## Annual Report

## On

Activities of Regional Research Sub-Station (Terai zone):
Year: 2017-18



Dr. Md. Wasim Reza In-Charge (Actg.)

# REGIONAL RESEARCH SUB-STATION (TERAI ZONE) UTTAR BANGA KRISHI VISWAVIDYALAYA KHORIBARI, DARJEELING – 734427, WEST BENGAL

## Annual Report Prepared By: (Year: 2017-2018)

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#### Acknowledgement:

A deepest sense of gratitude to Prof. Ashok Choudhury, Director of Research, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar for his excellent, affectionate guidance and sustained interest on researches as well as production activities of the farm throughout the year.

A plethora thanks to Dr. Mrigendra Ghosh, Director of Farms, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar for providing funds, valuable advices and several visits for conducting all farm activities during the whole year.

Sincere thanks are extended to Mr. Subhojit Ghosh, In-Charge, Comptroller Department, Uttar Banga Krishi Viswavidyalaya, Pundibari, Cooch Behar for valuable advice regarding different activities on proper utilization of the funds throughout the year.

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A special word to all the non-teaching staffs as well as Muster Roll Workers, Regional Research Sub-Station (Terai Zone), Uttar Banga Krishi Viswavidyalaya, Kharibari, Darjeeling for extending their hands of responsibilities on all cultivation related field activities, data recording and direct engagement in field of different progemmes in the farm throughout the whole year.

In-Charge (Actg.) RRSS (TZ), UBKV Kharibari, Darjeeling

#### REGIONAL RESEARCH SUB-STATION (TERAI ZONE), UTTAR BANGA KRISHI VISWAVIDYALAYA, KHORIBARI, DARJEELING

#### **Introduction:**

Kharibari-Phansidewa and Naxalbari area although located under the administrative jurisdiction of Darjeeling district but agro-ecologically this area fall under Sub- Himalayan terai region of west Bengal. Locationally the area is very much vulranable so far as international trade is concerned. Till, agriculture in the area is backward, subsistence ridden. High concentration of SC/ST population, lack of irrigation facilities, insufficient institutional support, higher percentage of small, marginal and share cropper make the agriculture situation miserable. Locational disadvantages and inherent problem in soil and climate further aggravate the situation.

**Longitude:** 26°34′19" N, Latitude: 88°08′51"E, MSL: 113 m

#### **Present strength of Staff position:**

#### a) Teaching Staff Position:

Sl. No.	Name of Scientists	Designation					
1.	Dr. Md. Wasim Reza	Assistant Professor in Agricultural					
		Entomology & In charge					
2.	Dr. Ram Krishna Sarkar	Assistant Professor in Vegetable					
		Science					

#### b) Non-teaching Staff Position:

Sl. No.	Name of the employees	Designation
1.	Sri Tanmoy Ghosh	Junior Assistant
2.	Sri Vishmadeb Anjoy	Junior Store Keeper
3.	Sri Ashok Xalxo	Junior Peon
4.	Sri Partha Maji	Jr. Duplicating cum Xerox Operator
5.	Sri Dipankar Chatterjee	Cattle Keeper
6.	Sri Prafulla Roy	Field Worker
7.	Sri Buddhadeb Pahan	Field Worker
8.	Chhotelal Oraon	Field Worker
9.	Sri Swapan Chhetri	Junior Darwan

c) Muster Roll Workers: 09 (Nine) numbers

# Brief report on activities of Regional Research Sub-Station for the Year 2017-18

#### A. Seed production programmes:

- 1. Certified paddy seed production under ICAR Mega Seed Project-Varieties- Naveen, Sahabhagi, MTU-1121, Gotra Bidhan -1
- 2. Seed production programme on pulses (Mung) Varieties- Roma and Local
- 3. Seed production of chilli:

Variety - Akashi

4. Seed production of on Till & Sesame:

Variety - Local

#### **B.** Research Programme:

- 1. Study on different crop cultivation in Kharif season (Rainy season) in one field. (Mishra Cultivation)
- 2. A study on exploration, characterization and conservation of brinjal germplasm in North-East India
- 3. Survey, documentation, collection and maintenance of Jackfruit (*Artocarpus heterophyllus*) germplasm grown under the Northern region of West Bengal.

#### C. Research programme on wheat- (AICW&BIP)

- i. National initial varietal trial-5A-RI under AICW&BIP.
- ii. Chemical control of foliage feeding wheat aphids
- iii. Eco-friendly management of aphids through bio-rational approaches
- iv. Compatibility of different insecticides used for aphids control with fungicides, Propiconazole (Tilt)
- v. Incidence and population build of major insect pest in different date of sowing
- vi. Drought tolerance screening nursery (both drought and irrigated, 98 nos. varieties)
- vii. Multiple Pest Screening Nursery
- viii. Control of store grain pests of wheat.

#### D. Planting material production-

- 1) Black pepper cuttings 10000 nos. (target)
- 2) Arecanut seedlings 15000 nos. (target)

#### E. General production programme:

1) Cauliflower, Broccoli, Tomato, Garden pea and Fishery

#### F. Demonstration programme:

- 1. Zero tillage wheat production
- 2. Zero tillage maize seed production

#### **G.** Farmers Service:

- 1. Farmers' Training programme on both agriculture and horticulture crops
- 2. Advisory service
- 3. Demonstration of Improve Production technologies
- 4. Distribution of Seeds & Planting Material both agriculture and horticulture crops

## Rainfall Data of 2017-2018 at RRSS (T.Z), Kharibari

Months	Total Rainfall (mm)
May'17	223.50
June'17	155.14
July'17	638.62
August'17	908.95
September'17	532.00
October'17	72.00
November'17	3.10
December'17	0.00
January'18	0.00
February'18	0.00
March'18	23.50
April'18	2.90

Source: Metrological observatory, RRSS (T.Z.), UBKV, Kharibari

## **Seeds Production Report:**

Sl. No.	Name of seeds variety	Total Production (Kg.)/ Pieces			
1.	Sahabhagi (NR)	1878			
2.	Naveen (C1 to C2)	1424			
3.	MTU-1121 (R)	945			
4.	GB-1 (R)	919			
5.	MTU-1006 (TL)	593			
6.	Kalo Nunia (TL)	488			
7.	Pusa Sughandh-5	297			
8.	Tulai Panji	170			
9.	Chini Shakkar	2.600			
10.	Bina-17	31			
11.	Biridhan- 75	48			
12.	Biridhan-71	21			
13.	Bina -11	68			
14.	Bina -11	22			
15.	Bina -11	1.700			
16.	Green Jackfruit	150			
17.	Turmeric Rhizome	2905.49			
18.	Arhar Dal	72.62			
19.	Tisi (Linseed)	178.5			
20.	Fish	56.93			
21.	Potato (Kufri Sindhuri) (F)	1757			
22.	Pumpkin	30			
23.	Chilli	71.5			
24.	Maize	55 (Pieces)			

25.	Maize	3000.5
26.	Arecanut	640.19
27.	Brinjal	20
28.	Arecanut seedling	1625
29.	Taro (Calocasia)	210.33
30.	Sona Mung	15.33
31.	Roma Mung	7
32.	Cauliflower	114
33.	Cabbage	271
34.	Palak	3
35.	Carrot	20
36.	French beans	9.5
37.	Wheat (infected)	50
38.	Wheat (HD-2967)	302 (C)
39.	Wheat (BHU)	66
40.	Mustard	8
41.	Mung Dal (HUM16)	118

### Farmers Training for Seeds Production under ICAR Seeds Production Project









## ${\bf Action\ photographs\ on\ different\ programme\ (Agriculture\ \&\ Horticulture):}$

## i. Seeds Production of Paddy (Certified):















## ii. Seed Packaging and Marketing:



## iii. Fish Cultivation (Fishery):



## iv. Colocasia Seed Production (Local Variety):



## v. Vegetable Seedling production:



vi. Linseed Field (Local Variety):



vii. Brinjal:



viii. Maize:



## ix. Chilli:



## x. Turmeric seed production (MIDH):



xi. Wheat:









## xii. Potato:









## xiii. Ginger:







xiv. Mushroom cultivation and Processing:









## Project details of RRSS (T.Z), UBKV, Kharibari

1	2	3	4	5	6	7	8	9	10	11	12
Sl. No.	Title of the Project	Sponsoring Company	Associated Scientists at RRSS, Kharibari	Duration	Date of comme ncemen t	Date of completion	Total fund	Status of Expenditure (Balance fund)	Status of Report	Item wise expenditure towards the creation of assets in university	Remar ks/ Any other inform ation
1.	Enhancing Pulses Production For Food And Nutritional Security , Improved Livelihoods, And Sustainable Agriculture In West Bengal	GoWB- ICARDA (Pulses ) Collaborati on, ICAR	Dr.Wasim Reza	Continuing	2017	continuing	3.0	Available with Our bank account at RRSS(T.Z) Kharibari	Interim report sent to the funding agency	Available with Comptroller's Dept., Pundibari	Nil
2.	BGREI Programme (Monitoring at Jalpaiguri District & sub- division Siliguri, Darjeeling)	ICAR	Dr. Wasim Reza & Dr. Ram Krishna Sarkar	Continuing	2011	Continuing	Available with comptroller' s Dept., Pundibari	Available with comptroller's Dept., Pundibari	Report Submitted	Available with comptroller's Dept., Pundibari	Nil
3.	Entomological screening of wheat aphid population and Management on different var.	IIWBR	Dr. Wasim Reza	Continuing	2014	Continuing	Available with comptroller' s Dept., Pundibari	Available with comptroller's Dept., Pundibari	Report Submitted	Available with comptroller's Dept., Pundibari	Nil
4.	Collection, characterization, in situ and ex	Research Mandate university	Dr. Wasim Reza	Continuing	2016	Continuing	Not Release				Nil

	situ conservation of Rice of North and North- Eastern Indiabiotic and abiotic stresses									
5.	Study on exploration, characterization and conservation of brinjal (Solanum melongena L.) germplasm in North-East India	Research Mandate university	Dr. Ram Krishna Sarkar	Continuing	2016	Continuing	0.15			Nil
6.	Turmeric seed production under MIDH	ICAR	Dr. Ram Krishna Sarkar	Continuing	2017	Continuing	2.40	Nil	Report Submitted to P.I	
7.	Production of Curry leaf cutting under MIDH	ICAR	Dr. Ram Krishna Sarkar	Continuing	2017	Continuing	0.25	Nil	Report Submitted to P.I	

#### Ph.D. Programme:

# Name of the Thesis: studies on arthropod faunal complex on wheat agroecosystem with special reference to aphids in terai region of west bengal

#### **Achievements of RRSS (Terai Zone):**

- 1. We have successfully trained 2500 to 3000 Nos. farmers of Kharibari-Phansidewa & Naxalbari Matigara block of different cultivation with the help of Agriculture Department..
- 2. We have organized 15 nos Farmers club in the block of Kharibari-Phansidewa with the help of Agriculture Department and NABARD.
- 3. We have successfully cultivated Aromatic rice (Var. Tulai Panji, Kalonunia and Chinishakkar) in the year 2009 to 2017.
- 4. We have successfully motivated the 25 nos. farmers for cultivation Aromatic rice (Var. Tulai Panji & Kalonunia).
- 5. We have successfully trained to the 50 nos, farmers for honey bee cultivation & 3-4 nos farmers are continuing cultivation.
- 6. We have successfully trained to farmers for Arecanut & Spices cultivation.
- 7. We have successfully trained to 10-20 Nos. farmers for cultivation specific nutrient management in lead cropping systems.
- 8. We have developed scientific cultivation practices among the farmers i.e. Line sowing, SRI, Zero tillage, utilization different type of machine).etc.
- 9. We have trained to farmers successfully, proper utilization of the pesticide & fungicides etc. target pest & disease.
- 10. We have successfully trained to farmers for utilization the Bio-pesticides means which is not harmful to human, pollution and environment etc. (Green triangle logo present in the pesticides).
- 11. We have successfully trained to farmer's cultivation planning & improvement of soil (Green manuring crop).
- 12. We have sown pulse crops (Mung, Black gram, Lentil & Lathyrus etc) and motivated to farmers to sowing the pulse crops on their field.
- 13. We have produced successfully paddy seeds var. MTU-1006, 1121, Gotra Bidhan-1, Naveen, Sahabhagi, etc.