Annual Report 2015-16

Project CRP on Agro biodiversity: Okra

Crop: Okra (Evaluation, characterization and seed multiplication of okra accessions –

(Component -I)

Summary

❖ No.of accessions received: 500 (NBPGR, New Delhi)

❖ Design : ABD . Season : Kharif: 2015

❖ No. Of Checks used : Four (Arka Anamika, VRO-6, Parbhani Kranthi,

Pusa Sawani)

- **❖** No.of morphological traits recorded: 21
- No. of Wild species: 64 (A. caillei (20), A. moschatus, (16) A. terraphyllus (8), A. angulosus var. grandiflorus(4), un identified: 01
- **❖** No.of accession not germinated :8
- **\$** 58 accessions had dark green fts.
- **❖** Four lines had dwarf and thick fruits
- **❖** Fourteen accessions had red colored fruits
- **❖** Forty five accession had very late flowering (85 days)
- **❖** Fruit length <10 cm : 12, >15 cm : 421
- **❖** YVMV & PM : Not appeared entire growing period
- ❖ Three accession had maximum yield of Yield 750 1000 gm (IC- 0117073, IC- 0553037 and IC 0012137)
- ❖ 418 accessions selfed seeds were packed and submitted to NBPGR, New Delhi for long term storage (First week of February 2016).

Detailed report: A total of 500 accessions were received from NBPGR, New Delhi under Component –I for evaluation, characterization and seed multiplication during Kharif 2015. Seeds were sown in a Augmented Block Design with four National checks as namely Arka Anamika, , VRO-6, Parbhani Kranti and Pusa Sawani. All five hundred accessions were grown

in 23 blocks. Twenty one morphological characters were characterized as per the guide lines provided by NBPGR.

Out of 500 accessions, eight accession did not germinated, 64 accessions were wild species , one accession was not able to identified the name of the species (Un known species). Each accession had 20 plants , 10 plants for general harvest and reaming 10 plants for seed multiplications. Majority of the accessions are early flowered (35 DAS) , five accession were late flowering (85 days). Fruit colour ranged from light green to dark green in which 58 accessions had dark green color. Four lines had dwarf and thick fruit , Fourteen accessions had purple colored fruit including an accession IC 0551791(Fig-3) . Fruit length ranged from minimum 10 cm,(12 accessions) to maximum 15 cm (421 accessions). Yield ranged from 320 gm per plant 1.75kg (Fig 1), in which three accessions namely dark green IC 0117073 (Fig 2),IC-0553037 and IC-0012137 had more than 1000 g yield per plant (Table 1) . There was no symptom of YVMV and ELCV was noticed during entire cropping period . 418 accessions seeds were mollified and deposited to NBPGR, New Delhi for long term storage.



Fig 1. IC 0553037 high yield 1.75 kg



Fig2. IC-0117073 high yield with dark green fruit



Fig 3. IC 0551791 purple fruit