

## Report on Zonal Monitoring of AICRP Yield Trials (2020-21)

### Northern Hills Zone (Virtual)

Period	Name of team members	Centers visited
17-04-2021	Drs. Lakshmi Kant, O.P. Gangwar, Madhu Patial, Gurudev Singh	Shimla, Bajaura, Malan, Dhaulakuan, Almora, Majhera and Ranichauri

#### Trials allocated (Plant Breeding & Agronomy)

Centre	Trial	Remark
Shimla	AVT-TS-IR, AVT-TS-RF, AVT-LS-RI, IVT-TS-RF	Very Good
Bajaura	AVT-TS-IR, AVT-TS-RF, AVT-LS-RI, IVT-TS-RF	Very Good
Malan	AVT-TS-IR, AVT-TS-RF, AVT-LS-RI, IVT-TS-RF	Very Good
Dhaulakuan	AVT-TS-RF, AVT-LS-RI, IVT-TS-RF	Very Good
Majhera	AVT-TS-RF, AVT-LS-RI, IVT-TS-RF	4 <sup>th</sup> rep of AVT-LS-RI rejected
Almora	AVT-TS-IR, AVT-TS-RF, AVT-LS-RI, IVT-TS-RF	Very Good
Ranichauri	AVT-TS-RF, AVT-LS-RI, IVT-TS-RF	AVT-LS-RI & IVT-TS-RF failed

#### Trials rejected by monitoring team:

Centre	Trial
Ranichauri	IVT-LS-RI, IVT-TS-RF (Trials failed due poor plant stand)

#### Entries exhibiting higher diseases/insect infestation\*:

Trial	Entry (Disease Response)
AVT-TS-IR	YR NHTSZ 2005 (40S), NHTSZ 2004 (20S), NHTSZ 2002: LS 2-3% at Malan
AVT-TS-RF	NHRFZ 2001: Loose Smut at Malan, Shimla, Almora, Majhera and Dhaulakuan only NHRFZ 2005: Loose Smut at Majhera and Ranichauri
AVT-LS-RI	Yellow Rust score at Bajaura only : NHLSZ 2009=20S

\*Rust infection was at the lowest level this year due to drought and also appeared late.

#### Report on Agronomical Trials:

Trial	Centre	Remarks (all Very Good)
<b>WHEAT AGRONOMY EXPERIMENT</b>		
SPL-1	Bajaura, Malan	Last week of Oct. to first week of Nov. is the best sowing time.
SPL-2		Good
SPL-4		Significant effect of nitrogen doses & growth retardants and Tebuconazole

#### Entries recommended for purification:

Trial	Entries	Remark
AVT-TS-IR	NIL	All entries were pure.
AVT-TS-RF	NIL	All entries were pure.
AVT-LS-RI	NHLSZ 2004	Tall off type.
IVT-TS-RF	NHIVT 2009	Waxy /non waxy at Shimla and Almora

#### Entries recommended to be dropped from further testing:

Trial	Entries	Remark
IVT-TS-RF	NHIVT 2002	Segregation for spike shape

## North Western Plains Zone : Team-I

Period	Name of team members	Centers visited
16-19 <sup>th</sup> March, 2021	Drs. Gopalareddy K, Harikrishna, Raj Pal Meena and Jagdish Kumar	Delhi, Bawal, Durgapura, Sriganganagar, Hisar

### Breeding Trials Allocated & Monitored:

Location	Trial	Observations
Delhi	NIVT-1A, NIVT-1B, AVT-IR-TS-TAS	Trials had lodged
	NIVT-3A, NIVT-5A, AVT-IR-LS, AVT-RI-TS, SPL-HYPT, SPL-CI-HYT	Good
Bawal	AVT-IR-TS, AVT-IR-LS, AVT-RI-TS-TAS	Rejected - late
Durgapura	NIVT-1A, NIVT-1B, NIVT-3A, NIVT-5A, AVT-IR-TS, AVT-IR-LS, AVT-RI-TS-TAS	Good except NIVT-5A
Sriganganagar	NIVT-1A, NIVT-1B	Plot size changed
	AVT-IR-TS, AVT-IR-LS, AVT-RI-TS, SPL-HYPT, SPL-CI-HYT	Good - no spray in HYPT & HYT
Hisar	NIVT-1A, NIVT-1B, NIVT-3A, NIVT-5A, AVT-IR-TS, AVT-IR-LS, AVT-RI-TS, SPL-HYPT, SPL-CI-HYT, SPL-AST	Good

### Trials Rejected by Monitoring Team:

Location	Trial	Remarks (Reason for Rejection)
Bawal	AVT-IR-TS, AVT-IR-LS, AVT-RI-TS	Late Sowing
Durgapura	NIVT-5A	Poor germination

### Entries Recommended for Purification:

Trial	Entry
NIVT-1A	N-108, 110, 112, 113, 114, 124, 125, 127, 132
NIVT-1B	N-205, 211, 212, 213, 214, 215, 223, 225, 227, 235
NIVT-3A	N-405, 407, 422, 423, 428
NIVT-5A	N-712, 716, 717, 722, 725
AVT-IR-TS-TAS	NWTS-101, 104, 107, 110, 111
AVT-IR-LS-TAS	NWLS-202
AVT-RI-TS-TAS	NWRI-306, 307
SPL-HYPT-IR-ES-TAS	SPL-HYPT-101, 103, 104, 107, 108, 112, 113, 115
SPL-CI-HYT-IR-ES-TAS	HYT-202, 203, 204, 206, 209, 210, 211, 213

### Entries Recommended to be dropped from further teting

Trial	Entry	Remarks
NIVT-1B	N-233	High segregation for multiple traits
NIVT-3A	N-417	
NIVT-5A	N-709	

### Report on Agronomical Trials

Centre	Trial	Remarks
Delhi	IR-DOS-LS	Trial rejected - low plant population
	RIR-TS-TAS	Trial rejected - severe termite infestation
	SPL-IR-ES-HYPT	Trial rejected - improper conduction
Durgapura	RIR-TS, SPL-1, 2, 4, 5 & 6	Trial (s) conduct was good
Sriganganagar	IR-DOS-LS	Trial (s) conduct was good
	RIR-TS, SPL-1, 2 & 4	Not conducted
Hisar	RIR-TS-TAS	Trial conduct is good.
	IR-DOS-LS	Trial rejected - less plant stand in D2
	SPL-IR-ES-HYPT	Lodging in N2 treatment
	SPL-1	Good, Lodging in NM2 & NM3
	SPL-4	Trial conduct is good.

**Report on Pathological Nurseries:** Only YR was recorded at ICAR-IARI, New Delhi.

**Report on Physiology and Quality Trials/nurseries:** Satisfactorily.

**Special Comments, if any :** Nil

### North Western Plains Zone : Team-II

Period	Name of team members	Centers visited
22-25 <sup>th</sup> March, 2021	Drs. VS Sohu, Hari Ram, PL Kashyap and Satish Kumar	Rauni, Balachaur, Ladhowal, Ludhiana, Gurdaspur and Jammu

**Breeding trials allocated & monitored:**

Centre	Trial	Remark
Rauni	AVT-IR-TS-TAS, AVT-IR-LS-TAS	All the trials conducted nicely at all the locations
Balachaur	NIVT-5A, AVT-RI-TS-TAS	
Ladhowal	SPL-HYPT-IR-ES, CI-HYT-IR-ES	
Ludhiana	NIVT-1A, NIVT-1B, NIVT-3A, NIVT-5A, AVT-IR-TS, AVT-IR-LS, AVT-RI-TS, SPL-HYPT, CI-HYT	
Gurdaspur	NIVT-1A, NIVT-1B, NIVT-3A, NIVT-5A, AVT-IR-TS, AVT-IR-LS, AVT-RI-TS, SPL-HYPT, CI-HYT	
Jammu	NIVT-1A, NIVT-1B, NIVT-3A, NIVT-5A, AVT-IR-TS, AVT-IR-LS, AVT-RI-TS	

**Trials not conducted/rejected by monitoring team:** Nil

**Entries showing promising performance in breeding trials:**

Trial	Entry
AVT-IR-TS-TAS	NW-TS-102, 106, 109
AVT-IR-LS-TAS	NW-TS-201
AVT-RI-TS-TAS	NW-RI-302, 303, 313
NIVT-1A	N-104, 109, 113, 116, 118, 119, 127
NIVT-1B	N-201, 210, 213, 215, 217, 222, 227, 234
NIVT-3A	N-402, 405, 419, 421, 425, 427, 431
NIVT-5A	N-704, 716, 717, 721, 722
SPL-HYPT	SPL-HYPT-102, 106, 115
CI-HYT	HYT-202, 205, 210, 215, 217

### Entries recommended for purification

Trial	Entry	Remarks
AVT-IR-TS-TAS	NW-TS-107	Mixture/ off types /variation in plant height, maturity
AVT-RI-TS-TAS	NW-RI-305, 306, 309, 315, 316	
NIVT-1A	N-115, 117, 125	
NIVT-1B	N-204, 205, 223, 233	
NIVT-3A	N-415, 422, 429	
NIVT-5A	N-703, 705, 712	
SPL-HYPT	SPL-HYPT-103	
CI-HYT	HYT-204, 206, 208, 213, 214	

### Entries recommended to be dropped from further testing:

Trial	Entry	Remarks
NIVT-1A	N-108	Segregation for plant height / maturity
NIVT-3A	N-404	
NIVT-5A	N-709	
SPL-HYPT	SPL-HYPT-107	

### Report on Agronomical Trials:

Centres	Name of the trial	Remarks
Jammu	IR-DOS-LS, RIR-TS-TAS, SPL-1, SPL-2, SPL-4	<ul style="list-style-type: none"> <li>All trials were very nicely conducted and well managed.</li> <li>Treatment effects were quite visible.</li> </ul>
Gurdaspur	IR-DOS-LS, RIR-TS, SPL-HYPT, SPL-1, 2, 4	
Ludhiana	IR-DOS-LS, RIR-TS, SPL-HYPT, SPL-1, SPL-4	
Ladhowal	SPL-IR -ES-HYPT	

### Report on Pathological Nurseries:

IPPSN & PPSN conducted nicely and inoculum load & disease development was satisfactory.

**Report on Physiology Trials:** MLHT, DHTSN were properly conducted at Ludhiana center

**Special comments, if any:** The schedule for monitoring of trials may be advanced

### North Western Planis Zone : Team-III

Period	Name of team members	Centers visited
20–22 <sup>nd</sup> March, 2021	Drs. BS Tyagi, Anil Khippal, Pramod Prasad and Prashantha Babu	Nagina, Ujhani, Bulandshahr, Meerut, ICAR-IIWBR Karnal

### Breeding trials allocated & monitored:

Centre	Trial	Remark
Nagina	AVT-IR-TS, AVT-IR-LS, AVT-RI-TS	Good, no disease
Bulandshahr	AVT-IR-TS, AVT-IR-LS, AVT-RI-TS, NIVT-1A, NIVT-1B, NIVT 3A, NIVT-5A	Very good but some lodging in IR trials
Ujhani	AVT-IR-TS-TAS, AVT-IR-LS-TAS, AVT-RI-TS-TAS	Good
Modipuram	AVT-IR-TS, AVT-IR-LS, AVT-RI-TS, SPL-HYPT, SPL-CI-HYT, NIVT-1A, NIVT-1B; NIVT-3A, NIVT-5A	Very good trials; lodging in few entries
Karnal	AVT-IR-TS-TAS, AVT-IR-LS, AVT-RI-TS, SPL-HYPT, SPL-CI-HYT, NIVT-1A, NIVT-1B, NIVT-3A, NIVT-5A	Very good trials; lodging in few entries

**Trials not conducted / rejected by monitoring team:**

Location	Trial
Ujhani	AVT-TS-RI-TAS trial

**Entries showing promising performance in breeding trials:**

Trial	Entry
AVT-IR-TS-TAS	NW-TS-101, 102, 103,106, 109, 111,113
AVT-IR-LS-TAS	NW-LS-201, 202, 203, 204, 206
AVT-RI-TS-TAS	NW-RI-302, 306, 308, 309, 313, 315, 316, 3017
NIVT-1A	N-101, 103, 117, 118, 136
NIVT-1B	N-202, 203, 207, 210, 219, 217, 220, 221, 231
NIVT-3A	N-403, 411, 416, 421, 423, 426,431,
NIVT-5A	N-702, 708, 711, 717, 719, 722,
SPL-HYPT	SPL-HYPT-102, 108, 112
SPL-CI-HYT	SPL-CI-HYT-212, 218

**Entries recommended for purification:**

Trial	Entry	Remark
AVT-IR-TS-TAS	NW-TS-110,	High mixture, segregation
AVT-IR-LS-TAS	NW-LS-201	
AVT-RI-TS-TAS;	NW-RI-305, 307, 309,	Height/ maturity variation
SPL-HYPT-NWPZ	SPL-HYPT-107	
NIVT-1A	N-115, 124, 125, 134,	Height/ maturity variation
NIVT-1B	N-205, 214, 225, 227,	Height/ maturity variation
NIVT-3A	N-404, 422, 428, 429, 433,	Height/ maturity variation
NIVT-5A	N-712, 725,	Ear shape/ maturity variation
SPL-CI-HYT	SPL-VLS-103	Height/ear shape/ maturity variation

**Entries recommended to be dropped from further testing:**

Trial	Entry	Remark
NIVT-1A	N-108, 121, 132	Maturity/ height, plant type segregation
NIVT-1B	N-215, 232, 233	Height/ ear shape/ maturity variation
NIVT-3A	N-436	Mixture/ ear shape/ maturity variation
NIVT-5A	N-704, 709, 716	Very mixture / segregation for height/ maturity

**Report on Agronomical Trials:** Not conducted at either of these four centers.

**Entries exhibiting higher diseases incidence / insect infestation:** Nil

**Report on Pathological Nurseries:** Nil

**Special comments, if any**

1. Sowing by machine for better results of entries and seeds of checks be taken only if pure.
2. Late sown trial was better than timely sown at Ujhani. The RI trial was under stress at Ujhani and for better results number of irrigations may be increased under sandy soils.

## North Eastern Plains Zone (NEPZ) : Team -I

Period	Name of team members	Centers visited
16 -21 <sup>st</sup> March, 2021	Drs. CN Mishra, SV Singh and RS Beniwal	Lucknow, Araul, Daleep Nagar, Kanpur, Prayagraj, Varanasi, Ayodhya and Gorakhpur

### Breeding trials allocated & monitored:

Centre	Trial	Remark
Lucknow	SPL-AST	Rejected
Araul	AVT-IR-TS, AVT-RI-TS and AVT-IR-LS	Good except AVT-IR-LS
Daleep Nagar	SPL-AST	Rejected
Kanpur	AVT-IR-TS, AVT-RI-TS, AVT-IR-LS, NIVT-1A, NIVT-1B, NIVT-3A and NIVT-5A	Good
Prayagraj	AVT-IR-TS, AVT-RI-TS and AVT-IR-LS	Good
Varanasi	AVT-IR-TS, AVT-RI-TS, AVT-IR-LS, NIVT-1A, NIVT-1B, NIVT-3A and NIVT-5A	Good
Ayodhya	AVT-IR-TS, AVT-RI-TS, AVT-IR-LS, NIVT-1A, NIVT-1B, NIVT-3A and NIVT-5A	Good
Gorakhpur	AVT-IR-TS, AVT-RI-TS and AVT-IR-LS	Good except AVT-RI-TS

### Trials not conducted/rejected by monitoring team:

Centre	Trial	Remark
Lucknow	SPL-AST	Rejected due to delayed Sowing (DOS11/12/2020)
Araul	AVT-IR-LS	Rejected due to very poor germination and low plant population
Daleep nagar	SPL-AST	Rejected due to very poor germination
Gorakhpur	AVT-RI-TS	Late sowing and additional irrigation

### Entries showing promising performance in breeding trials:

Trial	Entry
AVT-IR-TS,	NE-TS-102
AVT-RI-TS-TAS	NE-RI-307, 313
NIVT-1A	N-118, 116, 117
NIVT-1B	N-201, 203, 210, 222, 231, 234
NIVT-5A	N-702, 713, 718, 719
SPL-AST	SPL-AST-107

### Entries recommended for purification

Trial	Entry	Remarks
NIVT-1A	N-112, 121, 122, 132	Mixture/ off types /variation in plant height
NIVT-1B	N-209, 217, 218, 221, 227, 235	
NIVT-5A	N-705, 712, 707, 720, 724, 725	
NIVT-3A	N-408, 414, 422, 429	
AVT-RI-TS	NE-RI 301, 304	

### Entries recommended to be dropped from further testing:

Trial	Entry	Remarks
NIVT-1A	N-107, 108, 124	Segregation for plant height / ear type/ maturity
NIVT-1B	N-205, 206, 223	
NIVT-5A	N-709, 716, 717, 723	Segregation for plant height / maturity
NIVT-3A	N-407, 417	Segregation for plant height/ear shape/ maturity
AVT-RI-TS	NE-RI-309	

**Entries showing high disease incidence in breeding trials: None.**

**Report on Agronomical Trials:** No response of input and growth regulator in SPL-3 & 4 at Faizabad, hence rejected. The allotted trials at Varanasi and Kanpur were conducted satisfactorily.

**Report on Pathological Nurseries:** In PPSN, the brown rust infection was high at Kanpur and Ayodhya in infector rows. The entomological trials were well conducted at Kanpur.

**Report on Physiology Trials:** Physiological trials at Kanpur centre were satisfactorily.

**Special comments, if any:** At the voluntary centres limited trials may be allotted, work load of pathology at Ayodhya be distributed equally in this zone.

### North Eastern Plains Zone (NEPZ) : Team-II

Period	Name of team members	Centers visited
9-12 <sup>th</sup> March, 2021	Drs. AK Sharma, RS Chhokar, Surya Prakash & Satyajit Hembram	Ranchi, Goriakarma, Sabour, RPCAU & IARI- Pusa

**Breeding trials allocated & monitored:**

Centre	Trial	Remark
Ranchi	AVT-IR-TS, AVT-RI-TS, AVT-IR-LS, NIVT1A, NIVT1B, NIVT-3A and NIVT-5A	Good
Goriakarma	AVT-IR-TS, AVT-RI-TS and AVT-IR-LS	Rejected AVT-RI-TS
Sabour	AVT-IR-TS, AVT-RI-TS, AVT-IR-LS, NIVT-1A, NIVT-1B, NIVT-3A and NIVT-5A	Good
RPCAU	AVT-IR-TS, AVT-RI-TS, AVT-IR-LS, NIVT-1A, NIVT-1B, and NIVT-5A	Good
IARI Pusa	AVT-IR-TS, AVT-RI-TS and AVT-IR-LS NIVT-3A	Good

**Trials not conducted/rejected by monitoring team:**

Centre	Trial	Remark
Goriakarma	AVT-RI-TS	Rejected due to very poor population and >3 irrigations

**Entries showing promising performance in breeding trials:**

Trial	Entry
AVT-IR-TS,	NE-TS-103, 109
AVT-RI-TS-TAS	NE-RI-307, 313
AVT-IR-LS-TAS	NE-LS 203, 204
NIVT-1A	N-103, 117, 118, 119
NIVT-1B	N-201, 203, 210, 222, 231, 234
NIVT-3A	N 405, 417, 419
NIVT-5A	N-702, 713, 718, N-719

**Entries recommended for purification**

Trial	Entry	Remarks
NIVT-1A	N-112, 121, 126, 132, N 135	Mixture/ off types /variation in plant height & ear colour
NIVT-1B	N-209, 217, 218, 221, 227, 235	
NIVT-5A	N-705, 712, 707, 720, 724, 725	
NIVT-3A	N-408, 414, 422, 429	
AVT-RI-TS	NE-RI 301, 304	
AVT-IR-LS-TAS	NE-LS 211	

**Entries recommended to be dropped from further testing:**

Trial	Entry	Remarks
NIVT-1A	N-108	Segregation for plant height / ear type/ maturity
NIVT-1B	N-228, 233	Segregation for plant height / ear type/ maturity
NIVT-5A	N-709	Segregation for plant height / maturity
NIVT-3A	N-407, 417	Segregation for plant height / ear shape/ maturity
AVT-RI-TS	NE-RI-309	Segregation for plant height / ear shape/ maturity

**Entries showing high disease incidence in breeding trials : Nil****Report on Agronomical Trials:**

Centre	Trial	Remarks
Ranchi	SPL-1, SPL-2, SPL-4	Good, except SPL-1, where first date of sowing (25 <sup>th</sup> Oct. was not implemented).
Sabour	SPL-1, SPL-2, SPL-3, SPL-4	Good, except SPL-1, where first date of sowing (25 <sup>th</sup> Oct was not sown due to delayed rice harvesting.
RPCAU	SP-3-Surface seeding SPL-4 Nitrogen optimization	In surface seeding trial no differences observed and in SPL-4 no visual reduction in plant height was observed.
IARI, Pusa	SP-3-Surface seeding SPL-4 Nitrogen optimization	In surface seeding trial no visual treatment differences observed. Also in SPL-4, no visual response of growth retardant was observed. The crop stand was good.

**Report on Pathological Nurseries:** LBSN was not allotted to hot spot (Sabour) but at Ranchi. LBSN conducted at Goriakarma was satisfactory with clear-cut symptoms of disease plants.

**Report on Physiology Trials:** Ranchi, Sabour & RPCAU centres were satisfactory.

**Special comments, if any:** At the Goriakarma centre, performance was not satisfactory

**North Eastern Plains Zone (NEPZ) : Team-III**

Period	Name of team members	Centres Visited
15-18 <sup>th</sup> March, 2021	Drs. Saikat Das, Dhiman Mukherjee, Ravindra Kumar, Vikas Gupta	Kalyani, Burdwan, Malda, Coochbehar

**Breeding trials allocated & monitored:**

Centre	Trials	Remarks
Kalyani	NIVT-1A, NIVT-1B, NIVT-3A, NIVT-5A, AVT-IR-TS, AVT-RI-TS, AVT-IR-LS	Trial conduct was good. Monitoring was late by at least two weeks as most of the trials were at harvesting stage.
Burdwan	AVT-IR-TS, AVT-RI-TS, AVT-IR-LS	
Malda	AVT-IR-TS, AVT-RI-TS, AVT-IR-LS	
Coochbehar	NIVT-1A, NIVT-1B, NIVT-3A, NIVT-5A, AVT-IR-TS, AVT-RI-TS, AVT-IR-LS	

**Trials not conducted / rejected by monitoring team: None**

**Entries recommended for purification:**

Trial	Entry	Remarks
AVT-IR-TS	NETS-101, 108, 105	Few off-type plants were observed
AVT-RI-TS	NERI-305, 308, 314	Few off-type plants were observed
NIVT-1A	N-119,124,130, 133	Mixture of plant type, spike was observed
NIVT-1B	N-202, 209, 216, 219, 225, 227, 235	Off-types present
NIVT-3A	N-412, 433	Off-types present
NIVT-5A	N-704, 707, 716	Variation for height



**Entries recommended to be dropped from further testing:**

Trial	Entry	Remarks
AVT-RI-TS	N-309	Variation for plant type and maturity
NIVT-1A	N-108	Segregation for plant height
NIVT-3A	N-414	Genotype showing variation for maturity
NIVT-5A	N-709	Segregation for height and maturity

**Report on Agronomy trials:** Conducted properly at Kalyani, Burdwan and Coochbehar

Centre	Trials	Remarks
Kalyani	SPL 1 & 4	Good. RDF is best in SPL-4
Burdwan		Good
Coochbehar	SPL 2 & 4	Plot size changed to 5 x 3 m instead of 1.80 m x 8 m.

**Entries showing promising performance in breeding trials:**

Trial	Entry
AVT-IR-TS	NE-TS-104
AVT-IR-LS	NE-LS-201, 211
AVT-RI-TS	NE-RI-301, 303, 311
NIVT-1A	N-104
NIVT-1B	N-210, 226, 229
NIVT-3A	N-413, 427
NIVT-5A	N-702, 711, 714

**Report on Pathological Nurseries:**

Nursery	Centre	Remarks
IPPSN & PPSN	Kalyani & Coochbehar	Properly conducted

**Leaf rust and leaf blight observations in some of the entries in different trials:**

Trials	Entries and disease score	
	Leaf Blight	Leaf rust
AVT-IR-TS	NE-TS-101(59),	NETS-104(20S), 105(10S), 108(10S)
AVT-IR-LS	NE-LS-202(69), 203(79), 212 (69)	NELS-201(40S), 205(10S), 208 (60S), 210(40S), 212(40S)
AVT-RI-TS	NE-RI-304 (37), 309(48),	NERI-304(5S), 305(20S), 306(10S), 311(10S), 314(10S)
NIVT-1A	N-101(49)	-
NIVT-3A	N-401(36), 403(59), 411(59), 414(49), 416(79)	N-405(10S), 411(5S), 421(20S)

**Special comments, if any:** Monitoring of trials in NEPZ should start in first week of March.

## Central Zone: Team – I

Period	Name of team members	Centres Visited
17-19 <sup>th</sup> Feb., 2021	Drs. SI Patel, JB Singh, RP Meena and Vikas Gupta	Vijapur, Anand, Dhanduka, Sanosara, Amreli and Junagadh

### Breeding trials allocated & monitored:

Centre	Trials	Remarks
Vijapur	AVT-IR-TS, AVT-IR-LS, AVT-RI-TS, SPL-HYPT, SPL-CI-HYPT, NIVT-2, NIVT-3B, NIVT-4, NIVT-5B	Properly conducted
Anand	AVT-IR-TS, AVT-IR-LS	Properly conducted
Dhanduka	NIVT-5B, AVT-RI-TS	Properly conducted
Sanosara	AVT-RI-TS, AVT-IR-LS	Properly conducted
Amreli	AVT-IR-TS, AVT-RI-TS	AVT-RI-TS rejected
Junagadh	AVT-IR-TS, AVT-IR-LS, AVT-RI-TS, NIVT-2, NIVT-3B, NIVT-4, NIVT-5B	Properly conducted

**Trials not conducted / rejected by monitoring team:** AVT-RI-TS at Amreli

### Entries recommended for purification:

Trial	Entry	Remarks
AVT-IR-LS	CZ-LS-201, 202	Few off-types were present
AVT-RI-TS	CZ-RI-311	
SPL-HYPT	SPL-HYPT-103, 108	
SPL-CI-HYT	HYT-203, 209, 221	
NIVT-2	N-322, 325	Mixture of plant type and spike was observed
NIVT-3B	N-511, 521	Few off-types were observed
NIVT-4	N-610, 613, 621	

### Entries recommended to be dropped from further testing:

Trial	Entry	Remarks
AVT-IR-TS	CZ-TS-108	Segregation for ear waxiness, plant height and maturity
NIVT-2	N-320, 325, 335	Segregation for height, maturity
NIVT-3B	N-513, 509,	variation for ear head waxy and non-waxy
NIVT-4	N-611	Segregation for maturity and ear type
NIVT-5B	N-805	Segregation for ear-head waxiness
SPL-HYPT (IR-ES)	SPL-HYPT-106	Segregation for maturity and ear colour
SPL-CI-HYT	HYT-213	Segregation for maturity

### Report on Agronomy trials

Centre	Trial	Remarks
Vijapur	IR-DOS-TAD, RIR-TS-TAD, SPL-HYPT, SPL-1, SPL-4	Trial conduct was very good.
Dhanduka	SPL-2	
Junagadh	IR-DOS-TAD, SPL-1, SPL-4	25 <sup>th</sup> October sowing was not executed due to rainfall

### Report on Physiology Trials: all allocated trials conducted properly

Trial	Centre	Remarks
MLHT-2	Vijapur, Junagadh	Properly conducted
DHTSN	Junagadh	Properly conducted

**Entries showing promising performance in breeding trials:**

Trial	Entry
NIVT-2	N-304, 316, 331, 333
NIVT-3B	N-520, 524
NIVT-4	N-601, 615, 618
NIVT-5B	N-802, 818, 819, 820

**Report on Pathological Nurseries:**

Centre	Nursery	Remarks
Vijapur	PPSN	Rust development was excellent.
Junagadh	PPSN	Rust disease development was excellent.

**Special comments, if any:** Concern regarding increasing their contributions in NIVTs of CZ & PZ.

**Central Zone : Team II**

Period	Name of team members	Centres Visited
22-25 <sup>th</sup> Feb, 2021	Drs. SV Sai Prasad, Hanif Khan, K K Mishra and Dinesh Pandey	Raipur, Bilaspur, Jabalpur, BISA-Jabalpur, Sagar, Powarkheda and Indore

**Breeding trials allocated & monitored:**

Centre	Trial	Remark
Raipur	NIVT-3B, AVT-IR-TS-TAD, AVT-IR-LS-TAD	Satisfactorily conducted
Bilaspur	AVT-IR-TS-TAD, AVT-IR-LS-TAD, AVT-RI-TS-TAD, NIVT-2, NIVT-3B, NIVT-4 & NIVT-5B	04 trials rejected
JNKVV Jabalpur	AVT-IR-TS-TAD, AVT-IR-LS-TAD, AVT-RI-TS-TAD, NIVT-2, NIVT-3B, NIVT-4 & NIVT-5B	Satisfactorily conducted
BISA-Jabalpur	SPL-HYPT, SPL-CI-HYT	Satisfactorily conducted
Sagar	AVT-IR-TS-TAD, AVT-IR-LS-TAD, AVT-RI-TS-TAD, NIVT-2, NIVT-3B, NIVT-4 & NIVT-5B	Satisfactorily NIVT-3B except and AVT-IR-LS
Powarkheda	AVT-IR-TS-TAD, AVT-IR-LS-TAD, AVT-RI-TS-TAD, NIVT-2, NIVT-3B, NIVT-4 & NIVT-5B	Satisfactorily conducted
Indore	AVT-IR-TS-TAD, AVT-IR-LS-TAD, AVT-RI-TS-TAD, NIVT-2, NIVT-3B, NIVT-4 & NIVT-5B	Satisfactorily conducted

**Trials not conducted / rejected by monitoring team:**

Centre	Trial	Remarks
Bilaspur	AVT-IR-TS, AVT-RI-TS, NIVT-2 & NIVT-4	Rejected due to poor plant stand and presence of heavy weeds population.
Sagar	NIVT-3B and AVT-IR-LS-TAD	These two trials were rejected by monitoring team because of early sowing (14/11/2020) and poor management of the trials.

**Entries recommended for purification:**

Trial	Entry	Remarks
AVT-IR-TS-TAD	CZ-TS-108	Off-types were found & need purification
AVT-IR-LS-TAD	CZ-LS-201	
AVT-RI-TS-TAD	CZ-RI-311	
SPL-HYPT	HYPY-102, 103, 108, 111	
SPL-CI-HYT	HYT-203, 205, 209, 221, 224	
NIVT-2	N-311, 312, 319, 320, 324, 336	

NIVT-3B	N-502, 507, 511, 521, 523	
NIVT-4	N-610, 613, 619, 621	
NIVT-5B	N-807, 811, 816, 819, 824	

**Entries recommended to be dropped from further testing:**

Trial	Entry	Remarks
NIVT-2	N-325, 335	High segregation for maturity, height and pubescence
NIVT-3B	N-509, 513	Segregation for ear characteristics and leaf waxiness
NIVT-4	N-611	Segregation for ear type, maturity and pubescence
NIVT-5B	N-805	High segregation for waxiness
AVI-IR-TS-TAD	CZ-TS-108	High variation for plant height, ear and maturity duration
AVI-IR-LS-TAD	CZ-LS-202	High variation for plant height, waxiness, and maturity
SPL-HYPT	SPL-HYPT-106, 107, 109	High segregation for plant type and maturity duration
SPL-CI-HYT	HYT-206, 207, 213, 223	High segregation for ear characteristics and maturity

**Entries found promising:**

Trial	Entry
NIVT-2	N-301, 306, 307, 310, 331, 333
NIVT 3B	N-501, 503, 506, 512, 520
NIVT-4	N-603, 609, 614, 620
NIVT-5B	N-802, 808, 822
AVI-IR-TS-TAD	CZ-TS-101, 103, 110, 113
AVI-IR-LS-TAD	CZ-LS-204, 205
AVI-RI-TS-TAD	CZ-RI-301, 310
SPL-HYPT	HYPT-104, 105, 114, 116
SPL-CI-HYT	HY202, 204, 212, 214, 222

**Entries exhibiting higher diseases incidence / insect infestation: Free**

**Report on Agronomical Trials:**

Centre	Trials allotted	Remarks
Bilaspur, Jabalpur, Powarkheda	IR-DOS-TAD, RIR-TS-TAD, SPL-1 & SPL-4	Satisfactorily
Indore	IR-DOS-TAD, RIR-TS-TAD	Satisfactorily

**Report on Pathological Nurseries (PPSN and IPPSN):** Very good at Powarkheda and Indore centers.

Disease incidence in **PPSN and IPPSN** at Indore and Powarkheda centers were as under.

Name of nursery/ trial	Brown Rust	Black Rust
PPSN	No. 195: 60S	No. 18, 19, 58 and 64 : 40S ; 95-60S
IPPSN entries having rust incidence > 80S	120, 232, 384, 661	291, 317, 328, 338, 661, 662, 665, 674, 676, 731, 744, 775, 796, 1070, 1092, 1095, 1096, 1128, 1149, 1150, 1179, 1180, 1235, 1236,

## Peninsular Zone: Team-I

Period	Name of team members	Centres Visited
9-12 Feb., 2021	Drs. K Venkatesh, KD Lamani, Gurudatt Hegde and Yashwantha KJ	Dharwad, Bagalkot, Mudhol, Kalloli, Digraj Arabhavi, Ugar Khurd, Nippani, Kolhapur

### Coordinated breeding trials allocated, conducted & monitored:

Centre	Trials
Dharwad	AVT-IR-TS, AVT-IR-LS, AVT-RI-TS, SPL-Dic, NIVT-2, NIVT-3B, NIVT-4, NIVT-5B
Bagalkot	AVT-RI-TS-TAD, NIVT-5B
Mudhol	AVT-IR-TS-TAD, AVT-IR-LS, SPL-IR-TS-Dic
Kalloli	AVT-IR-TS-TAD, AVT-IR-LS, SPL-IR-TS-Dic
Arbhavi	AVT-IR-TS-TAD, AVT-IR-LS, SPL-IR-TS-Dic
Ugar-Khurd	AVT-IR-TS-TAD, AVT-IR-LS, SPL-IR-TS-Dic, NIVT-2, NIVT-4, NIVT-5B
Nippani	AVT-IR-TS-TAD, AVT-IR-LS, AVT-RI-TS, NIVT-2, NIVT-3B, NIVT-4, NIVT-5B
Kolhapur	AVT-IR-TS-TAD, AVT-RI-TS-TAD, SPL-IR-TS-Dic, NIVT-2, NIVT-4, NIVT-5B
Kasbe-Digraj	AVT-IR-TS-TAD, AVT-RI-TS, SPL-IR-TS-Dic
Bailhongal	AVT-IR-TS-TAD, NIVT-5B

### Trials not conducted / rejected by monitoring team:

Centre	Trial	Remark
Kolhapur	AVT-IR-TS, AVT-RI-TS, SPL-Dic, NIVT-2, NIVT-4, NIVT-5B	Rejected -very late sowings
K-Digraj	AVT-IR-TS, AVT-RI-TS, SPL -Dic	Rejected - very late sowing
Bagalkot	NIVT-5B	Rejected poor plant stand
Ugar Khurd	NIVT-2	Rejected poor plant stand

### Entries recommended for purification:

Trial	Entry
AVT-RI-TS-TAT	PZ-RI-301, 302
NIVT-2	N-301, 303, 308, 310, 320, 323, 326, 329, 330, 332, 333
NIVT-3B	N-521
NIVT-4	N-611, 612, 616, 625
NIVT-5B	N-802
Spl-Dic	Dic-103

### Entries recommended to be dropped from further testing:

Trial	Entry	Remark
NIVT-2	N-304, 314, 325, 335	High segregation for multiple traits.
NIVT-3B	N-513	
NIVT-4	N-610, 619	
NIVT-5B	N-804, 805, 814	

### Report on Agronomical Trials:

Centre	Trial	Remark
Dharwad	PZ-Agr-RIR, SPL-1, SPL-2, SPL-4, SPL-5, SPL-6, SPL-7	Good

### Report on Pathological Nurseries: Satisfactory

**Report on Physiology/ Quality :** MLHT, DTSN and QCWBN at Dharwad were good.

**Special comments, if any:** Kolhapur centre requested not to allot NIVT trials and similarly NIVT-5B trial may not be allotted to Ugar-Khurd centre as the location is suited for only Irrigated ecology.

## Peninsular Zone : Team-II

Period of visit	Name of team members	Centres Visited
10 to 13 <sup>th</sup> Feb., 2021	Drs. SK Singh, Vikas VK, VS Baviskar, BC Game	Nasik, Niphad, Savalivihir, Pravaranagar and Pune

### Coordinated breeding trials allocated, conducted & monitored:

Centre	Trials
Niphad Pune	AVT-IR-TS-TAD, AVT-IR-LS, AVT-RI-TS-TAD, Spl-IR-TS-Dic, NIVT-2, NIVT-3B, NIVT-4, NIVT-5B
Nasik	AVT-IR-TS-TAD, AVT-IR-LS, AVT-RI-TS-TAD
Savilivihir	AVT-RI-TS-TAD, NIVT-5B
Pravaranagar	AVT-IR-TS-TAD, AVT-IR-LS-TAS

### Trials not conducted / rejected by monitoring team: Nil

### Entries recommended for purification:

Trial	Entry	Remark
AVT-IR-LS-TAS	PZ-LS-203, 204, 206	Off-types
NIVT-2	N-301, 307, 308, 325	
NIVT-3B	N-505	
Spl-Dic	Dic-104	

### Entries recommended to be dropped from further testing:

Trial	Entry	Remark
NIVT-2	N-335	High segregation for multiple traits.
NIVT-3B	N-511	
NIVT-5B	N-805, 824	
Spl-Dic	Dic-103	

**Entries exhibiting higher diseases incidence / insect infestation:** No incidence of rust at the centres monitored.

### Report on Agronomical Trials:

Centre	Trial	Remark
Niphad & Pune	PZ-Agr-RIR, Spl-1, Spl-4, Spl-5 & Spl-6	Conducted satisfactorily

### Report on Pathological Nurseries:

PPSN, IPPSN, EPPSN, MDSN at Niphad and Pune had high incidence of rust diseases in infector rows was observed. Low infestation of aphids in entomological trials and nurseries at Niphad.

### Report on Physiology and Quality Trials/nurseries:

MLHT and DTSN at Niphad and Pune were good. However, entries 15, 19 of MLHT and 37, 40, 91 of DTSN were not germinated. QCWBN was conducted satisfactorily.

**Report on National/International Trials/nurseries:** satisfactory.

**Special comments, if any :** FHB was reported from some farmers field.