J Krishi Vigyan 2022, 11 (1) : 298-303 DOI : 10.5958/2349-4433.2022.00145.3

# Performance of Hot Pepper (*Capsicum annuum* L.) For Yield and Yield Attributing Traits in Chhattisgarh Plains

**Devki Markam[1] and Dhananjay Sharma[2]**

Department of Vegetable Science,
Indira Gandhi Krishi Vishwavidyalaya, Raipur 492012 (Chhattisgarh)

## ABSTRACT

The performance study of forty eight genotypes of hot pepper was carried out for fruit yield and its component characters, during *rabi season* of 2020-21 at Horticultural Research cum Instructional Farm, Indira Gandhi Krishi Vishwavidyalaya , Raipur. A significant difference was observed among genotypes for growth and yield parameters. Genotype CHIGEN-46 recorded maximum number of fruits per plant (270.50), fruit yield per plot (15.25kg) and fruit yield per hectare (165.73 q/ha). The genotype CHIGEN-41 recorded highest fruit yield per plant (415.10g) and maximum plant height (80.47cm), CHIGEN-40 (8.17) recorded maximum number of primary branches whereas CHIGEN-32 was early in first flowering(26.03d), CHIGEN-38 recorded for early days to 50% flowering(43.20), CHIGEN-45 recorded maximum fruit stalk length (5.69 cm)and fruit girth (5.51 cm). CHIGEN-29 recorded maximum fruit length (18.38 cm) and CHIGEN-43 gave maximum fresh weight of fruits (85.96 g) whereas CHIGEN-37 recorded maximum dry weight of fruits(10.60 g). CHIGEN-36 (85.23) was recorded for minimum days to first fruit harvesting and CHIGEN-42 (6.52) was recorded for maximum total number of picking. Overall performance of the genotypes revealed that the genotypes CHIGEN-45, CHIGEN-41 and CHIGEN-46 were superior genotypes for most of the traits studied among the forty eight genotypes.

**Key Words:** Hot Pepper, performance, Fruit, Yield.

## INTRODUCTION

Hot pepper (*Capsicum annuum* L.) was introduced in India by the Portuguese towards the end of 17$^{th}$ century. In India, two species *Capsicum annum* and *Capsicum frutescence* are the most cultivated species among them 5 cultivated and 22 wild species in the genus of capsicum. Capsanthin is principle pigment of hot pepper, which is responsible for red colour of pepper. Hot pepper is quite high in other nutritive value containing protein (2.9%), Phosphorus (80 mg), Riboflavin (0.39 mg) and Thiamine (0.19 mg) per 100g of fruits. Dry peppers contain capsaicin in pericarp 40%, seed 54% and fruit stalk 6%. The Pharmaceutical and medicinal application of capsaicinoid is attributed to antioxidant, antiarthritc, and analgesic properties. India is one of the leading chilli producing countries of the world. Green pepper is grown over an area of 2387.39 lakh hectares with production of 21.72 lakh tons per hectare. Andhra Pradesh (49.1%) share maximum area under hot pepper cultivation followed by Telangana (32.7%), Madhya Pradesh (23.51%), Karnataka (25.01%), and minimum area share Orissa (6.65%).

In spite of tremendous potential use, good scope for export as a spice, high nutritive value crop. In, Chhattisgarh, Hot Pepper occupied 35,912 ha area with production of 2, 46,438 MT. It is mainly cultivated in Korba, Bilaspur, Raipur, Bastar, Kabirdham and Durg district of Chhattisgarh state. Hot Pepper is the most economic and popular additive to improve food acceptability. The largest

Correspondence Author's Email:devkimarkam54@gmail.com
Research Scholar[1]
Dhananjay Sharma[2] (Scientist)

**Table 1. Analysis of variance for fruit yield and its attributing traits in hot pepper**

| Sr. No. | Character | Mean Sum of Square | | |
|---|---|---|---|---|
| | | Replication | Treatment | Error |
| | | Degree of freedom | | |
| | | 2 | 47 | 94 |
| 1 | Plant height(cm) | 21.73 | 319.30** | 15.49 |
| 2 | Number of primary branches | 3.03 | 4.010** | 0.63 |
| 3 | Days to first flowering | 8.44 | 236.51** | 15.29 |
| 4 | Days to 50% flowering | 15.74 | 221.68** | 14.08 |
| 5 | Fruit stalk length (cm) | 0.03 | 1.850** | 0.09 |
| 6 | Fruit length (cm) | 0.27 | 23.73** | 0.47 |
| 7 | Fruit girth (cm) | 0.30 | 1.180** | 0.17 |
| 8 | Days to first fruit harvesting | 19.22 | 77.950** | 6.31 |
| 9 | Total number of picking | 0.56 | 1.960** | 0.39 |
| 10 | Fresh weight of fruits (g) | 13.70 | 488.56** | 33.05 |
| 11 | Dry weight of fruits (g) | 1.37 | 6.56** | 0.82 |
| 12 | Number of fruits per plant | 110.11 | 5669.25** | 497.20 |
| 13 | Fruit yield per plant (g) | 114.35 | 16616.54** | 758.76 |
| 14 | Fruit yield per plot (kg) | 1.33 | 14.35** | 0.90 |
| 15 | Fruit yield per hectare (q) | 23.07 | 1886.16** | 193.66 |
| ** Significant at 1% levels of significance | | | | |

variability in respect of fruit shape, length and growth pattern exist among hot pepper genotypes. Hence, there was a need to evaluate hot pepper genotypes under Chhattisgarh Plains condition for excellent quality, growth and yield performance.

## MATERIALS AND METHODS

The experiment materials comprised forty eight genetically diverse genotypes including (two check variety) of hot pepper. The experiment was laid out in a randomized block design (RBD) with three replications at Indira Gandhi Krishi Vishwavidyalaya (IGKV), Raipur (C. G), during *Rabi Season* of 2020-21. Each plot size measuring 3 x 3 $m^2$ had six rows spaced at 60 cm apart with intra-row spacing of 50 cm. The hot pepper seedling planted during 1$^{st}$ week of October 2020. Standard practices were followed to raise good and healthy crop. The study on analysis of variance and mean performance of genotypes was carried out for various growth and yield contributing characters to evaluate the performance of genotypes for Chhattisgarh Plains.

### Analysis of variance

Analysis of variance revealed that the mean sum of square due to genotypes was found to be highly significant (at 1% levels of significance) for plant height (cm), number of primary branches per plant, days to first flowering, days to 50% flowering, fruit stalk length (cm), fruit length (cm), fruit girth (cm), days to first harvesting , total number of picking, number of fruits per plant, fruit yield per plant (g), fruit yield per plot (kg) and fruit yield per ha (q/ha). These traits suggested the presence of substantial amount of genetic variation amidst the genotypes that could be useful in selection for desirable characters. All the above finding was in close proximity with Janaki *et al* (2016) and Kumari *et*

**Table 2. Mean performance of fruit yield and yield attributing traits in hot pepper.**

| | | Characters | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Sr. No.** | **Genotypes** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **10** | **11** | **12** | **13** | **14** | **15** |
| 1 | CHIGEN -1 | 70.63 | 5.10 | 54.88 | 65.93 | 3.46 | 8.57 | 4.68 | 102.53 | 3.87 | 74.27 | 7.10 | 180.07 | 376.60 | 10.25 | 113.22 |
| 2 | CHIGEN-2 | 65.23 | 5.13 | 54.67 | 66.93 | 3.27 | 7.59 | 4.92 | 101.63 | 5.13 | 72.87 | 6.80 | 127.20 | 370.20 | 5.84 | 62.92 |
| 3 | CHIGEN-3 | 54.86 | 4.37 | 51.73 | 69.87 | 3.46 | 8.74 | 3.61 | 102.87 | 4.63 | 73.50 | 8.90 | 126.03 | 365.40 | 5.87 | 65.25 |
| 4 | CHIGEN-4 | 65.13 | 4.67 | 55.27 | 65.20 | 3.27 | 7.15 | 3.53 | 94.10 | 3.80 | 61.20 | 7.53 | 105.70 | 259.40 | 7.88 | 87.67 |
| 5 | CHIGEN-5 | 69.76 | 6.03 | 45.40 | 59.13 | 3.54 | 6.65 | 3.79 | 95.23 | 4.97 | 67.23 | 5.67 | 174.60 | 266.60 | 6.80 | 75.85 |
| 6 | CHIGEN-6 | 60.97 | 3.91 | 51.60 | 61.87 | 4.39 | 8.58 | 3.37 | 98.27 | 3.80 | 51.17 | 6.23 | 106.13 | 287.41 | 6.19 | 68.47 |
| 7 | CHIGEN-7 | 42.53 | 5.06 | 50.27 | 62.73 | 3.11 | 7.26 | 2.45 | 103.87 | 4.97 | 54.37 | 4.77 | 110.53 | 192.87 | 6.70 | 74.44 |
| 8 | CHIGEN-8 | 60.93 | 6.59 | 47.53 | 58.43 | 4.63 | 6.47 | 3.38 | 96.73 | 4.07 | 58.68 | 6.43 | 129.33 | 271.61 | 8.21 | 91.18 |
| 9 | CHIGEN-9 | 32.73 | 4.51 | 54.20 | 68.40 | 4.21 | 10.28 | 3.41 | 95.07 | 4.93 | 54.00 | 5.13 | 95.33 | 164.13 | 9.73 | 108.07 |
| 10 | CHIGEN-10 | 69.10 | 4.77 | 56.50 | 64.40 | 5.35 | 8.59 | 4.13 | 103.63 | 5.70 | 59.37 | 4.53 | 138.60 | 283.47 | 9.31 | 103.40 |
| 11 | CHIGEN-11 | 67.87 | 4.83 | 56.33 | 67.13 | 4.35 | 9.61 | 3.29 | 102.07 | 3.93 | 49.83 | 3.87 | 84.53 | 348.60 | 9.04 | 100.48 |
| 12 | CHIGEN-12 | 34.93 | 5.41 | 56.80 | 66.47 | 4.32 | 8.54 | 3.33 | 94.10 | 4.27 | 58.97 | 5.40 | 89.77 | 229.73 | 5.83 | 64.70 |
| 13 | CHIGEN-13 | 59.87 | 5.43 | 55.50 | 68.53 | 3.11 | 7.28 | 3.28 | 94.10 | 4.20 | 52.37 | 4.20 | 63.83 | 347.73 | 5.88 | 65.37 |
| 14 | CHIGEN-14 | 57.80 | 5.10 | 44.87 | 67.20 | 3.75 | 6.44 | 4.07 | 102.40 | 3.83 | 33.20 | 5.27 | 133.97 | 251.87 | 6.22 | 69.14 |
| 15 | CHIGEN-15 | 50.97 | 3.20 | 55.93 | 63.17 | 3.24 | 5.56 | 3.24 | 97.80 | 4.16 | 42.97 | 4.73 | 136.03 | 241.73 | 6.33 | 70.37 |
| 16 | CHIGEN-16 | 67.03 | 4.27 | 56.07 | 68.27 | 2.78 | 7.48 | 4.31 | 104.07 | 3.93 | 31.37 | 5.47 | 116.57 | 231.10 | 7.07 | 79.25 |
| 17 | CHIGEN-17 | 74.37 | 3.23 | 47.80 | 67.67 | 3.17 | 7.70 | 3.33 | 101.87 | 3.53 | 40.10 | 3.47 | 94.07 | 364.07 | 6.52 | 72.81 |
| 18 | CHIGEN-18 | 56.83 | 5.27 | 44.93 | 65.50 | 4.11 | 6.47 | 3.50 | 97.60 | 4.89 | 41.57 | 5.33 | 98.10 | 162.67 | 6.11 | 67.29 |
| 19 | CHIGEN-19 | 58.07 | 5.77 | 50.60 | 76.33 | 4.35 | 6.52 | 3.47 | 102.02 | 6.43 | 46.57 | 6.57 | 120.37 | 261.07 | 5.85 | 65.03 |
| 20 | CHIGEN-20 | 48.73 | 3.93 | 44.90 | 53.00 | 3.34 | 7.40 | 4.60 | 103.45 | 4.70 | 30.27 | 3.17 | 71.20 | 254.53 | 6.92 | 76.88 |
| 21 | CHIGEN-21 | 64.87 | 4.86 | 40.47 | 47.03 | 4.47 | 8.68 | 3.30 | 102.74 | 4.90 | 32.33 | 3.87 | 90.73 | 183.40 | 6.00 | 75.44 |
| 22 | CHIGEN-22 | 62.24 | 5.10 | 44.34 | 56.80 | 3.24 | 6.64 | 2.88 | 101.13 | 4.10 | 38.77 | 4.73 | 76.73 | 152.73 | 6.79 | 75.36 |
| 23 | CHIGEN-23 | 52.27 | 3.93 | 50.67 | 57.17 | 3.33 | 6.71 | 4.33 | 98.93 | 4.83 | 46.60 | 7.03 | 168.40 | 241.60 | 6.81 | 74.81 |
| 24 | CHIGEN-24 | 55.97 | 6.53 | 45.47 | 55.87 | 3.17 | 6.40 | 3.34 | 95.63 | 5.73 | 39.63 | 5.05 | 80.20 | 214.53 | 10.82 | 93.47 |
| 25 | CHIGEN-25 | 61.67 | 5.03 | 52.17 | 59.47 | 3.70 | 7.66 | 4.69 | 107.02 | 4.13 | 34.87 | 5.25 | 91.44 | 145.27 | 6.73 | 120.22 |
| 26 | CHIGEN-26 | 73.83 | 6.43 | 47.23 | 57.93 | 3.45 | 9.67 | 3.28 | 104.33 | 6.33 | 36.33 | 6.80 | 94.97 | 274.07 | 8.11 | 106.70 |
| 27 | CHIGEN-27 | 55.67 | 4.37 | 35.67 | 49.27 | 3.26 | 8.50 | 4.73 | 86.53 | 5.10 | 56.30 | 5.17 | 124.80 | 280.80 | 10.82 | 157.03 |
| 28 | CHIGEN-28 | 65.27 | 6.10 | 34.90 | 47.30 | 3.75 | 9.48 | 3.14 | 95.93 | 5.23 | 56.30 | 7.33 | 185.23 | 266.23 | 9.60 | 120.58 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 29 | CHIGEN-29 | 70.65 | 7.63 | 33.53 | 43.63 | 2.86 | 18.38 | 3.33 | 92.70 | 6.03 | 42.73 | 7.20 | 153.40 | 370.40 | 14.10 | 117.10 |
| 30 | CHIGEN-30 | 57.65 | 5.17 | 32.87 | 47.41 | 4.33 | 8.77 | 3.37 | 87.20 | 4.63 | 84.17 | 6.07 | 144.90 | 263.33 | 10.85 | 107.59 |
| 31 | CHIGEN-31 | 57.03 | 6.37 | 29.13 | 57.07 | 4.46 | 6.55 | 3.11 | 95.54 | 5.90 | 62.47 | 5.77 | 176.37 | 304.80 | 10.54 | 80.25 |
| 32 | CHIGEN-32 | 62.60 | 5.80 | 26.03 | 46.80 | 2.21 | 10.64 | 3.38 | 86.57 | 4.97 | 57.57 | 4.97 | 164.70 | 267.70 | 9.71 | 105.88 |
| 33 | CHIGEN-33 | 71.27 | 5.27 | 34.37 | 56.33 | 2.27 | 11.63 | 3.41 | 94.10 | 5.03 | 49.87 | 5.94 | 129.90 | 263.70 | 10.25 | 108.84 |
| 34 | CHIGEN-34 | 73.94 | 4.62 | 33.27 | 49.33 | 5.66 | 8.67 | 4.13 | 96.43 | 6.10 | 53.53 | 7.70 | 136.07 | 314.47 | 9.56 | 122.10 |
| 35 | CHIGEN-35 | 65.19 | 3.87 | 35.37 | 47.03 | 4.75 | 10.50 | 3.29 | 96.97 | 5.10 | 59.47 | 5.80 | 176.40 | 285.80 | 9.80 | 114.85 |
| 36 | CHIGEN-36 | 68.11 | 5.47 | 32.77 | 49.57 | 5.53 | 8.59 | 3.33 | 85.23 | 4.73 | 56.83 | 5.63 | 120.27 | 343.60 | 10.99 | 117.03 |
| 37 | CHIGEN-37 | 75.53 | 6.27 | 35.50 | 46.33 | 4.32 | 8.43 | 3.28 | 97.47 | 5.40 | 57.17 | 10.60 | 119.13 | 275.13 | 10.33 | 109.71 |
| 38 | CHIGEN-38 | 73.14 | 5.87 | 36.37 | 43.20 | 4.72 | 9.46 | 4.07 | 96.37 | 4.90 | 45.90 | 8.27 | 141.77 | 375.90 | 10.53 | 107.10 |
| 39 | CHIGEN-39 | 67.09 | 6.33 | 34.70 | 51.83 | 4.57 | 8.63 | 3.24 | 85.56 | 5.87 | 53.73 | 7.20 | 138.07 | 296.07 | 9.87 | 117.45 |
| 40 | CHIGEN-40 | 79.27 | 8.17 | 37.27 | 54.53 | 3.43 | 8.35 | 3.33 | 94.57 | 4.70 | 62.57 | 6.17 | 157.10 | 302.67 | 9.87 | 107.59 |
| 41 | CHIGEN-41 | 80.47 | 4.70 | 30.93 | 46.57 | 4.49 | 9.43 | 3.50 | 96.47 | 5.88 | 66.50 | 5.20 | 121.27 | 415.10 | 9.92 | 110.39 |
| 42 | CHIGEN-42 | 59.23 | 6.67 | 32.87 | 47.37 | 3.57 | 13.64 | 3.47 | 96.33 | 6.52 | 74.23 | 3.12 | 177.10 | 312.17 | 9.24 | 102.70 |
| 43 | CHIGEN-43 | 60.11 | 6.77 | 34.10 | 48.60 | 4.01 | 12.54 | 4.60 | 99.50 | 5.40 | 85.97 | 4.18 | 119.07 | 403.86 | 9.52 | 105.84 |
| 44 | CHIGEN-44 | 51.61 | 5.06 | 35.37 | 44.87 | 4.64 | 14.67 | 4.20 | 95.47 | 4.83 | 48.90 | 3.83 | 125.43 | 311.33 | 8.60 | 95.55 |
| 45 | CHIGEN-45 | 54.17 | 4.97 | 39.60 | 48.67 | 5.69 | 13.12 | 5.51 | 94.40 | 4.67 | 56.67 | 5.37 | 181.07 | 383.20 | 11.43 | 127.03 |
| 46 | CHIGEN-46 | 58.87 | 6.67 | 40.80 | 47.27 | 4.50 | 9.57 | 4.40 | 95.90 | 5.50 | 55.96 | 7.17 | 270.50 | 359.10 | 15.25 | 165.73 |
| 47 | LCA-334 | 34.93 | 5.41 | 56.80 | 66.47 | 4.32 | 8.54 | 3.33 | 94.10 | 4.27 | 58.97 | 5.40 | 89.77 | 229.73 | 8.35 | 92.81 |
| 48 | K A S H I ANMOL | 42.53 | 5.06 | 50.27 | 62.73 | 3.11 | 7.26 | 2.45 | 103.87 | 4.97 | 54.37 | 4.77 | 110.53 | 192.87 | 9.30 | 100.48 |
| | Grand Mean | 61.830 | 5.435 | 43.729 | 57.000 | 3.954 | 9.101 | 3.687 | 97.185 | 4.904 | 52.517 | 5.926 | **136.108** | **283.198** | **8.703** | **95.821** |
| | Sem ± | 2.270 | 0.458 | 2.250 | 2.167 | 0.172 | 0.179 | 0.238 | 1.451 | 0.359 | 3.319 | 0.522 | 12.874 | 15.774 | 0.559 | 11.081 |
| | CD (5%) | 6.381 | 1.286 | 6.339 | 6.084 | 0.482 | 0.504 | 0.667 | 4.072 | 1.009 | 9.320 | 1.466 | 36.149 | 44.291 | 1.569 | 22.002 |
| | **CV** | 8.381 | 14.593 | 8.926 | 6.583 | 7.516 | 3.416 | 11.164 | 2.585 | 12.355 | 10.946 | 15.263 | **16.383** | **9.647** | **11.124** | **14.160** |

**1.**Plant height (cm)
**2.**Number of primary branches
**3.** Days to first flowering
**4.** Days to 50% flowering
**5.** Fruit stalk length (cm)
**6.** Fruit length (cm)
**7.** Fruit girth (cm)
**8.** Days to first fruit harvesting
**9.** Total number of picking
**10.** Fruit weight of fruits (g)
**11.** Fruit weight of fruits (g)
**12.** Number of fruits per plant
**13.** Fruit yield per plant (g)
**14.** Fruit yield per plot (kg)
**15**. fruit yield per hectare (q)

*al* (2017). The results of analysis of variance for all the characters under study were presented in Table 1.

## RESULTS AND DISCUSSION

The observation was taken from randomly tagged five plants from each genotype in all the three replications for fruit yield and its contributing characters were used for calculating the mean performance. Data on averaged of five plants taken random from each genotype. Data on mean performance of fruit yield and it's contributing characters from presented in Table 2. The study revealed that highest plant height was observed in genotype CHIGEN-41 (80.47cm) while, the lowest plant height was recorded in genotype CHIGEN-9 (32.73 cm). Maximum number of primary branches was found in CHIGEN-40 (8.17) whereas; the minimum number of primary branches was obtained in CHIGEN-15 (3.20). Early days to first flowering was found in CHIGEN-32 (26.03), while delayed first flowering was recorded in LCA-334 (56.80) days. Days to 50% flowering was found minimum in CHIGEN-38 (43.20), while, delayed 50% flowering recorded in CHIGEN-19 (76.33) days.

The average fruit stalk length was found highest in CHIGEN-32 (5.69 cm) while, the lowest fruit stalk length recorded for the genotype CHIGEN-45 (2.21 cm). Maximum fruit length was obtained in CHIGEN-29 (18.38 cm) while, minimum fruit length was found in CHIGEN-15 (5.56 cm). Fruit girth recorded highest in CHIGEN-45 (5.51 cm) whereas, lowest fruit girth reported in CHIGEN-7 (2.45 cm). Early days to first fruit harvesting was found in CHIGEN-36 (85.23) and delayed days to first fruit harvesting was recorded in CHIGEN-25 (107.02). Total number of picking was recorded maximum in CHIGEN-42 (6.52) whereas, minimum number of total picking was found in CHIGEN-17 (3.53).

The average fresh weight of fruits was recorded maximum in CHIGEN-43 (85.96 g) whereas; minimum fresh weight of fruits was obtained in genotype CHIGEN-20 (30.27 g). Dry weight of fruits was recorded maximum in CHIGEN-37 (10.60 g) and CHIGEN-20 (3.17g) recorded for minimum dry weight of fruits. Number of fruits per plant was found maximum in CHIGEN-46 (270.50) followed by CHIGEN-28 (185.23), CHIGEN-45 (181.07) while, minimum number of fruits per plant was reported in CHIGEN-20 (71.20). Maximum fruit yield per plant was found in CHIGEN-41 (415.10g) followed by CHIGEN-43 (403.86g), CHIGEN-45 (383.20 g) and CHIGEN-25 (145.27 g) recorded minimum fruit yield per plant. Fruit yield per plot was recorded highest in CHIGEN-46 (15.25 kg) and lowest fruit yield was recorded in genotype CHIGEN-12 (5.38 kg). The variation present between all genotypes for fruit yield per hectare was observed highest in genotype CHIGEN-46 (165.73 q/ha) and CHIGEN-2 (62.92 q/ha) was reported minimum total fruit yield per hectare.

A wide range of genetic variation was reported for characters *viz*., number of fruits per plant, fruit yield per plot (kg), fruit yield per hectare (q), fresh weight of fruits (g), dry weight of fruits (g) and fruit length (cm) which indicates that there are abundant scopes for selection for the improvement of these characters. These finding are close proximity with the result of Sahu *et al* (2016), Yatagiri *et al* (2017) and Kavitha *et al* (2018).

## CONCLUSION

On the basis of mean performance of genotypes for different characters, the genotypes showed best performance in terms of yield attributing traits namely; CHIGEN-29 for maximum fruit length CHIGEN-41 for fruit yield per plant and CHIGEN-46 for highest number of fruits per plant , fruit yield per plot and fruit yield per hectare. Thus, the above mentioned genotypes can be recommended to be grown in order to achieve higher production in Chhattisgarh Plains.

## REFERENCES

Anonymous(2017-18). *National Horticultural Board, Gurugram, Haryana.* Ministry of Agriculture and Farmers Welfare, New Delhi.

Anonymous (2019-20) 1st Advance estimated data, Department of Agriculture Economics, College of Agriculture, Rajendranagar, Hyderabad.

Anonymous (2019-20). Area and Production of Vegetable Crops, Directorate of Horticulture and Farm Forestry, Raipur (Chhattisgarh).

Janaki M, Aram L N, Naidu C, Venkata R and Paratpara R (2016). Assessment of Genetic variability, heritability and genetic advance for quantitative traits in chilli (*Capsicum annuum* L.). *Int Quarterly J Life Sci* **10** (2):729-733.

Kavitha P S, Sudha A and srividya S (2018). Assessment of chilli varieties in Salem district for higher productivity. *J Hort Sci* **13** (1):119-121.

Kumari V, Singh J, Sharma D and Mishra S (2017). Evaluation of Chilli Genotypes for Growth and Fruit Yield Attributing Traits under Chhattisgarh Plain Condition. *Int J Curr Microbiol Appl Sci* **6** (11): 3478- 3483.

Sahu L, Trivedi J and Sharma D (2016). Genetic variability, heritability and divergence analysis in chilli (*Capsicum annuum* L.). *Pl Archive* **16** (1):445-448.

Yatagiri N, Telugu R K, Shafiqurrahama M and Sanap P B (2017). Evaluation of chilli genotypes for yield and yield attributing and incidence of leaf curl and white fly traits in Coastal Maharashtra, India. . *Int J Curr Microbiol Appl Sci* **6** (9): 3140-3148.

*Received on 3/3/2022* *Accepted on 25/8/2022*