**Achievements (1st January 2019 – 31st December 2019)**

1. Organised the following with a team of 12 persons
   1. **Field Monitoring** 
      1. Field Monitoring : 3871 Ac

During Paddy HSP season, team mainly focussed on “A-09” for observation and collection of leaf samples of contaminants/off types/volunteer plants from production fields and other nearby fields, which helped in timely and accurate screening of 414 MT qty in 17 days with the help Biotech GOT.

* 1. **Seed Testing**
     1. Germination Test : 50720 samples
     2. Vigour Test : 11184 samples
     3. Vegetable GOT : 8559 lots
     4. Field Crop GOT : 4671 lots
     5. Foundation Seed : 258 lots
     6. Biotech GOT analysis : 865 lots (81846 Samples DNA extraction 93605 PCR Analysis
     7. Total no of Tests : 76257
     8. Moisture Meter Calibration: 52 units
  2. **Molecular Biology Lab**
     1. Timely and accurate screening of VNR-2111, Supreme, Supreme Plus Virat & other new hybrids (during peak paddy season) ensured zero complaint for tested fresh lots, placed in sensitive markets.
     2. Genetic Purity Screening of 414 MT qty of export paddy hybrid “A 09” within 17 days in the month of June 2019 helped in early/timely release to Philippines.
     3. Identification of molecular markers for the 13 new Paddy hybrids (8235,12666,13723,13766,14825,14865, 4866, 15126, 15144, 15175, 12686, Supreme Plus, & Virat) and existing Cowpea varieties.
  3. **GOT**
     1. Out of which 161 Ac GOT area in 2019, 111 Ac (69 %) was conducted in Farmers field which resulted in saving of lacks of Rupees.
     2. For better identification of early off types and improve accuracy, GOT of Paddy hybrid 2233, organised at Mysore.
     3. To help in proper identification of Products and their parents and to improve accuracy, collected and compiled all related photographs of product from GOT fields and their parents form Seed Production fields and recorded unique morphological characters .
     4. To improve accuracy in Biotech GOT of Hybrid Paddy lots, planned and executed collection, and fingerprinting of off types observed in field and subsequently protocol development for bulk analysis in all hybrid Paddy Products.
  4. **Seed Testing & Seed Quality Upgradation**
     1. As we are maintaining high standards of Germination & Genetic Purity, Poor vigour & Substandard lots were discarded earlier. Judicious Blending of these lots with fresh lots resulted in
        1. Utilisation of these quantities without any complaint, which otherwise would have been rejected or created problems if sold individually and ultimately saving lot of money.
        2. Bigger lots help in increased efficiency in plant operations, reduced number of lots and easy inventory management (details given below).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **S.No.** | **Crop** | **Qty blended @ 5 %** | | **Germination upgradation** | | **Genetic Purity upgradation** | |
| **No** | **Qty(kg)** | **No** | **Qty(kg)** | **No** | **Qty(kg)** |
| 1 | Ash Gourd | 4 | 0.4 | - | - | - | - |
| 2 | Bhindi (Hy+OP) | 13 | 3 | 156 | 51,978 | 32 | 1,143 |
| 3 | Bitter Gourd | 125 | 30 | 179 | 1,107 | 60 | 4,414 |
| 4 | Bottle Gourd | 46 | 15 | 11 | 53 | 120 | 8,695 |
| 5 | Brinjal | 46 | 2 | 77 | 63 | 70 | 1,821 |
| 6 | Capsicum | - | - | - | - | - | - |
| 7 | Chilli | 92 | 4 | 117 | 94 | 10 | 109 |
| 8 | Cluster Bean | - | - | 2 | 11 | - | - |
| 9 | Coriander | - | - | - | - | - | - |
| 10 | Cow Pea | - | - | 14 | 286 | - | - |
| 11 | Cucumber | 11 | 1 | 2 | 7 | - | - |
| 12 | Dolichos | - | - | 8 | 220 | - | - |
| 13 | Papaya | - | - | - | - | - | - |
| 14 | Pumpkin | 31 | 6 | 45 | 286 | 3 | 65 |
| 15 | Raddish | - | - | - | - | - | - |
| 16 | Ridge Gourd | 22 | 5 | - | - | 20 | 2,221 |
| 17 | Sponge Gourd | 12 | 2 | 19 | 52 | - | - |
| 18 | Snake Gourd | 2 | 0.2 | - |  | 44 | 2,629 |
| 19 | Tinda | - | - | - | - | - | - |
| 20 | Tomato | 28 | 1 | 29 | 14 | 23 | 439 |
| 21 | Water Melon | 8 | 1 | 6 | 10 | - | - |
| 22 | Maize | - | - | - | - | - | - |
| 23 | Paddy | - | - | - | - | 6 | 3,432 |
| 24 | Pearl Millet | - | - | - | - | - | - |
| **Total** | | **440** | **71** | **665** | **54,181** | **388** | **24,968** |

* + 1. Proper Testing, Blending/merging and grading of Carry over stock in Paddy, Maize & Bajra hybrids helped in maximum utilisation of carry over stock without any significant germination complaint.
  1. **Support to other departments**
     1. Continuous Support given to Product Development department in data generation (Test weight, Moisture and Volume weight data) of trial entries, which are very important in deciding fate of new products. This year data for 616 samples is given to PD department.
     2. Moisture meter calibration (Production department)
  2. **Lab Accreditation**
     1. Initiated process for NABL & ISTA accreditation of “Seed Testing Laboratory” Deorjhal.
     2. As mandatory requirement for NABL accreditation
        1. Calibration of required equipment is completed.
        2. Training of key personnel’s of VNR testing laboratories in “Laboratory Quality Management System and Internal Audit as per IS/ISO/IEC 17025:2017” will be completed in the month of January 2020 from “NITS Noida.