New experiment setup based on requirement

A) Chilli: -

- 1. Identification of molecular markers for Phytophthora in chilli and comparison with resistant lines total sample 94 and total PCR 695
- 2. Chilli Hybrid GOT Samples from Durkabeda & jaetgiri 192 samples
- 3. Identification of molecular markers for GMS in chilli. (total 18 samples and using 2 samples for 40 SSR markers and 18 samples in 4 markers total PCR-152)
- 4. Identification of molecular markers for LCV in chilli (8 Parent sample in 206 SSR Markers and all sample check total PCR-2034) Gel data analysis in progress, awaiting sample details.
- Chilli Hybrid VNR-145 samples test using ISSR & SSR markers (Samples from different location, total PCR-1202)
- Comparison between Chilli DHC lines and VNR-32, using VNR-32 validated Molecular markers (26 samples using 1 marker)
- Identification of Female plants based on Chilli Hybrid VNR-314 using hybrid specific validated molecular marker (13 samples including controls using 4 identified markers for VNR-314) samples from Mongrapal.

B) Rice: -

- 1. Entomology samples from Dhaba sample analysis through Molecular marker (288 samples and total PCR-480)
- 2. Rice sample from Foundation DEPT. (Big nursery & Normal nursery), Off-type Identification through Molecular marker. (31 samples tested from 8 RM markers)
- 3. Rice Hybrid VNR2245 and T&D sample Comparison through molecular marker (8 samples with 30 RM Markers total PCR 240)
- 4. PCR Analysis of rice hybrid VNR-2111 (17 off-type and 5 hybrid) sample from Production dept (Hariprasad sir). (22 samples using 6 RM markers)
- 5. PCR Analysis of rice sample from Production dept. (Hariprasad sir) (60 samples tested with 7 RM markers)
- 6. PCR Analysis of rice FCN sample from Hyderabad which was further given for rice Microarray assay. (10 samples tested with 25 Rice & RM Markers)
- 7. Rice Blast samples from Greenhouse PCR analysis (4 samples tested in 22 RM markers)
- C) Bitter Gourd
 - 1. Bitter gourd Hybrid 72038 parent (sample from different location) Comparison from validated sample and 3 lot sample from quality dept.
 - 2. PCR Analysis of VNR-72038 Female, Male, Hybrid samples from Production line, breeder line comparison with validated sample. (Total PCR 1164)
 - 3. Bitter gourd Hybrid 72034 parent (sample from different location) Comparison from validated sample and 3 lot sample from quality dept.
 - 4. Bitter gourd Hybrid VNR-76008 hybrid 3 lot sample from quality dept. for Validation of marker.
 - 5. Bitter gourd Hybrid VNR-72038, 69 hybrid samples for Molecular Marker validation (Total 5-marker used). But not yet completed due to sample containing female plant as shown by marker.
 - 6. DNA isolation was carried out in 2245 samples (2 repeat set) in 1220 breeding line from Jagdalpur.
- D) Maize
 - 1. Identification of polymorphic Maize SSR marker in comparison of 15-IC lines with RP MEL-26 & OP MEL-12. (Total 9-Maize SSR Marker used)
 - 2. Identification of polymorphic SSR marker and parent analysis of C4035 & C4038 Hybrid.
 - 3. Maize hybrids (C4035 & C4038) Identified Molecular marker where compare with True type and offtype samples & C4035 & C4038.
 - 4. DH Identification in maize sample using molecular marker (17 sample and 16 Maize SSR marker was used)
 - 5. Identification of Polymorphic Molecular marker for Maize NCLB samples.
- E) Brinjal: Brinjal SSR Marker Analysis Using Samples from tissue culture. (Embryo rescue)
- F) Muskmelon Identification of polymorphic Molecular marker for fusarium in muskmelon.
- G) Bottelgourd Identification of VNR-Haruna hybrid samples using validated SSR marker to this hybrid.
- H) Papaya Identification of Transgenic Papaya sample using Molecular marker.
- I) AppleBer- Samples comparison with VNR AppleBer mother plant with 438 samples using identified molecular marker.
- J) Tomato Red-stem & Green-stem tomato VNR-3171 sample (from Chawada bag -PAHARA) Analysis using Tomato SSR Markers.