|  |  |
| --- | --- |
| **Parameters** | **Values** |
| Hue angle ( ⁰ ) | 15.00±0.05 |
| Chroma value | 48.00±0.05 |
| Penetration force(N) | 12.91±0.12 |
| TSS (⁰brix) | 4.01±0.03 |
| Moisture (%) | 77.05±0.24 |
| pH | 4.21±0.014 |
| Titrable acidity (%) | 0.91±0.03 |
| ascorbic acid (mg/100 g) | 1.88±0.23 |
| Total sugars (%) | 3.12±0.02 |
| Reducing sugars (%) | 1.26±0.05 |
| Sucrose (%) | 2.39±0.04 |
| Non-reducing sugars (%) | 2.80±0.02 |
| total phenolics content (mg GAE/100 mL) | 9.00±0.53 |
| Sugar to acid ratio | 31.57±0.02 |
| Total mineral content (mg/100g) | 279.00±0.13 |

**Table 1: Initial physicochemical quality attributes of the green tomato fruit juice**

Note: All the values are Mean±SD (n = 3)

**Table 2 : Changes in Physico-chemical quality attributes of α-tomatine rich RTS beverage during Storage at LT (4±2°C).**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameters** | **Storage period in days** | | | | | | | | | |
| **Sample**  **code** | | **0** | **15** | **30** | **45** | **60** | **75** | **90** |
| Color  Hue angle | | BB | 88.14±0.05a | 88.28±0.28b | 88.33±0.01c | 88.36±0.05d | 89.38.±0.01d | 89.41±0.01e | 89.46±0.02f |
| WB | 87.14±0.05a | 87.28±0.28b | 87.33±0.01c | 87.36±0.05cd | 86.38.±0.01d | 86.41±0.01ef | 86.46±0.02f |
| Chroma value | | BB | 9.32±0.05a | 9.06±0.05b | 9.05±0.15c | 8.82±0.23d | 8.69±0.17e | 8.59±0.06f | 8.50±0.11g |
| WB | 8.61±0.04a | 8.43±0.00b | 8.23±0.23c | 7.73±0.10c | 7.57±0.17d | 7.29±0.10d | 6.56±0.19e |
| TSS (oBrix) | | BB | 13.62±0.01a | 13.69±0.02c | 13.75±0.05c | 13.85±0.03c | 13.93±0.11c | 14.03±0.17ac | 14.12±0.17a |
| WB | 13.6±0.09a | 13.8±0.05c | 13.9±0.16c | 14.01±0.06c | 14.31±0.01c | 14.48±0.02a | 14.6±0.10a |
| pH | | BB | 3.01±0.01a | 2.88±0.03c | 2.69±0.01c | 2.64±0.01c | 2.64±0.06cb | 2.62±0.06c | 2.61±0.06c |
| WB | 3.23±0.02a | 3.07±0.01c | 3.02±0.07c | 2.70±0.06c | 2.67±0.02c | 3.02±0.01a | 3.20±0.03a |
| Titrable acidity (%) | | BB | 0.33±0.01a | 0.31±0.02a | 0.29±0.01c | 0.27±0.05c | 0.28±0.02c | 0.27±0.01c | 0.26±0.02c |
| WB | 0.34±0.02a | 0.33±0.03c | 0.32±0.04c | 0.31±0.02c | 0.67±0.01c | 0.25±0.01a | 0.24±0.03a |
| Reducing sugar (%) | | BB | 0.97±0.02g | 1.06±0.01f | 2.26±0.02e | 2.57±0.01d | 2.93±0.02c | 3.41±0.03b | 3.82±0.04a |
| WB | 0.98±0.05g | 1.24±0.10f | 1.63±0.03e | 2.02±0.02d | 2.65±0.06c | 3.93±0.06b | 4.43±0.05a |
| Total invert sugar (%) | | BB | 9.55±0.05a | 9.47±0.06a | 9.13±0.01b | 9.11±0.10b | 8.77±0.06c | 8.60±0.04d | 8.53±0.03d |
| WB | 9.55±0.05a | 9.31±0.01b | 9.04±0.07c | 8.92±0.06c | 8.67±0.08d | 8.21±0.03e | 7.40±0.13f |
| Sucrose (%) | | BB | 8.15±0.03a | 7.98±0.63b | 6.52±0.01c | 6.28±0.14c | 5.54±0.04e | 4.93±0.10f | 4.45±0.06g |
| WB | 8.15±0.04a | 7.67±0.09b | 7.04±0.06c | 6.54±0.07d | 5.72±0.15e | 4.07±0.05f | 2.80±0.17g |
| Total sugar (%) | | BB | 10.51±0.06e | 10.53±0.05e | 11.39±0.01d | 11.62±0.05c | 11.70±0.10c | 12.01±0.03b | 12.34±0.34a |
| WB | 10.52±0.05f | 10.54±0.11f | 10.67±0.09e | 10.95±0.05d | 11.31±0.30c | 12.13±0.08b | 12.50±0.03a |
| Reducing sugar (%) | | BB | 0.97±0.02g | 1.06±0.01f | 2.26±0.02e | 2.57±0.01d | 2.93±0.02c | 3.41±0.03b | 3.82±0.04a |
| WB | 0.98±0.05g | 1.24±0.10f | 1.63±0.03e | 2.02±0.02d | 2.65±0.06c | 3.93±0.06b | 4.43±0.05a |
| Sugar : acid ratio | | BB | 30.27±1.48e | 31.75±1.33e | 38.19±0.03d | 41.16±0.40c | 42.92±0.3c | 44.73±0.63b | 46.99±0.32a |
| WB | 33.21±0.212e | 32.84±0.69e | 32.89±0.03de | 31.16±0.32d | 39.72±0.8c | 47.93±0.73d | 49.17±0.25e |
| Chlorophyll a (mg/100 mL) | | BB | 4.80±0.09a | 4.78±0.09a | 4.73±0.15a | 4.42±0.30b | 3.43±0.22c | 2.98±0.09d | 2.98±0.20d |
| WB | 4.81±0.03a | 4.85±0.54a | 4.43±0.31a | 3.71±0.16b | 3.05±0.33c | 2.26±0.08d | 0.32±0.18e |
| Chlorophyll b (mg/100 mL) | | BB | 3.46±0.03a | 3.27±0.06ab | 3.03±0.05b | 2.22±0.34c | 2.10±0.05c | 1.91±0.09d | 1.52±0.16e |
| WB | 3.44±0.03a | 2.58±0.54b | 2.21±0.35bc | 2.02±0.06cd | 1.72±0.15de | 1.33±0.13e | 0.24±0.05f |
| Total chlorophyll (mg/100 mL) | | BB | 8.32±0.05a | 8.06±0.05b | 7.79±0.15c | 6.62±0.23d | 5.69±0.17e | 4.59±0.06f | 4.50±0.11g |
| WB | 8.31±0.00a | 7.43±0.00b | 6.63±0.23c | 5.73±0.19d | 4.77±0.17e | 3.59±0.10f | 0.56±0.19g |
| Viscosity  (mPas-1) | | BB | 15.14±0.05e | 15.28±0.28d | 15.33±0.01c | 15.36±0.05cb | 15.38.±0.01b | 15.41±0.01b | 15.46±0.02a |
| WB | 15.10±0.02e | 15.20±0.2d | 15.33±0.02d | 15.46±0.05c | 15.48.±0.01b | 15.51±0.01a | 15.56±0.02a |

Note: (n = 3; Mean ±SD), values in rows with different superscripts (a–g) have significant differences at p < 0.05 by DMRT Test