**Lampiran VII. Hasil Analisis Kimia *Mix Juice***

Tabel Data Asli Hasil Analisis Protein Terhadap *Mix Juice*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Jumlah Sukrosa** | **Kelompok Ulangan** | **Lama Penyimpanan (minggu)** | | | | **Total** | **Rata-rata** |
| **p1** | **p2** | **p3** | **p4** |
| s1 (10%) | 1 | 0.74 | 0.68 | 0.64 | 0.56 | 2.62 | 0.66 |
| 2 | 0.75 | 0.69 | 0.64 | 0.56 | 2.64 | 0.66 |
| **Sub Total** | | **1.49** | **1.37** | **1.28** | **1.12** | 5.26 | 1.32 |
| **Rata-rata** | | **0.75** | **0.69** | **0.64** | **0.56** | 2.63 | 0.66 |
| s2 (15%) | 1 | 0.75 | 0.68 | 0.65 | 0.56 | 2.64 | 0.66 |
| 2 | 0.75 | 0.69 | 0.64 | 0.55 | 2.63 | 0.66 |
| **Sub Total** | | **1.5** | **1.37** | **1.29** | **1.11** | 5.27 | 1.32 |
| **Rata-rata** | | **0.75** | **0.69** | **0.65** | **0.56** | 2.635 | 0.66 |
| s3 (20%) | 1 | 0.76 | 0.70 | 0.63 | 0.55 | 2.64 | 0.66 |
| 2 | 0.76 | 0.69 | 0.65 | 0.56 | 2.66 | 0.67 |
| **Sub Total** | | **1.52** | **1.39** | **1.28** | **1.11** | 5.3 | 1.33 |
| **Rata-rata** | | **0.76** | **0.70** | **0.64** | **0.56** | 2.65 | 0.66 |
| **Sub Total** | | **4.51** | **4.13** | **3.85** | **3.34** | **15.83** | **3.96** |
| **Rata-rata** | | **2.26** | **2.07** | **1.93** | **1.67** | **7.92** | **1.98** |

Tabel Nilai Rata-Rata Data Asli Hasil Analisis Protein Terhadap *Mix Juice*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Kelompok Ulangan** | **Perlakuan** | | | | | | | | | | | | |
| **s1p1** | **s1p2** | **s1p3** | **s1p4** | **s2p1** | **s2p2** | **s2p3** | **s2p4** | **s3p1** | **s3p2** | **s3p3** | **s3p4** | **Total** |
| **I** | 0.74 | 0.68 | 0.64 | 0.56 | 0.75 | 0.68 | 0.65 | 0.56 | 0.76 | 0.70 | 0.63 | 0.55 | 7.90 |
| **II** | 0.75 | 0.69 | 0.64 | 0.56 | 0.75 | 0.69 | 0.64 | 0.55 | 0.76 | 0.69 | 0.65 | 0.56 | 7.93 |
| **Jumlah** | **1.49** | **1.37** | **1.28** | **1.12** | **1.5** | **1.37** | **1.29** | **1.11** | **1.52** | **1.39** | **1.28** | **1.11** | 15.83 |
| **Rata-rata** | **0.75** | **0.69** | **0.64** | **0.56** | **0.75** | **0.69** | **0.65** | **0.56** | **0.76** | **0.70** | **0.64** | **0.56** | 7.92 |

**Perhitungan :**

= (0,742 + 0,752 + ... + 0,562) – = 0,122

Tabel. Analisis Variansi (ANAVA) Protein Terhadap *Mix Juice*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sumber Variansi** | **dB** | **JK** | **KT** | **F Hitung** | **F Tabel 5%** |  |
| Kelompok | 1 | 0.000037 | 0.000037 |  |  |  |
| Perlakuan | 11 | 0.121746 | 0.011068 |  |  |  |
| Taraf s | 2 | 0.000108 | 0.000054 | 1.16 | 3.98 | tn |
| Taraf p | 3 | 0.121313 | 0.040438 | 867.927 | 3.59 | \* |
| Interaksi sp | 6 | 0.000325 | 0.000054 | 1.16 | 3.09 | tn |
| Galat | 11 | 0.000513 | 0.000047 |  |  |  |
| Total | 23 | 0.122 |  |  |  |  |

Keterangan : tn = Tidak Berbeda Nyata

\* = Berbeda Nyata

Kesimpulan :

Berdasarkan tabel anava diketahui bahwa F hitung ≥ F tabel pada taraf 5% maka dapat disimpulkan lama penyimpanan (P) berpengaruh terhadap kadar protein *Mix Juice*, sehingga diberi tanda \* (berbeda nyata) maka perlu dilakukan uji lanjut duncan untuk faktor (P), sedangkan untuk jumlah sukrosa (S) dan interaksi keduanya (SP) tidak berpengaruh terhadap kadar protein *Mix Juice*, sehingga diberi tanda tn (tidak berbeda nyata) maka tidak perlu dilakukan uji lanjut duncan.

Sў = = = 0,00197

LSR = Sў x SSR

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel uji jarak berganda Duncan untuk Lama Penyimpanan (P) | | | | | | | |  |  | |  |  |  |
| **SSR 5%** | **LSR 5%** | **Kode** | **Rata-rata** | **Perlakuan** | | | | | | | | | **Taraf Nyata 5%** |
| **1** | | **2** | | **3** | | **4** | | |
|  |  | p4 | 1.67 |  |  |  |  |  |  |  | |  | a |
| 3.11 | 0.006 | p3 | 1.93 | 0.255 | \* |  |  |  |  |  | |  | b |
| 3.27 | 0.006 | p2 | 2.07 | 0.395 | \* | 0.140 | \* |  |  |  | |  | c |
| 3.35 | 0.007 | p1 | 2.26 | 0.585 | \* | 0.330 | \* | 0.190 | \* |  | |  | d |

Tabel Data Asli Hasil Analisis Gula Total Terhadap *Mix Juice*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Jumlah Sukrosa** | **Kelompok Ulangan** | **Lama Penyimpanan (minggu)** | | | | **Total** | **Rata-rata** |
| **p1** | **p2** | **p3** | **p4** |
| s1 (10%) | 1 | 50.07 | 48.03 | 47.56 | 45.64 | 191.3 | 47.83 |
| 2 | 49.98 | 48 | 47.56 | 45.55 | 191.09 | 47.77 |
| **Sub Total** | | **100.05** | **96.03** | **95.12** | **91.19** | 382.39 | 95.60 |
| **Rata-rata** | | **50.03** | **48.02** | **47.56** | **45.60** | 191.195 | 47.80 |
| s2 (15%) | 1 | 51.33 | 49.43 | 48.32 | 47.02 | 196.1 | 49.03 |
| 2 | 51.43 | 48.97 | 48.32 | 47.02 | 195.74 | 48.94 |
| **Sub Total** | | **102.76** | **98.4** | **96.64** | **94.04** | 391.84 | 97.96 |
| **Rata-rata** | | **51.38** | **49.20** | **48.32** | **47.02** | 195.92 | 48.98 |
| s3 (20%) | 1 | 52.87 | 50.34 | 49.00 | 48.30 | 200.51 | 50.13 |
| 2 | 52.85 | 50.34 | 49.00 | 48.30 | 200.49 | 50.12 |
| **Sub Total** | | **105.72** | **100.68** | **98** | **96.6** | 401 | 100.25 |
| **Rata-rata** | | **52.86** | **50.34** | **49.00** | **48.30** | 200.5 | 50.13 |
| **Sub Total** | | **308.53** | **295.11** | **289.76** | **281.83** | **1175.23** | **293.81** |
| **Rata-rata** | | **154.27** | **147.56** | **144.88** | **140.92** | **587.62** | **146.90** |

Tabel Nilai Rata-Rata Data Asli Hasil Analisis Gula Total Terhadap *Mix Juice*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Kelompok Ulangan** | **Perlakuan** | | | | | | | | | | | | |
| **s1p1** | **s1p2** | **s1p3** | **s1p4** | **s2p1** | **s2p2** | **s2p3** | **s2p4** | **s3p1** | **s3p2** | **s3p3** | **s3p4** | **Total** |
| **I** | 50.07 | 48.03 | 47.56 | 45.64 | 51.33 | 49.43 | 48.32 | 47.02 | 52.87 | 50.34 | 49.00 | 48.30 | 587.91 |
| **II** | 49.98 | 48.00 | 47.56 | 45.55 | 51.43 | 48.97 | 48.32 | 47.02 | 52.85 | 50.34 | 49.00 | 48.30 | 587.32 |
| **Jumlah** | **100.05** | **96.03** | **95.12** | **91.19** | **102.76** | **98.4** | **96.64** | **94.04** | **105.72** | **100.68** | **98** | **96.6** | 1175.23 |
| **Rata-rata** | **50.03** | **48.02** | **47.56** | **45.60** | **51.38** | **49.20** | **48.32** | **47.02** | **52.86** | **50.34** | **49.00** | **48.30** | 587.62 |

**Perhitungan :**

= (50,072 + 49,982 + ... + 48,302) – = 86,016

Tabel. Analisis Variansi (ANAVA) Gula Total Terhadap *Mix Juice*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sumber Variansi** | **dB** | **JK** | **KT** | **F Hitung** | **F Tabel 5%** |
| Kelompok | 1 | 0.015 | 0.015 |  |  |
| Perlakuan | 11 | 85.897 | 7.809 |  |  |
| Taraf s | 2 | 21.648 | 10.824 | 1133.422 | 3.98 |
| Taraf p | 3 | 63.049 | 21.016 | 2200.735 | 3.59 |
| Interaksi sp | 6 | 1.201 | 0.200 | 20.961 | 3.09 |
| Galat | 11 | 0.105 | 0.010 |  |  |
| Total | 23 | 86.017 |  |  |  |

Keterangan : tn = Tidak Berbeda Nyata

\* = Berbeda Nyata

Kesimpulan :

Berdasarkan tabel anava diketahui bahwa F hitung ≥ F tabel pada taraf 5% maka dapat disimpulkan jumlah sukrosa (S), lama penyimpanan (P) dan interaksi keduanya (SP) berpengaruh terhadap kadar gula total *Mix Juice*, sehingga diberi tanda \* (berbeda nyata) maka perlu dilakukan uji lanjut duncan.

Sў = = = 0,0281

LSR = Sў x SSR

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel uji jarak berganda Duncan untuk jumlah sukrosa (S1) terhadap P | | | | | | | | | | | | | | | |  | | |  |  | |  |  |
| **SSR 5%** | | **LSR 5%** | | **Kode** | | **Rata-rata** | | **Perlakuan** | | | | | | | | | | | | | | | **Taraf Nyata 5%** |
| **1** | | | | **2** | | | | **3** | | | | **4** | | |
|  | |  | | s1p4 | | 45.60 | |  | |  | |  | | |  |  | | |  |  | |  | a |
| 3.11 | | 0.088 | | s1p3 | | 47.56 | | 1.965 | | \* | |  | | |  |  | | |  |  | |  | b |
| 3.27 | | 0.092 | | s1p2 | | 48.02 | | 2.420 | | \* | | 0.455 | | | \* |  | | |  |  | |  | c |
| 3.35 | | 0.095 | | s1p1 | | 50.03 | | 4.430 | | \* | | 2.465 | | | \* | 2.010 | | | \* |  | |  | d |
|  | |  | |  | |  | |  | |  | |  | | |  |  | | |  |  | |  |  |
| Tabel uji jarak berganda Duncan untuk jumlah sukrosa (S2) terhadap P | | | | | | | | | | | | | | | |  | | |  |  | |  |  |
| **SSR 5%** | | **LSR 5%** | | **Kode** | | **Rata-rata** | | **Perlakuan** | | | | | | | | | | | | | | | **Taraf Nyata 5%** |
| **1** | | | | **2** | | | | **3** | | | | **4** | | |
|  | |  | | s2p4 | | 47.02 | |  | |  | |  | | |  |  | | |  |  | |  | a |
| 3.11 | | 0.088 | | s2p3 | | 48.32 | | 1.300 | | \* | |  | | |  |  | | |  |  | |  | b |
| 3.27 | | 0.092 | | s2p2 | | 49.20 | | 2.180 | | \* | | 0.880 | | | \* |  | | |  |  | |  | c |
| 3.35 | | 0.095 | | s2p1 | | 51.38 | | 4.360 | | \* | | 3.060 | | | \* | 2.180 | | | \* |  | |  | d |
|  | |  | |  | |  | |  | |  | |  | | |  |  | | |  |  | |  |  |
| Tabel uji jarak berganda Duncan untuk jumlah sukrosa (S3) terhadap P | | | | | | | | | | | | | | | |  | | |  |  | |  |  |
| **SSR 5%** | | **LSR 5%** | | **Kode** | | **Rata-rata** | | **Perlakuan** | | | | | | | | | | | | | | | **Taraf Nyata 5%** |
| **1** | | | | **2** | | | | **3** | | | | **4** | | |
|  | |  | | s3p4 | | 48.30 | |  | |  | |  | | |  |  | | |  |  | |  | a |
| 3.11 | | 0.088 | | s3p3 | | 49.00 | | 0.700 | | \* | |  | | |  |  | | |  |  | |  | b |
| 3.27 | | 0.092 | | s3p2 | | 50.34 | | 2.040 | | \* | | 1.340 | | | \* |  | | |  |  | |  | c |
| 3.35 | | 0.095 | | s3p1 | | 50.34 | | 2.040 | | \* | | 1.340 | | | \* | 0.000 | | | tn |  | |  | c |
| Tabel uji jarak berganda Duncan untuk lama penyimpanan (P1) terhadap S | | | | | | | | | | | | | |  | | |  |  | | |
| **SSR 5%** | **LSR 5%** | | **Kode** | | **Rata-rata** | | **Perlakuan** | | | | | | | | | | | **Taraf Nyata 5%** | | |
| **1** | | | | **2** | | | **3** | | | |
|  |  | | s1p1 | | 50.03 | |  | |  | |  | |  |  | | |  | A | | |
| 3.11 | 0.088 | | s2p1 | | 51.38 | | 1.355 | | \* | |  | |  |  | | |  | B | | |
| 3.27 | 0.092 | | s3p1 | | 52.86 | | 2.835 | | \* | | 1.480 | | \* |  | | |  | C | | |
|  |  | |  | |  | |  | |  | |  | |  |  | | |  |  | | |
| Tabel uji jarak berganda Duncan untuk lama penyimpanan (P2) terhadap S | | | | | | | | | | | | | |  | | |  |  | | |
| **SSR 5%** | **LSR 5%** | | **Kode** | | **Rata-rata** | | **Perlakuan** | | | | | | | | | | | **Taraf Nyata 5%** | | |
| **1** | | | | **2** | | | **3** | | | |
|  |  | | s1p2 | | 48.02 | |  | |  | |  | |  |  | | |  | A | | |
| 3.11 | 0.088 | | s2p2 | | 49.20 | | 1.185 | | \* | |  | |  |  | | |  | B | | |
| 3.27 | 0.092 | | s3p2 | | 50.34 | | 2.325 | | \* | | 1.140 | | \* |  | | |  | C | | |
|  |  | |  | |  | |  | |  | |  | |  |  | | |  |  | | |
| Tabel uji jarak berganda Duncan untuk lama penyimpanan (P3) terhadap S | | | | | | | | | | | | | |  | | |  |  | | |
| **SSR 5%** | **LSR 5%** | | **Kode** | | **Rata-rata** | | **Perlakuan** | | | | | | | | | | | **Taraf Nyata 5%** | | |
| **1** | | | | **2** | | | **3** | | | |
|  |  | | s1p3 | | 47.56 | |  | |  | |  | |  |  | | |  | A | | |
| 3.11 | 0.088 | | s2p3 | | 48.32 | | 0.760 | | \* | |  | |  |  | | |  | B | | |
| 3.27 | 0.092 | | s3p3 | | 49.00 | | 1.440 | | \* | | 0.680 | | \* |  | | |  | C | | |
|  |  | |  | |  | |  | |  | |  | |  |  | | |  |  | | |
| Tabel uji jarak berganda Duncan untuk lama penyimpanan (P4) terhadap S | | | | | | | | | | | | | |  | | |  |  | | |
| **SSR 5%** | **LSR 5%** | | **Kode** | | **Rata-rata** | | **Perlakuan** | | | | | | | | | | | **Taraf Nyata 5%** | | |
| **1** | | | | **2** | | | **3** | | | |
|  |  | | s1p4 | | 45.60 | |  | |  | |  | |  |  | | |  | A | | |
| 3.11 | 0.088 | | s2p4 | | 47.02 | | 1.425 | | \* | |  | |  |  | | |  | B | | |
| 3.27 | 0.092 | | s3p4 | | 48.30 | | 2.705 | | \* | | 1.280 | | \* |  | | |  | C | | |

Tabel . Uji Lanjut *Duncan* untuk Interaksi antara Faktor S dan Faktor P



Tabel Data Asli Hasil Analisis Polifenol Terhadap *Mix Juice*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Jumlah Sukrosa** | **Kelompok Ulangan** | **Lama Penyimpanan (minggu)** | | | | **Total** | **Rata-rata** |
| **p1** | **p2** | **p3** | **p4** |
| s1 (10%) | 1 | 0.021 | 0.019 | 0.010 | 0.007 | 0.057 | 0.014 |
| 2 | 0.021 | 0.018 | 0.012 | 0.006 | 0.057 | 0.014 |
| **Sub Total** | | **0.042** | **0.037** | **0.022** | **0.013** | 0.114 | 0.029 |
| **Rata-rata** | | **0.021** | **0.019** | **0.011** | **0.007** | 0.057 | 0.014 |
| s2 (15%) | 1 | 0.022 | 0.017 | 0.012 | 0.008 | 0.059 | 0.015 |
| 2 | 0.021 | 0.019 | 0.011 | 0.009 | 0.060 | 0.015 |
| **Sub Total** | | **0.043** | **0.036** | **0.023** | **0.017** | 0.119 | 0.030 |
| **Rata-rata** | | **0.022** | **0.018** | **0.012** | **0.009** | 0.060 | 0.015 |
| s3 (20%) | 1 | 0.022 | 0.018 | 0.011 | 0.008 | 0.059 | 0.015 |
| 2 | 0.022 | 0.019 | 0.012 | 0.008 | 0.061 | 0.015 |
| **Sub Total** | | **0.044** | **0.037** | **0.023** | **0.016** | 0.120 | 0.030 |
| **Rata-rata** | | **0.022** | **0.019** | **0.012** | **0.008** | 0.060 | 0.015 |
| **Sub Total** | | **0.129** | **0.110** | **0.068** | **0.046** | **0.353** | **0.088** |
| **Rata-rata** | | **0.065** | **0.055** | **0.034** | **0.023** | **0.177** | **0.044** |

Tabel Nilai Rata-Rata Data Asli Hasil Analisis Polifenol Terhadap *Mix Juice*

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Kelompok Ulangan** | **Perlakuan** | | | | | | | | | | | | |
| **s1p1** | **s1p2** | **s1p3** | **s1p4** | **s2p1** | **s2p2** | **s2p3** | **s2p4** | **s3p1** | **s3p2** | **s3p3** | **s3p4** | **Total** |
| **I** | 0.021 | 0.019 | 0.010 | 0.007 | 0.022 | 0.017 | 0.012 | 0.008 | 0.022 | 0.018 | 0.011 | 0.008 | 0.175 |
| **II** | 0.021 | 0.018 | 0.012 | 0.006 | 0.021 | 0.019 | 0.011 | 0.009 | 0.022 | 0.019 | 0.012 | 0.008 | 0.178 |
| **Jumlah** | **0.042** | **0.037** | **0.022** | **0.013** | **0.043** | **0.036** | **0.023** | **0.017** | **0.044** | **0.037** | **0.023** | **0.016** | 0.353 |
| **Rata-rata** | **0.021** | **0.019** | **0.011** | **0.007** | **0.022** | **0.018** | **0.012** | **0.009** | **0.022** | **0.019** | **0.012** | **0.008** | 0.177 |

**Perhitungan :**

= (0,0212 + 0,0192 + ... + 0,0082) – = 0,000734

Tabel. Analisis Variansi (ANAVA) Polyfenol Terhadap *Mix Juice*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sumber Variansi** | **dB** | **JK** | **KT** | **F Hitung** | **F Tabel 5%** |  |
| Kelompok | 1 | 0.000000 | 0.000000 |  |  |  |
| Perlakuan | 11 | 0.000727 | 0.000066 |  |  |  |
| Taraf s | 2 | 0.000003 | 0.000001 | 1.99 | 3.98 | tn |
| Taraf p | 3 | 0.000721 | 0.000240 | 371.277 | 3.59 | \* |
| Interaksi sp | 6 | 0.000003 | 0.000001 | 0.88 | 3.09 | tn |
| Galat | 11 | 0.000007 | 0.000001 |  |  |  |
| Total | 23 | 0.000735 |  |  |  |  |

Keterangan : tn = Tidak Berbeda Nyata

\* = Berbeda Nyata

Kesimpulan :

Berdasarkan tabel anava diketahui bahwa F hitung ≥ F tabel pada taraf 5% maka dapat disimpulkan lama penyimpanan (P) berpengaruh terhadap kadar polifenol *Mix Juice*, sehingga diberi tanda \* (berbeda nyata) maka perlu dilakukan uji lanjut duncan untuk faktor (P), sedangkan untuk jumlah sukrosa (S) dan interaksi keduanya (SP) tidak berpengaruh terhadap kadar polifenol *Mix Juice*, sehingga diberi tanda tn (tidak berbeda nyata) maka tidak perlu dilakukan uji lanjut duncan.

Sў = = = 0,000232

LSR = Sў x SSR

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel uji jarak berganda Duncan untuk lama penyimpanan (P) | | | | | | | |  |  |  |  |  |
| **SSR 5%** | **LSR 5%** | **Kode** | **Rata-rata** | **Perlakuan** | | | | | | | | **Taraf Nyata 5%** |
| **1** | | **2** | | **3** | | **4** | |
|  |  | p4 | 0.0230 |  |  |  |  |  |  |  |  | a |
| 3.11 | 0.0007 | p3 | 0.0340 | 0.0110 | \* |  |  |  |  |  |  | b |
| 3.27 | 0.0008 | p2 | 0.0550 | 0.0320 | \* | 0.0210 | \* |  |  |  |  | c |
| 3.35 | 0.0008 | p2 | 0.0645 | 0.0415 | \* | 0.0305 | \* | 0.0095 | \* |  |  | d |