**To assist in SNP markers validation and to assist in traits association study.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Trait specific Marker Analysis for Validation** | | | | | | |
| **Sl. No** | **Crop** | **Genes** | **No of Samples** | **No of Markers** | **Marker Selected for Validation** | **Total PCR (Including repeats)** |
| **1** | **Rice** | **RF-3** | **15** | **4 (KASP)** | **1 (Validated)** | **70** |
| **2** | **RF-4** | **15** | **6 (KASP)** | **0** | **96** |
| **3** | **RF-1** | **17** | **17 (GEL)** | **1 (Validated)** | **255** |
| **4** | **GM1** | **7** | **10 (KASP)** | **0** | **354** |
| **5** | **BPH (R2)** | **192** | **31 (KASP) + 4 (GEL)** | **0** | **672** |
| **6** | **Test Weight** | **15** | **4 (KASP) + 9 (GEL)** | **1 (GEL)** | **212** |
| **7** | **Drought Tolerance** | **9** | **5 (KASP)** | **0** | **50** |
| **8** | **Maize** | **NCLB** | **16** | **11 (KASP)** | **0** | **108** |
| **9** | **Haploid Inducer** | **3814** | **1 (KASP) + 1 (GEL)** | 0 | **4678** |
| **10** | **ASI** | **18** | **2** | **0** | **40** |
| **11** | **Sh2 (Sweet corn)** | **110** | **2** | **0** | **175** |
| **Total PCR** | | | | | | **6710** |

**Co-Department work**:

* **Rice-**

1. Pusa-1637 samples analysis, 9 samples, total 90 PCR.
2. Pusa-1121, Pusa1509, Basmati DP-1401 and off-types samples from quality & production dept., 46 samples, total 322 PCR.
3. Odisha samples, Foundation samples, VNR-2318, STN-46, VNR-2111, VNR-2233, Green house samples analysis, 255 samples, total 937 PCR.

* **Pearl Millet-** VNR-3245, VNR-23651 and samples from kohadiya farm, PCR analysis has been done, 58 samples, total 544 PCR
* **Mustard-** Sample analysis using SSR markers (TE#6, TE#7, TE#8, Koral-432), 8 samples, total 71 PCR.
* **Maize-** PCR set up of diversity analysis for MBG-1 to 236 markers, 37 samples, total 8968 PCR.