam Sodium(N) - Use in nurseries
		Sulphur (A)

Chemicals Removed

Azadiractin, Carbosulfan, Fenthion, Phenamiphos, Propagite & Tebufenozide

Tea MRLs and EU
EU MRL revision - July 2012

- MRLs set for 458 chemicals
- MRLs for 44 substances are set above Lower Limit of Detection (LOD)
- Many more (>400) set at LOD
- Application for new import MRLs – Same data requirements and risk assessment process as for products grown in the EU

EU MRLs for TRI Recommended Pesticides

Fungicides	Weedicides	Insecticides
Bitertanol - 0.1*	2,4 D - 0.1*	Carbofuran - 0.05*
Copper - 40	Diuron - 0.1*	Diazinon -0.02*
Hexaconazole - 0.05*	Glyphosate - 2	Dazomet - 0.02*
Propiconazole - 0.1*	Oxyfluorfen -0.05*	Fipronil - 0.005*
Tebuconazole - 0.05*	MCPA - 0.1*	Imidacloprid - 0.05*
	Paraquat - 0.05*	Metam Sodium - 0.02*

Survey by JTA on Sri Lankan Teas - 2012

Agrochemical	Detection	LOQ	MRL Japan	MRL EU	USA
2,4 D	ND	0.01	-	0.1*	
Bitertanol	ND	0.01	0.1	0.1*	
Carbofuran	ND	0.01	0.2	0.05*	
Carbosulfan	ND	0.01	0.1		
Chlorfluazuron	ND	0.01	10		
Dazomet	ND	0.01	0.1	0.02*	
Diazinon	ND	0.01	0.1	0.02*	
Diuoron	ND	0.01	1	0.1*	
Phenamiphos	ND	0.01	0.05		
Fenthion	ND	0.01	-		
Glupghosinate	ND	0.01	0.3		
Glyphosate	0.09	0.05	1.0	2.0	1.0
Hexaconazole	ND	0.01	0.05	0.05*	
Imidacloprid	ND	0.01	10	0.05*	
MCPA	ND	0.01	-	0.1*	
Oxyfluorfen	ND	0.01	-	0.05*	
Paraquat	ND	0.01	0.3	0.05*	
Propagite	ND	0.01	5		
Propiconazole	ND	0.01	0.1	0.1*	
Tebuconazole	ND	0.01	25	0.05*	
Tebufenozide	ND	0.01	25	0.05*	

FAO-Intergovernmental group on tea Inter sessional meeting, USA, September 2012

Working Group on Maximum Residue Levels (MRLs)

Finalize the priority list of compounds in different countries and remove anomalies and duplication of work

Insecticides:

- 26 Insecticides were identified
- TRI Recommended Chlorfluazuron, Fipronil, Imidacloprid included

Herbicides:

- 8 Herbicides were identified
- TRI Recommended 2 ,4-D, Diuron, Glufosinate, Glyphosate & MCPA included

FAO-Intergovernmental group on tea Inter sessional meeting, USA, September 2012

Working Group on Maximum Residue Levels (MRLs) contd..,

Fungicides:

- 13 Fungicides were identified
- TRI Recommended Bitertanol, Copper hydroxide, Copper Oxychloride, Copper Oxide, Hexaconazole, Propiconazole Tebuconazole

FAO-Intergovernmental group on tea Inter sessional meeting, USA, September 2012

Working Group on Maximum Residue Levels (MRLs) condt..,

- A list and a timetable for those chemicals that are planned for submission to Codex will be given to IGG/Tea Secretariat for advance notice to Codex.
- The intent is to progress submissions through Codex with a view to achieve ***global harmonization of MRLs for tea.***

FAO-Intergovernmental group on tea Inter sessional meeting, USA, September 2012

Working Group on (MRLs) on Tea Brew

- To prepare a detailed methodology and policy document on how to approach the regulators following acceptance at the 44th session of the CCPR of the proposal to fix MRLs in tea based on risk assessment using the *brew factor*.
- This would act as a guidance document for fixing MRLs in tea

MRL Related Developments

Global: October 2012

- Korean Food and Drug Administration (KFDA) proposed to delete 17 of Koreas 37 currently established tea MRLs. Of these 17 MRLs 9 MRLs are in the priority list identified by the FAO-IGG Working Group on Maximum Residue Levels (MRLs).
- Three of the 17 MRLs proposed for deletion have equivalent MRLs established by CODEX !
- Tea producing countries and Tea Association from consuming countries requested KFDAs assurance that it will maintain the current MRLs until data holders are notified and give them an opportunity submit data for review by KFDA.

National: October 2012

- Rejection of consignments by EU countries due to *Chlorfluazuron* and *Diuron* residues in Sri Lankan tea

Status of Testing of Alternate PPPs

Pest	Pesticide to be replaced	Alternate PPPs	Bioefficacy trials	MRL studies	Adaptive trials	Recommendation
Shot hole borer	Fenthion	Fipronil	Completed	Completed; results awaiting; results to be submitted for revision	Completed	Pending
		Lime: Sulphur	Completed	Not required	Completed	Pending
Mites	Propagite	Lauric acid	Completed	Not required	Completed	Pending
		Azadirachtin	Completed	Pending	Completed	Pending
		Milbemectin	In progress			
Tea Tortrix	Chlorfluazauron	Chromafenozide	In progress			
		Thiamethoxam	In progress			
Blister blight	Systemic fungicides	Pyrachlostrobin	Completed	Completed; results to be submitted for revision	Completed	Pending
	Contact fungicides	Dry Prilled Cu	Completed	Completed	Completed	Pending
Weeds	Paraquat	Glyphosate + MCPA + Iso propile Amine (RAPID)	Completed	Pending		
		Glyphosate + Carpentasole Ethyl (TRIGGER)				
Weeds: Pre emergent	Oxyfluorfen	Indaziflam	In progress			
White grubs	Carbofuran	Fipronil (Granular formulation)	In progress			
Nematodes	Carbofuran	Fipronil (Granular formulation)	In progress			

Shade Management Related Issues

Major Issues identified during Advisory Visits in the Corporate sector 2012

Out of 788 Advisory & Extension Visits done during 2012;

• Land selection for Replanting	23%
• Bush debilitation and Yield declining	19%
• Shade Management/Removal	15%
• Pest and Disease problems	13%
• Fertilizer/Fertility related issues	08%
• Field categorization and Pruning programs	05%
• Nursery related issues	04%
• Cultivar related issues	03%
• Pruning and recovery after pruning	04%
• other	06%

Shade Removal/ management related issues

- No proper shade removal and replacement plan
- Request permission to remove huge number of shade trees at a time
- Sudden exposure of field could affect the tea, adversely
- No proper monitoring mechanism for shade removal

Shade in Tea

Advisory Circular: Shade in Tea, No: SI 2, Issued on March 2003, Serial No. 3/03

- Planting of shade trees has been associated with tea cultivation
- Establish shade during planting of the rehabilitation grass
- Thinning out should be done
- Pollard *Grevillea* and *Albizzia* when they are over 10 years and 3 years old, respectively

Shade in Tea contd…,

Advisory Circular: Shade in Tea, No: SI 2, Issued on March 2003, Serial No. 3/03

- *Albizzia* trees and *Grevillea* trees become unmanageable after 10 and 25 years respectively. Replace them every 10-25 years depending on the species.
- Establish replacements, when existing *Grevillea* are 20 years and *Albizzia* are 8 years old
- Ring-bark the shade trees 2 yrs before felling them

National Energy Management Plan (EnMAP)

National Energy Management Plan (EnMAP)

- EnMAP is developed by SEA with the objective of saving energy
- Tea sector is included under a sub-programme
- Project period is 2012-2016
- Programme is expected to save 1500GWh

In the Tea sector –
Potential of saving 30Mn kWh/Yr through energy management programmes

National Energy Management Plan (EnMAP)

Objectives:

1. Develop capacities of Factory /Energy managers, factory officers in efficient energy utilisation
2. Implement energy efficient measures thereby reducing processing cost
3. Minimise energy waste in the tea sector to support national energy saving targets

EnMAP for Tea Sector - Progress

- **Actions were taken to appoint Energy Managers / Energy Management Officers from RPCs' SLPTFOA, Tea Shakthi & State Plantation Corporation.**
- **Three day training program will be conducted in February 2013 to train EM/EMO from RPCs & other organisations.**
- **Training program will be conducted in collaboration with SLSEA.**
- **Energy Auditing program will also be conducted for EM/EMO in selected tea factories.**

Awards and Recognitions for TRI staff

1. Drs M A Wijeratne, KM Mohotti and Mr. B A D Samansiri were awarded first, second and third prizes under the TRI reward scheme
2. Ms. N N K Wellala won the prize for the best paper/presentation at the Fourth Symposium on Plantation Crop Research for her paper on "Use of geographic information system in tea plantation management – A case study at St. Coombs Estate, Talawakelle"
3. Dr. P A N Punyasiri won the prize for best presentation in the tea sector for his presentation on "Chemo diversity of Sri Lanka Tea Germplasm" at the Fourth Symposium on Plantation Crop Research
4. Dr. K M Mewan was awarded "commendation" Postgraduate Research Award by the Sri Lanka Association for the Advancement of Science
5. Dr. H W Shyamalee received the gold medal for the presentation on "Potential for eco tourism in up country estates" in Sri Lanka organised by Sri Lanka Agricultural Economists Association

Awards and Recognitions for TRI staff

6. Mrs. T L Wijeratne, received a merit award for her presentation on "Predicted impacts of climate change on the tea yields of different elevation zones of Sri Lanka during the 21st century" at the "Young Scientists Symposium 2012" organised by the National Science and Technology Commission.

7. Dr K Mohotti was appointed as the President of the Institute of Biology Sri Lanka for the year 2012-2013

TRI website won a merit award in the government category at the Bestweb.lk 2012 awards ceremony organized by LK domain registry which is an affiliated organization under University of Moratuwa.

Awards for TRI Estates

St. Coombs Estate

1. The Presidential Award for the Best Tea Factory (Small scale) in Hatton Region.
2. Received 3 all time record prices for Dust No. 1 in 2012

February - Rs. 630/- per kg
November - Rs. 655/- per kg
December - Rs. 700/- per kg

Top Prices

Dust No. 1 - 11
Fgs 1 - 02
BP - 01

St. Joachim Estate

1. The Presidential Award for the Best Tea Factory (Small scale) in Ratnapura Region.

Thank you