**Lampiran 12. Data Pengamatan Hasil Organoleptik (Hedonik) Terhadap Warna *Fruit Leather* Stroberi**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Kode | Perbandingan | Lama Pengeringan | Ulangan | Jumlah | Rata-rata |
| 1 | 2 | 3 |
| 1 | a1b1 | 1 : 1 (Sukrosa : Glukosa) | 7 jam | 6.07 | 4.73 | 4.87 | 15.67 | 5.22 |
| 2 | a1b2 | 8 jam | 3.80 | 4.93 | 5.33 | 14.07 | 4.69 |
| 3 | a1b3 | 9 jam | 4.53 | 5.27 | 5.20 | 15.00 | 5.00 |
| 4 | a2b1 | 1 : 2 (Sukrosa : Glukosa) | 7 jam | 6.20 | 5.60 | 5.60 | 17.40 | 5.80 |
| 5 | a2b2 | 8 jam | 4.33 | 5.00 | 4.80 | 14.13 | 4.71 |
| 6 | a2b3 | 9 jam | 3.87 | 4.93 | 5.07 | 13.87 | 4.62 |
| 7 | a3b1 | 1 : 3 (Sukrosa : Glukosa) | 7 jam | 5.93 | 5.27 | 4.93 | 16.13 | 5.38 |
| 8 | a3b2 | 8 jam | 3.67 | 4.87 | 5.00 | 13.53 | 4.51 |
| 9 | a3b3 | 9 jam | 3.67 | 4.80 | 4.80 | 13.27 | 4.42 |
| Jumlah |   |   | 42.07 | 45.40 | 45.60 | 133.07 | 44.36 |
| Rata-rata |   |   | 14.02 | 15.13 | 15.20 | 44.36 | 14.79 |

Data Asli

Data Transformasi

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Kode | Perbandingan | Lama Pengeringan | Ulangan | Jumlah | Rata-rata |
| 1 | 2 | 3 |
| 1 | a1b1 | 1 : 1 (Sukrosa : Glukosa) | 7 jam | 2.563 | 2.288 | 2.317 | 7.167 | 2.389 |
| 2 | a1b2 | 8 jam | 2.074 | 2.331 | 2.415 | 6.820 | 2.273 |
| 3 | a1b3 | 9 jam | 2.244 | 2.401 | 2.387 | 7.032 | 2.344 |
| 4 | a2b1 | 1 : 2 (Sukrosa : Glukosa) | 7 jam | 2.588 | 2.470 | 2.470 | 7.528 | 2.509 |
| 5 | a2b2 | 8 jam | 2.198 | 2.345 | 2.302 | 6.846 | 2.282 |
| 6 | a2b3 | 9 jam | 2.090 | 2.331 | 2.359 | 6.780 | 2.260 |
| 7 | a3b1 | 1 : 3 (Sukrosa : Glukosa) | 7 jam | 2.536 | 2.401 | 2.331 | 7.269 | 2.423 |
| 8 | a3b2 | 8 jam | 2.041 | 2.317 | 2.345 | 6.703 | 2.234 |
| 9 | a3b3 | 9 jam | 2.041 | 2.302 | 2.302 | 6.646 | 2.215 |
| Jumlah |   |   | 20.375 | 21.186 | 21.229 | 62.790 | 20.930 |
| Rata-rata |   |   | 2.264 | 2.354 | 2.359 | 6.977 | 2.326 |

Keterangan : Transformasi Data : $\sqrt{x+0,5}$

Contoh Perhitungan :

∑ Pengamatan = 27 ∑ Pelakuan = 9 ∑ Ulangan = 3

FK = $\frac{(Total)^{2}}{Banyaknya pengamatan}$

 = $\frac{(62,79)^{2}}{\left(3\right)(9)}$

 = 146.023

JKU = $(\frac{\sum\_{}^{}total ulangan^{2}}{banyaknya perlakuan})- FK$

 = $\frac{(20,375)^{2}+(21,186)^{2}+(21,229)^{2}}{9} –$ 146,023

 = 0,0514

JKP = $\left(\frac{\sum\_{}^{}total perlakuan^{2}}{total ulangan}\right)- FK$

 =$ \frac{(7,167)^{2}+ ……. +(6,646)^{)2}}{3}- 146,023$

 = 0,2312

$ JKT =\sum\_{}^{}\left(Total Pengamatan\right)^{2}-FK$

= ((2,563)2 +…..+(2,302)2) – 146,023

 = 0,5436

JKA = $(\frac{\sum\_{}^{}total faktor A^{2}}{banyaknya perlakuan})- FK$

 = $\frac{(21,019)^{2}+(21,154)^{2}+(20,617)^{2}}{9} –$ 146,023

 = 0,0173

JKB = $(\frac{\sum\_{}^{}total faktor B^{2}}{banyaknya perlakuan})- FK$

 = $\frac{(21,964)^{2}+(20,369)^{2}+(20,458)^{2}}{9} –$ 146,023

 = 0,1785

JKAB = $\left(\frac{\sum\_{}^{}total interaksi faktor AB^{2}}{total ulangan}\right)- FK$ – JKA – JKB

 =$ \frac{(7,167)^{2}+ ……. +(6,646)^{)2}}{3}- 146,023$ – 0,0173 – 0,1785

 = 0,0354

JKG = JKT – JKU – JKA – JKB – JKAB

 = 0,5436 – 0,0514 – 0,0173 – 0,1785 – 0,0354

 = 0,261

Tabel Anava

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sumber Variasi | dB | JK | KT | Fhitung | Ftabel 5% |
| Ulangan | 2 | 0.0514 | 0.0257 |   |   |
| Perlakuan | 8 | 0.2312 | 0.0289 |   |   |
| A | 2 | 0.0173 | 0.0087 | 0.530tn | 3.63 |
| B | 2 | 0.1785 | 0.0892 | 5.470\* | 3.63 |
| AB | 4 | 0.0354 | 0.0088 | 0.542tn | 3.01 |
| Galat | 16 | 0.2610 | 0.0163 |   |   |
| Total | 26 | 0.5436 |   |   |   |

**Uji Lanjut Duncan**

Standar Error (Sy) = $\sqrt{\frac{KTG}{t x r}}$ = $\sqrt{\frac{0,01063}{3 x 9}}$ = 0,074

LSR 5 % = Sy x SSR 5 %

 X1 = 0,074 x 3,0 = 0,221

 X2 = 0,074 x 3,15 = 0,232

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SSR | LSR | Kode Sampel | Nilai Rata-rata | Perlakuan | Taraf Nyata 5% |
| 1 | 2 | 3 |
| - | - | b2 | 6.79 |   |   |   | a |
| 3 | 0.221 | b3 | 6.82 | 0.03tn |   |   | a |
| 3.15 | 0.232 | b1 | 7.32 | 0.53\* | 0.5\* |   | b |

**Lampiran 13. Data Pengamatan Hasil Organoleptik (Hedonik) Terhadap Rasa *Fruit Leather* Stroberi**

Data Asli

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Kode | Perbandingan | Lama Pengeringan | Ulangan | Jumlah | Rata-rata |
| 1 | 2 | 3 |
| 1 | a1b1 | 1 : 1 (Sukrosa : Glukosa) | 7 jam | 5.07 | 4.87 | 5.07 | 15.00 | 5.00 |
| 2 | a1b2 | 8 jam | 4.80 | 5.13 | 4.73 | 14.67 | 4.89 |
| 3 | a1b3 | 9 jam | 5.33 | 4.80 | 5.13 | 15.27 | 5.09 |
| 4 | a2b1 | 1 : 2 (Sukrosa : Glukosa) | 7 jam | 4.67 | 4.87 | 4.80 | 14.33 | 4.78 |
| 5 | a2b2 | 8 jam | 4.80 | 5.07 | 5.27 | 15.13 | 5.04 |
| 6 | a2b3 | 9 jam | 5.13 | 4.87 | 4.87 | 14.87 | 4.96 |
| 7 | a3b1 | 1 : 3 (Sukrosa : Glukosa) | 7 jam | 4.67 | 5.07 | 4.80 | 14.53 | 4.84 |
| 8 | a3b2 | 8 jam | 4.73 | 4.73 | 4.93 | 14.40 | 4.80 |
| 9 | a3b3 | 9 jam | 4.80 | 4.73 | 4.60 | 14.13 | 4.71 |
| Jumlah |   |   | 44.00 | 44.13 | 44.20 | 132.33 | 44.11 |
| Rata-rata |   |   | 14.67 | 14.71 | 14.73 | 44.11 | 14.70 |

Data Transformasi

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Kode | Perbandingan | Lama Pengeringan | Ulangan | Jumlah | Rata-rata |
| 1 | 2 | 3 |
| 1 | a1b1 | 1 : 1 (Sukrosa : Glukosa) | 7 jam | 2.359 | 2.317 | 2.359 | 7.035 | 2.345 |
| 2 | a1b2 | 8 jam | 2.302 | 2.373 | 2.288 | 6.963 | 2.321 |
| 3 | a1b3 | 9 jam | 2.415 | 2.302 | 2.373 | 7.091 | 2.364 |
| 4 | a2b1 | 1 : 2 (Sukrosa : Glukosa) | 7 jam | 2.273 | 2.317 | 2.302 | 6.892 | 2.297 |
| 5 | a2b2 | 8 jam | 2.302 | 2.359 | 2.401 | 7.063 | 2.354 |
| 6 | a2b3 | 9 jam | 2.373 | 2.317 | 2.317 | 7.007 | 2.336 |
| 7 | a3b1 | 1 : 3 (Sukrosa : Glukosa) | 7 jam | 2.273 | 2.359 | 2.302 | 6.935 | 2.312 |
| 8 | a3b2 | 8 jam | 2.288 | 2.288 | 2.331 | 6.906 | 2.302 |
| 9 | a3b3 | 9 jam | 2.302 | 2.288 | 2.258 | 6.848 | 2.283 |
| Jumlah |   |   | 20.888 | 20.920 | 20.932 | 62.740 | 20.913 |
| Rata-rata |   |   | 2.321 | 2.324 | 2.326 | 6.971 | 2.324 |

Dengan Perhitungan yang sama, maka didapat hasil sebagai berikut :

Tabel Anava

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sumber Variasi | dB | JK | KT | Fhitung | Ftabel 5% |
| Ulangan | 2 | 0.0001 | 0.0001 |   |   |
| Perlakuan | 8 | 0.0184 | 0.0023 |   |   |
| A | 2 | 0.0093 | 0.0046 | 2.854tn | 3.63 |
| B | 2 | 0.0005 | 0.0002 | 0.139tn | 3.63 |
| AB | 4 | 0.0086 | 0.0022 | 1.326tn | 3.01 |
| Galat | 16 | 0.0261 | 0.0016 |   |   |
| Total | 26 | 0.0446 |   |   |   |

**Lampiran 14. Data Pengamatan Hasil Organoleptik (Hedonik) Terhadap Tekstur *Fruit Leather* Stroberi**

Data Asli

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Kode | Perbandingan | Lama Pengeringan | Ulangan | Jumlah | Rata-rata |
| 1 | 2 | 3 |
| 1 | a1b1 | 1 : 1 (Sukrosa : Glukosa) | 7 jam | 4.40 | 5.00 | 4.73 | 14.13 | 4.71 |
| 2 | a1b2 | 8 jam | 5.13 | 4.93 | 4.73 | 14.80 | 4.93 |
| 3 | a1b3 | 9 jam | 5.20 | 5.00 | 4.87 | 15.07 | 5.02 |
| 4 | a2b1 | 1 : 2 (Sukrosa : Glukosa) | 7 jam | 4.07 | 5.07 | 4.80 | 13.93 | 4.64 |
| 5 | a2b2 | 8 jam | 5.13 | 4.93 | 4.80 | 14.87 | 4.96 |
| 6 | a2b3 | 9 jam | 5.07 | 4.27 | 4.53 | 13.87 | 4.62 |
| 7 | a3b1 | 1 : 3 (Sukrosa : Glukosa) | 7 jam | 4.60 | 4.67 | 4.80 | 14.07 | 4.69 |
| 8 | a3b2 | 8 jam | 3.87 | 4.80 | 5.07 | 13.73 | 4.58 |
| 9 | a3b3 | 9 jam | 5.00 | 4.67 | 4.73 | 14.40 | 4.80 |
| Jumlah |   |   | 42.47 | 43.33 | 43.07 | 128.87 | 42.96 |
| Rata-rata |   |   | 14.16 | 14.44 | 14.36 | 42.96 | 14.32 |

Data Transformasi

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No | Kode | Perbandingan | Lama Pengeringan | Ulangan | Jumlah | Rata-rata |
| 1 | 2 | 3 |
| 1 | a1b1 | 1 : 1 (Sukrosa : Glukosa) | 7 jam | 2.214 | 2.345 | 2.288 | 6.846 | 2.282 |
| 2 | a1b2 | 8 jam | 2.373 | 2.331 | 2.288 | 6.992 | 2.331 |
| 3 | a1b3 | 9 jam | 2.387 | 2.345 | 2.317 | 7.049 | 2.350 |
| 4 | a2b1 | 1 : 2 (Sukrosa : Glukosa) | 7 jam | 2.137 | 2.359 | 2.302 | 6.799 | 2.266 |
| 5 | a2b2 | 8 jam | 2.373 | 2.331 | 2.302 | 7.007 | 2.336 |
| 6 | a2b3 | 9 jam | 2.359 | 2.183 | 2.244 | 6.786 | 2.262 |
| 7 | a3b1 | 1 : 3 (Sukrosa : Glukosa) | 7 jam | 2.258 | 2.273 | 2.302 | 6.834 | 2.278 |
| 8 | a3b2 | 8 jam | 2.090 | 2.302 | 2.359 | 6.751 | 2.250 |
| 9 | a3b3 | 9 jam | 2.345 | 2.273 | 2.288 | 6.906 | 2.302 |
| Jumlah |   |   | 20.538 | 20.743 | 20.689 | 61.970 | 20.657 |
| Rata-rata |   |   | 2.282 | 2.305 | 2.299 | 6.886 | 2.295 |

Dengan Perhitungan yang sama, maka didapat hasil sebagai berikut :

Tabel Anava

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Sumber Variasi | dB | JK | KT | Fhitung | Ftabel 5% |
| Ulangan | 2 | 0.0025 | 0.0013 |   |   |
| Perlakuan | 8 | 0.0310 | 0.0039 |   |   |
| A | 2 | 0.0095 | 0.0047 | 0.743tn | 3.63 |
| B | 2 | 0.0053 | 0.0026 | 0.415tn | 3.63 |
| AB | 4 | 0.0162 | 0.0041 | 0.636tn | 3.01 |
| Galat | 16 | 0.1020 | 0.0064 |   |   |
| Total | 26 | 0.1355 |   |   |  |