## **Gerbera Breeding**

Methods of breeding:-

1. Clonal selection - selection of superior clones from the mixed population of asexually propagated crops.

i. Variety - YCD-1

Year of Release - 1991

Parentage - Clonal selection from GJ 19

Elevation - 1000 to 2000 m , Flower color - Cherry Red

Vase Life - 9 days

Yield - 65 flowers/ plant/year

ii. Variety - YCD-2 Gerbera

Year of Release - 1994

Parentage - Clonal selection from GJ 8

Elevation - 1500 m, Flower color - Pale pink

Vase Life - 10 days and Yield - 80 flowers/plant/year

2. Half sib selection in Gerbera

i. IIHR 15-7 ( Arka white ) :-

It is a Half sib selection from variety IIHR9.

ii. IIHR 16-9 (Arka Pink):-

It is a Half sib selection from variety Arka Ashwa.

iii. IIHR 3-34:-

Half-sib derived from IIHR 3; year of crossing: 2011

iv. IIHR 8-45:-

Half-sib derived from IIHR 1; year of crossing: 2011

## 3. Hybridization and selection in Gerbera

The following varieties were developed by CSIR-IHBT through hybridization and selection programme. Using characterized parental lines, a controlled hybridization programme was carried out followed by selection of promising hybrid genotypes which were superior to the parents for morphological and floral attributes. The criteria for selections were unique flower shapes and bright colors. These selections were evaluated for agronomic performance for two years under protected cultivation. The cultivars having good tissue culture response, nursery performance, vigorous growth and suitable for protected cultivation were finally selected.

i. Him Saumya (CSIR-IHBT-Gr-11-6): Gr-1 × Gr-3

Characteristics: Double flower shape. Light yellow colour

ii. Him Keerti (CSIR-IHBT-Gr-Y-1): Gr-1 × Gr-3

Characteristics: Double flower shape, standard size (> 10 cm). Yellow colored petals

iii. IIHRGO-1: IIHR99-5 x Savana

Characteristics: Bright red (40 A, red group) and double type flowers. Ability to grow under open field conditions.

iv. CSIR-IHBT- Gr-E-3 (HIM Peace): CSIR-IHBT-Gr-1 x CSIR-IHBT-Gr-7 (2011)

v. CSIR-IHBT- Gr-23( HIM Glow) : Gr-2 X Gr-3 (2011)

vi. Him Gaurav (CSIR-IHBT- Gr-13-1): Gr-2 × Gr-6

Standard flower type, double flower head type, red coloured flowers

vii. Him Aabha ( CSIR-IHBT-Gr-24-6) : Gr-4 × Gr-3

Semi-double flower head type, yellow orange petals, standard flower type

viii. Him Apoorva (CSIR-IHBT-Gr-29-1): Gr-1 × Gr-4

Red bicolor, double flower head type, standard flower type

4. Distant hybridization in Gerbera

Gerbera cantabrigensis (G. hybrida) = G. jamesonii X G. viridifolia