## Genetic analysis of safflower to aphids: (2012-15)

2012: Crosses were made between susceptible CO-1 and resistant EC523368-2 and CO-1 (S) X A-1 (R)

2013-15: Screening was done

Chi-square test for significance of Mendelian genetic ratios of aphid resistance in safflower crosses

| Cross            | Number of F₃ families |    |             |    | Mendelian ratio of | χ² value |
|------------------|-----------------------|----|-------------|----|--------------------|----------|
|                  | Total                 | R  | Segregating | S  | F₂ population      |          |
| CO1 x A1         | 102                   | 7  | 47          | 48 | 15 (S):1 (R)       | 0.177    |
| CO1 x EC523368-2 | 118                   | 11 | 39          | 68 | 15 (S):1 (R)       | 2.429    |

 $\chi^2$  significance value at (P=0.05) = 3.841; R – Resistant, S – Susceptible

