**Work report- first June to last December**

* Molecular characterization of brinjal hybrids along with parents( Total sample 33, marker 120)
* True Cross Confirmation Of Tomato Crosses Using Molecular Markers(63 Different Crosses; Total-220 crosses; Female-67; Male-80) twenty markers
* Validation of 20 markers (63 Different Crosses; Total-220 crosses; Female-67; Male-80) of tomato for thirteen traits.
* Marker assisted selection of 400 tomato for ty gene(five markers)
* Marker assisted selection of 258 tomato for ty gene(five markers)
* Marker assisted selection of 600 tomato for ty gene(five markers)
* Marker assisted selection of 30 tomato hybrids for ty gene(five markers)
* Chimeric detection of 68 samples by DNA markers
* Parental polymorphism of brinjal sample for double haploid total 120 markers
* Genetic purity of 3132 tomato sample by two markers
* Genetic purity of 1875 tomato sample by two markers
* Marker assisted selection of 341 tomato for ty gene(five markers)
* Genomic DNA isolation was carried out from 11,500 samples of different vegetable crops.
* 150 samples of tomato being screened for Mi gene for nematode resistance
* Validation of markers for bacterial wilt resistance in 36 tomato samples is in progress(four markers)
* Screening and validation of markers for bacterial wilt resistance in 110 tomato samples(four markers)
* Marker based differentiation between diploid and doubled haploid/haploid (30 SSR markers)