

Table 1 Mean sum of square values of analysis of variance (ANOVA) and estimation of genetic parameter for 15 quantitative traits in brinjal

| Character | Genotypes (df=20) | Error (df=20) | Calculated 'F' value | CV% | Mean | GCV | PCV | h ² (Broad Sense) % | Gen. Adv as % of Mean 1% |
|--------------------------------------|-------------------|---------------|----------------------|-------|---------|--------|---------|--------------------------------|--------------------------|
| Plant height (cm) | 1112.16** | 274.53 | 4.05 | 10.3 | 160.81 | 12.726 | 16.374 | 60.4 | 26.112 |
| No. of primary branches/plant | 21.69* | 7.96 | 2.72 | 17.71 | 15.94 | 16.438 | 24.161 | 46.3 | 29.526 |
| No. of secondary branches/plant | 128.23** | 34.65 | 3.7 | 17.04 | 34.55 | 19.8 | 26.122 | 57.5 | 39.619 |
| Stem diameter (cm) | 0.83** | 0.1 | 7.77 | 6 | 5.44 | 11.06 | 12.583 | 77.3 | 25.665 |
| Days to first flowering | 115.85** | 22.49 | 5.15 | 4.26 | 111.36 | 6.136 | 7.469 | 67.5 | 13.306 |
| Days to first fruiting | 144.13** | 24.63 | 5.85 | 4.08 | 121.74 | 6.35 | 7.546 | 70.8 | 14.106 |
| Harvesting period | 1086.68** | 20.48 | 53.05 | 6.14 | 73.74 | 31.312 | 31.908 | 96.3 | 81.12 |
| No. of fruits in inflorescence/plant | 142.02** | 11.64 | 12.19 | 43.05 | 7.93 | 101.84 | 110.563 | 84.8 | 247.635 |
| No. of fruits in solitary/plant | 14.17* | 4.96 | 2.85 | 52.02 | 4.28 | 50.126 | 72.241 | 48.1 | 91.824 |
| Fruit length (cm) | 36.64** | 1.67 | 21.84 | 8.14 | 15.91 | 26.28 | 27.512 | 91.2 | 66.271 |
| Fruit stalk length (cm) | 2.41** | 0.33 | 7.15 | 8.82 | 6.59 | 15.488 | 17.826 | 75.5 | 35.526 |
| Fruit circumference (cm) | 116.96** | 3.99 | 29.25 | 11.2 | 17.85 | 42.1 | 43.564 | 93.4 | 107.406 |
| Fresh weight/fruit (g) | 18001.84** | 527.74 | 34.11 | 14.38 | 159.8 | 58.495 | 60.236 | 94.3 | 149.964 |
| Fruits/plant | 145.03** | 10.48 | 13.83 | 26.5 | 12.22 | 67.136 | 72.176 | 86.5 | 164.862 |
| Yield/plant (g) | 2447424.17** | 221159.2 | 11.06 | 27.08 | 1736.56 | 60.755 | 66.517 | 83.4 | 146.499 |

* = 5% Level of Significance, ** = 1% Level of Significance

(df = Degrees of Freedom, CV% = Coefficient of Variation, GCV = Genotypic Coefficient of Variation, PCV = Phenotypic Coefficient of Variation, h² = Heritability in broad sense as percentage, GA 1% = Genetic Advance as percentage of mean 1%)