**LAMPIRAN 1**

**Penentuan Kadar Protein Metode Kjeldhal (SNI, 1992)**

Sebanyak 0,51 g sampel dimasukkan ke dalam labu Kjeldhal 100 ml kemudian ditambahkan 2 g campuran selen dan 25 ml H2SO4 pekat, lalu dipanaskan di atas pemanas sampai mendidih dan larutan menjadi jernih   
kehijau-hijauan (sekitar 2 jam), kemudian didinginkan, lalu diencerkan dan dimasukkan ke dalam labu ukur 100 ml, tepatkan sampai tanda garis. 5 ml larutan dipipet dan dimasukkan ke dalam alat penyuling, tambahkan 5 ml NaOH 30% dan beberapa tetes indikator PP, kemudian disulingkan selama lebih kurang 10 menit, sebagai penampung gunakan 10 ml larutan asam borat 2% yang telah dicampur indikator. Kemudian dibilasi ujung pendingin dengan air suling, lalu titar dengan larutan HCl 0,01 N. Kerjakan penetapan blanko.

Perhitungan :

Kadar Protein = (V1 – V2) x N x 0,014 x f.k x fp

w

Contoh Perhitungan :

Dik : - VHCl = 4,25

- Vblanko = 0,56

- NHCl  = 0,0108

- Fk (utk kedelai) = 5,75

- Fp = 20

- Wsampel = 0,5368

Dit : % Kadar Protein ?

Jawab :

% Kadar Protein = (V1 – V2) x N x 0,014 x f.k x fp x 100 %

wsampel

**=** (4,25 – 0,56) x 0,0108 x 0,014 x 5,75 x 20

0,5368

**=** 11,95263 %

**LAMPIRAN 2**

**Penentuan Kadar Air Metode Oven (Gravimetri) (SNI, 1992)**

Cawan kosong yang bersih dikeringkan dalam oven bersuhu 105oC sekitar 30 menit. Kemudian cawan didinginkan dalam eksikator, lalu ditimbang. Sebanyak 1-2 g sampel dimasukkan ke dalam cawan, kemudian dimasukkan ke dalam oven bersuhu 105oC selama 3 jam, cawan yang berisi sampel yang sudah dikeringkan diangkat dan didinginkan dalam eksikator, setelah itu ditimbang kembali. Pekerjaan ini diulangi hingga diperoleh bobot tetap.

Perhitungan :

Kadar Air = w x 100%

w1

Contoh Perhitungan :

Dik : - Wcawan kosong = 20,2784

- Wsampel = 2,0097

- Wkonstan = 20,7314

Dit : % Kadar Air ?

Jawab :

% Kadar Air = (Wcawan kosong + Wsampel) - Wkonstan x 100 %

Wsampel

= (20,2784 + 2,0097) - 20,7314 x 100 %

2,0097

**=** 77,46 %

**LAMPIRAN 3**

**Penentuan Kadar Lemak Metode Hidrolisis (Weibull) (SNI, 1992)**

Sebanyak 1-2 g sampel dimasukkan ke dalam gelas piala, kemudian ditambahkan 30 ml HCl 25% dan 20 ml air serta beberapa butir batu didih, lalu gelas piala ditutup dengan kaca arloji dan didihkan selama 15 menit. Kemudian disaring dalam keadaan panas dan dicuci dengan air panas hingga tidak bereaksi asam lagi, selanjutnya keringkan kertas saring berikut isinya pada suhu   
100-105oC, lalu dimasukkan ke dalam kertas saring pembungkus (*paper thimble*) dan ekstrak dengan heksana atau pelarut lemak lainnya dan keringkan ekstrak lemak pada suhu 100-105oC, kemudian didinginkan dan ditimbang. Ulangi proses pengeringan ini hingga tercapai bobot tetap.

Perhitungan :

Kadar Lemak = w1 - w2 x 100%

w

Contoh Perhitungan :

Dik : - Wsoxlet konstan = 118,3635

- Wsampel = 2,0198

- Wkonstan = 118,5074

Dit : % Kadar Lemak ?

Jawab :

% Kadar Lemak = (Wkonstan - Wsoxlet konstan) x 100 %

Wsampel

= (118,5074 - 118,3635) x 100 %

2,0198

**=** 7,12 %

**LAMPIRAN 4**

**Penentuan Kadar Abu (SNI, 1992)**

Sebanyak 2-3 g sampel dimasukkan ke dalam sebuah cawan porselen (atau platina) yang telah diketahui bobotnya, untuk sampel cairan uapkan di atas penangas air sampai kering. Kemudian diarangkan di atas nyala pembakar, lalu diabukan ke dalam tanur listrik pada suhu maksimum 550oC sampai pengabuan sempurna (sekali-kali pintu tanur dibuka sedikit, agar oksigen bisa masuk), lalu didinginkan dalam eksikator dan ditimbang sampai bobot tetap.

Perhitungan :

Kadar Abu = w1 - w2 x 100%

w

Contoh Perhitungan :

Dik : - Wcawan kosong = 20,2784

- Wsampel = 2,0097

- Wkonstan = 20,2876

Dit : % Kadar Abu ?

Jawab :

% Kadar Abu = (Wkonstan – Wcawan kosong) x 100 %

Wsampel

= (20,2876 - 20,2784) x 100 %

2,0097

**=** 0,46 %

**LAMPIRAN 5**

**Penentuan Kadar Serat Kasar (SNI, 1992)**

Sebanyak 2-4 g sampel (bebaskan lemaknya dengan cara ekstraksi dengan cara Soxlet atau dengan cara mengaduk, mengenap tuangkan sampel dalam pelarut organik sebanyak 3 kali, lalu sampel dikeringkan dan dimasukkan ke dalam Erlenmeyer 500 ml). Kemudian ditambahkan 50 ml larutan H2SO4 1,25%, lalu didihkan selama 30 menit dengan menggunakan pendingin tegak. Selanjutnya ditambahkan 50 ml NaOH 3,25% dan didihkan lagi selama 30 menit, dalam keadaan panas, saring dengan corong Bucher yang berisi kertas saring tak berabu *Whatman* 54,541 atau 41 yang telah dikeringkan dan diketahui bobotnya, kemudian dicuci endapan yang terdapat pada kertas saring berturut-turut dengan H2SO4 1,25% panas, air panas dan etanol 96%, lalu kertas saring beserta isinya diangkat, dan dimasukkan ke dalam kotak timbang yang telah diketahui bobotnya, keringkan pada suhu 150oC, didinginkan dan ditimbang sampai bobot tetap. Bila ternyata kadar serat kasar lebih besar dari 1%, abukan kertas saring beserta isinya, timbang sampai bobot tetap.

Perhitungan :

a. Serat Kasar ≤ 1 %

% serat kasar = w x 100%

w2

b. Serat Kasar > 1 %

% serat kasar = w – w1 x 100%

w2

dimana :

w = bobot sampel, dalam gram.

w1 = bobot abu, dalam gram.

w2 = bobot endapan pada kertas saring, dalam gram.

Catatan :

1. Kehalusan partikel sampel harus diperhatikan, disarankan sampel yang halus tersebut dapat lolos ayakan lebih kurang 1 mm2.

2. Pembebasan lemak dari sampel dapat diabaikan bila jumlah lemak dalam sampel tersebut rendah.

Contoh Perhitungan :

Dik : - Wkertas saring = 0,9935

- Wsampel = 2,0462

- Wkertas konstan = 0,995

Dit : % Kadar Serat ?

Jawab :

% Kadar Serat = (Wkertas konstan – Wkertas saring) x 100 %

Wsampel

= (0,995 - 0,9935) x 100 %

2,0462

**=** 0,073307 %

**LAMPIRAN 6**

**Penentuan Rendemen Tahu (koreksi kadar air) (Sahay, 1994)**

Kedelai ditimbang kemudian diproses menjadi produk tahu, lalu ditimbang produk tahu yang dihasilkan. Hitung kadar air dari tahu yang dihasilkan.

Perhitungan : (Dihitung dari berat tahu)

Contoh perhitungan :

Misal : - Berat Kedelai = 0,5 kg

- Berat Tahu yang dihasilkan = 1,27 kg

- Kadar Air Tahu = 77,46 %

- Berat Bahan Kering = 22,54 %

- Berat Tahu (22,54% dari 1,27 kg) = 0,286 kg

- Rendemen % = 0,286 x 100 %

0,5

= 57,2 %

**LAMPIRAN 7**

**Contoh Formulir Uji Organoleptik**

**PENGARUH SUHU DAN JUMLAH AIR EKSTRAKSI**

**BUBUR KEDELAI TERHADAP MUTU TAHU**

Nama :

Alamat :

Pekerjaan :

Tanggal :

Tanda Tangan :

Dihadapan Anda telah tersedia sembilan buah sampel dan Anda diminta untuk memberikan penilaian sesuai dengan keterangan untuk setiap   
masing-masing tabel . Penilaian diberikan berdasarkan tingkat kesukaan dengan kriteria penilaian sebagai berikut :

1. Sangat tidak suka

2. Tidak suka

3. Agak tidak suka

4. Biasa

5. Agak suka

6. Suka

7. Sangat suka

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sampel** | **Rasa** | **Warna** | **Aroma** | **Tekstur** | **Kenampakan** |
| a1b1 |  |  |  |  |  |
| a1b2 |  |  |  |  |  |
| a1b3 |  |  |  |  |  |
| a2b1 |  |  |  |  |  |
| a2b2 |  |  |  |  |  |
| a2b3 |  |  |  |  |  |
| a3b1 |  |  |  |  |  |
| a3b2 |  |  |  |  |  |
| a3b3 |  |  |  |  |  |

Terima kasih atas bantuan Anda !

**LAMPIRAN 8**

**Perhitungan Statistik Hasil Analisis Kimia Kadar Air**

Tabel Data Asli Hasil Perhitungan Terhadap Kadar Air Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 77,46 | 81,75 | 81,55 | 240,75 | 80,25 |
| a1b2 | 81,97 | 84,62 | 83,18 | 249,77 | 83,26 |
| a1b3 | 79,71 | 84,01 | 83,53 | 247,25 | 82,42 |
| a2b1 | 79,77 | 82,91 | 82,00 | 244,68 | 81,56 |
| a2b2 | 80,39 | 79,17 | 83,08 | 242,64 | 80,88 |
| a2b3 | 82,12 | 82,32 | 83,89 | 248,34 | 82,78 |
| a3b1 | 78,35 | 80,03 | 82,40 | 240,77 | 80,26 |
| a3b2 | 82,67 | 82,12 | 80,87 | 245,66 | 81,89 |
| a3b3 | 81,76 | 82,43 | 84,10 | 248,29 | 82,76 |
| Total | 724,20 | 739,36 | 744,60 | 2208,16 | 736,05 |
| Rata-rata | 80,47 | 82,15 | 82,73 | 245,35 | 81,78 |

Tabel Data Transformasi Hasil Perhitungan Terhadap Kadar Air Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 1,89 | 1,92 | 1,92 | 5,73 | 1,91 |
| a1b2 | 1,92 | 1,93 | 1,93 | 5,78 | 1,93 |
| a1b3 | 1,91 | 1,93 | 1,93 | 5,76 | 1,92 |
| a2b1 | 1,91 | 1,92 | 1,92 | 5,75 | 1,92 |
| a2b2 | 1,91 | 1,90 | 1,92 | 5,74 | 1,91 |
| a2b3 | 1,92 | 1,92 | 1,93 | 5,77 | 1,92 |
| a3b1 | 1,90 | 1,91 | 1,92 | 5,73 | 1,91 |
| a3b2 | 1,92 | 1,92 | 1,91 | 5,76 | 1,92 |
| a3b3 | 1,92 | 1,92 | 1,93 | 5,77 | 1,92 |
| Total | 17,20 | 17,28 | 17,31 | 51,78 | 17,26 |
| Rata-rata | 1,91 | 1,92 | 1,92 | 5,75 | 1,92 |

Tabel Rata-rata Data Asli Terhadap Kadar Air Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 77,4593 | 81,9721 | 79,7065 | 239,1379 | 79,7126 |
| 2 | 81,7468 | 84,6206 | 84,0150 | 250,3824 | 83,4608 |
| 3 | 81,5467 | 83,1760 | 83,5328 | 248,2555 | 82,7518 |
| Sub Total | | 240,7528 | 249,7688 | 247,2543 | 737,7758 | 245,9253 |
| Rata-Rata Sub Total | | 80,2509 | 83,2563 | 82,4181 | 245,9253 | 81,9751 |
| a2 ( 50°C ) | 1 | 79,7724 | 80,3915 | 82,1222 | 242,2861 | 80,7620 |
| 2 | 82,9097 | 79,1654 | 82,3233 | 244,3984 | 81,4661 |
| 3 | 81,9970 | 83,0826 | 83,8927 | 248,9723 | 82,9908 |
| Sub Total | | 244,6791 | 242,6395 | 248,3382 | 735,6568 | 245,2189 |
| Rata-Rata Sub Total | | 81,5597 | 80,8798 | 82,7794 | 245,2189 | 81,7396 |
| a3 ( 70°C ) | 1 | 78,3486 | 82,6695 | 81,7588 | 242,7769 | 80,9256 |
| 2 | 80,0290 | 82,1171 | 82,4289 | 244,5749 | 81,5250 |
| 3 | 82,3969 | 80,8744 | 84,1004 | 247,3717 | 82,4572 |
| Sub Total | | 240,7745 | 245,6610 | 248,2881 | 734,7236 | 244,9079 |
| Rata-Rata Sub Total | | 80,2582 | 81,8870 | 82,7627 | 244,9079 | 81,6360 |
| Total | | 726,2063 | 738,0692 | 743,8806 | 2208,1562 | 736,0521 |
| Total Rata-Rata | | 242,0688 | 246,0231 | 247,9602 | 736,0521 | 245,3507 |
| Rata-rata perlakuan | | 80,6896 | 82,0077 | 82,6534 |  |  |

Tabel Rata-rata Data Transformasi Terhadap Kadar Air Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 1,8946 | 1,9189 | 1,9069 | 5,7205 | 1,9068 |
| 2 | 1,9178 | 1,9326 | 1,9295 | 5,7798 | 1,9266 |
| 3 | 1,9167 | 1,9252 | 1,9270 | 5,7689 | 1,9230 |
| Sub Total | | 5,7291 | 5,7767 | 5,7634 | 17,2692 | 5,7564 |
| Rata-Rata Sub Total | | 1,9097 | 1,9256 | 1,9211 | 5,7564 | 1,9188 |
| a2 ( 50°C ) | 1 | 1,9073 | 1,9106 | 1,9197 | 5,7376 | 1,9125 |
| 2 | 1,9238 | 1,9040 | 1,9208 | 5,7486 | 1,9162 |
| 3 | 1,9191 | 1,9247 | 1,9289 | 5,7726 | 1,9242 |
| Sub Total | | 5,7501 | 5,7393 | 5,7694 | 17,2588 | 5,7529 |
| Rata-Rata Sub Total | | 1,9167 | 1,9131 | 1,9231 | 5,7529 | 1,9176 |
| a3 ( 70°C ) | 1 | 1,8995 | 1,9226 | 1,9178 | 5,7399 | 1,9133 |
| 2 | 1,9086 | 1,9197 | 1,9213 | 5,7496 | 1,9165 |
| 3 | 1,9211 | 1,9131 | 1,9299 | 5,7642 | 1,9214 |
| Sub Total | | 5,7293 | 5,7554 | 5,7691 | 17,2538 | 5,7513 |
| Rata-Rata Sub Total | | 1,9098 | 1,9185 | 1,9230 | 5,7513 | 1,9171 |
| Total | | 17,2086 | 17,2714 | 17,3018 | 51,7818 | 17,2606 |
| Total Rata-Rata | | 5,7362 | 5,7571 | 5,7673 | 17,2606 | 5,7535 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,000697 | 0,000348 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,000014 | 0,000007 | 0,13tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,000503 | 0,000251 | 4,88\* | 3,63 |
| Interaksi AB | 4 | 0,000326 | 0,000081 | 1,58tn | 3,01 |
| Galat | 16 | 0,000824 | 0,000051 |  |  |
| total | 26 | 0,002363 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel uji jarak berganda Duncan untuk Jumlah Air Ekstraksi (B) | | | | | | | |
| SSR 5% | LSR 5% | Perlakuan | Rata-rata Perlakuan | Perlakuan | | | taraf nyata 5% |
| 1 | 2 | 3 |
|  |  | b1 | 5,736187 | - |  |  | a |
| 3,00 | 0,007175 | b2 | 5,757126 | 0,020938\* | - |  | b |
| 3,15 | 0,007533 | b3 | 5,767282 | 0,031094\* | 0,010156\* | - | c |

Keterangan : \* = Berbeda nyata

tn = Tidak Berbeda nyata

**LAMPIRAN 9**

**Perhitungan Statistik Hasil Analisis Kimia Kadar Abu**

Tabel Data Asli Hasil Perhitungan Terhadap Kadar Abu Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 0,46 | 0,29 | 0,35 | 1,10 | 0,37 |
| a1b2 | 0,26 | 0,35 | 0,32 | 0,94 | 0,31 |
| a1b3 | 0,35 | 0,27 | 0,41 | 1,04 | 0,35 |
| a2b1 | 0,36 | 0,39 | 0,27 | 1,03 | 0,34 |
| a2b2 | 0,34 | 0,42 | 0,29 | 1,05 | 0,35 |
| a2b3 | 0,32 | 0,33 | 0,28 | 0,94 | 0,31 |
| a3b1 | 0,39 | 0,32 | 0,38 | 1,09 | 0,36 |
| a3b2 | 0,33 | 0,33 | 0,31 | 0,97 | 0,32 |
| a3b3 | 0,30 | 0,26 | 0,41 | 0,97 | 0,32 |
| Total | 3,13 | 2,98 | 3,03 | 9,13 | 3,04 |
| Rata-rata | 0,35 | 0,33 | 0,34 | 1,01 | 0,34 |

Tabel Data Transformasi Hasil Perhitungan Terhadap Kadar Abu Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 0,16 | 0,11 | 0,13 | 0,41 | 0,14 |
| a1b2 | 0,10 | 0,13 | 0,12 | 0,35 | 0,12 |
| a1b3 | 0,13 | 0,10 | 0,15 | 0,39 | 0,13 |
| a2b1 | 0,13 | 0,14 | 0,10 | 0,38 | 0,13 |
| a2b2 | 0,13 | 0,15 | 0,11 | 0,39 | 0,13 |
| a2b3 | 0,12 | 0,12 | 0,11 | 0,35 | 0,12 |
| a3b1 | 0,14 | 0,12 | 0,14 | 0,40 | 0,13 |
| a3b2 | 0,12 | 0,12 | 0,12 | 0,36 | 0,12 |
| a3b3 | 0,12 | 0,10 | 0,15 | 0,36 | 0,12 |
| Total | 1,16 | 1,11 | 1,13 | 3,41 | 1,14 |
| Rata-rata | 0,13 | 0,12 | 0,13 | 0,38 | 0,13 |

Tabel Rata-rata Data Asli Terhadap Kadar Abu Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,4578 | 0,2639 | 0,3545 | 1,0762 | 0,3587 |
| 2 | 0,2933 | 0,3544 | 0,2714 | 0,9190 | 0,3063 |
| 3 | 0,3511 | 0,3229 | 0,4139 | 1,0879 | 0,3626 |
| Sub Total | | 1,1021 | 0,9412 | 1,0397 | 3,0831 | 1,0277 |
| Rata-Rata Sub Total | | 0,3674 | 0,3137 | 0,3466 | 1,0277 | 0,3426 |
| a2 ( 50°C ) | 1 | 0,3644 | 0,3445 | 0,3235 | 1,0325 | 0,3442 |
| 2 | 0,3948 | 0,4188 | 0,3298 | 1,1433 | 0,3811 |
| 3 | 0,2704 | 0,2893 | 0,2834 | 0,8430 | 0,2810 |
| Sub Total | | 1,0296 | 1,0526 | 0,9366 | 3,0188 | 1,0063 |
| Rata-Rata Sub Total | | 0,3432 | 0,3509 | 0,3122 | 1,0063 | 0,3354 |
| a3 ( 70°C ) | 1 | 0,3918 | 0,3282 | 0,3039 | 1,0239 | 0,3413 |
| 2 | 0,3198 | 0,3313 | 0,2622 | 0,9132 | 0,3044 |
| 3 | 0,3785 | 0,3094 | 0,4076 | 1,0955 | 0,3652 |
| Sub Total | | 1,0901 | 0,9689 | 0,9737 | 3,0326 | 1,0109 |
| Rata-Rata Sub Total | | 0,3634 | 0,3230 | 0,3246 | 1,0109 | 0,3370 |
| Total | | 3,2218 | 2,9627 | 2,9500 | 9,1345 | 3,0448 |
| Total Rata-Rata | | 1,0739 | 0,9876 | 0,9833 | 3,0448 | 1,0149 |
| Rata-rata perlakuan | | 0,3580 | 0,3292 | 0,3278 |  |  |

Tabel Rata-rata Data Transformasi Terhadap Kadar Abu Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,1637 | 0,1017 | 0,1318 | 0,3972 | 0,1324 |
| 2 | 0,1117 | 0,1317 | 0,1043 | 0,3477 | 0,1159 |
| 3 | 0,1307 | 0,1215 | 0,1504 | 0,4026 | 0,1342 |
| Sub Total | | 0,4061 | 0,3550 | 0,3865 | 1,1475 | 0,3825 |
| Rata-Rata Sub Total | | 0,1354 | 0,1183 | 0,1288 | 0,3825 | 0,1275 |
| a2 ( 50°C ) | 1 | 0,1349 | 0,1286 | 0,1217 | 0,3852 | 0,1284 |
| 2 | 0,1445 | 0,1519 | 0,1238 | 0,4202 | 0,1401 |
| 3 | 0,1039 | 0,1103 | 0,1083 | 0,3226 | 0,1075 |
| Sub Total | | 0,3834 | 0,3908 | 0,3538 | 1,1281 | 0,3760 |
| Rata-Rata Sub Total | | 0,1278 | 0,1303 | 0,1179 | 0,3760 | 0,1253 |
| a3 ( 70°C ) | 1 | 0,1436 | 0,1233 | 0,1153 | 0,3821 | 0,1274 |
| 2 | 0,1205 | 0,1243 | 0,1011 | 0,3459 | 0,1153 |
| 3 | 0,1394 | 0,1171 | 0,1485 | 0,4050 | 0,1350 |
| Sub Total | | 0,4035 | 0,3646 | 0,3648 | 1,1329 | 0,3776 |
| Rata-Rata Sub Total | | 0,1345 | 0,1215 | 0,1216 | 0,3776 | 0,1259 |
| Total | | 1,1929 | 1,1104 | 1,1051 | 3,4085 | 1,1362 |
| Total Rata-Rata | | 0,3976 | 0,3701 | 0,3684 | 1,1362 | 0,3787 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,000149 | 0,000074 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,000023 | 0,000011 | 0,03tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,000539 | 0,000269 | 0,69 tn | 3,63 |
| Interaksi AB | 4 | 0,000493 | 0,000123 | 0,32 tn | 3,01 |
| Galat | 16 | 0,006203 | 0,000388 |  |  |
| total | 26 | 0,007406 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

**LAMPIRAN 10**

**Perhitungan Statistik Hasil Analisis Kimia Kadar Lemak**

Tabel Data Asli Hasil Perhitungan Terhadap Kadar Lemak Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 7,12 | 5,25 | 5,10 | 17,48 | 5,83 |
| a1b2 | 6,13 | 5,14 | 5,16 | 16,43 | 5,48 |
| a1b3 | 6,51 | 6,08 | 4,88 | 17,47 | 5,82 |
| a2b1 | 5,32 | 5,02 | 4,62 | 14,96 | 4,99 |
| a2b2 | 6,57 | 5,68 | 6,21 | 18,47 | 6,16 |
| a2b3 | 5,94 | 6,32 | 5,29 | 17,55 | 5,85 |
| a3b1 | 8,80 | 6,50 | 5,36 | 20,65 | 6,88 |
| a3b2 | 5,01 | 5,93 | 6,67 | 17,61 | 5,87 |
| a3b3 | 6,41 | 4,03 | 3,98 | 14,41 | 4,80 |
| Total | 57,80 | 49,95 | 47,28 | 155,03 | 51,68 |
| Rata-rata | 6,42 | 5,55 | 5,25 | 17,23 | 5,74 |

Tabel Data Transformasi Hasil Perhitungan Terhadap Kadar Lemak Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 0,91 | 0,80 | 0,79 | 2,49 | 0,83 |
| a1b2 | 0,85 | 0,79 | 0,79 | 2,43 | 0,81 |
| a1b3 | 0,88 | 0,85 | 0,77 | 2,50 | 0,83 |
| a2b1 | 0,80 | 0,78 | 0,75 | 2,33 | 0,78 |
| a2b2 | 0,88 | 0,83 | 0,86 | 2,56 | 0,85 |
| a2b3 | 0,84 | 0,86 | 0,80 | 2,50 | 0,83 |
| a3b1 | 0,99 | 0,87 | 0,80 | 2,67 | 0,89 |
| a3b2 | 0,78 | 0,84 | 0,88 | 2,50 | 0,83 |
| a3b3 | 0,87 | 0,70 | 0,70 | 2,27 | 0,76 |
| Total | 7,80 | 7,32 | 7,14 | 22,26 | 7,42 |
| Rata-rata | 0,87 | 0,81 | 0,79 | 2,47 | 0,82 |

Tabel Rata-rata Data Asli Terhadap Kadar Lemak Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 7,1245 | 6,1283 | 6,5069 | 19,7597 | 6,5866 |
| 2 | 5,2500 | 5,1374 | 6,0831 | 16,4704 | 5,4901 |
| 3 | 5,1038 | 5,1602 | 4,8794 | 15,1434 | 5,0478 |
| Sub Total | | 17,4783 | 16,4259 | 17,4693 | 51,3735 | 17,1245 |
| Rata-Rata Sub Total | | 5,8261 | 5,4753 | 5,8231 | 17,1245 | 5,7082 |
| a2 ( 50°C ) | 1 | 5,3194 | 6,5690 | 5,9376 | 17,8260 | 5,9420 |
| 2 | 5,0192 | 5,6840 | 6,3215 | 17,0247 | 5,6749 |
| 3 | 4,6238 | 6,2143 | 5,2949 | 16,1330 | 5,3777 |
| Sub Total | | 14,9623 | 18,4673 | 17,5540 | 50,9837 | 16,9946 |
| Rata-Rata Sub Total | | 4,9874 | 6,1558 | 5,8513 | 16,9946 | 5,6649 |
| a3 ( 70°C ) | 1 | 8,7973 | 5,0143 | 6,4051 | 20,2168 | 6,7389 |
| 2 | 6,4953 | 5,9269 | 4,0309 | 16,4532 | 5,4844 |
| 3 | 5,3616 | 6,6650 | 3,9764 | 16,0030 | 5,3343 |
| Sub Total | | 20,6542 | 17,6063 | 14,4124 | 52,6729 | 17,5576 |
| Rata-Rata Sub Total | | 6,8847 | 5,8688 | 4,8041 | 17,5576 | 5,8525 |
| Total | | 53,0949 | 52,4995 | 49,4358 | 155,0301 | 51,6767 |
| Total Rata-Rata | | 17,6983 | 17,4998 | 16,4786 | 51,6767 | 17,2256 |
| Rata-rata perlakuan | | 5,8994 | 5,8333 | 5,4929 |  |  |

Tabel Rata-rata Data Transformasi Terhadap Kadar Lemak Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,9098 | 0,8530 | 0,8755 | 2,6382 | 0,8794 |
| 2 | 0,7959 | 0,7880 | 0,8502 | 2,4341 | 0,8114 |
| 3 | 0,7856 | 0,7896 | 0,7693 | 2,3445 | 0,7815 |
| Sub Total | | 2,4913 | 2,4306 | 2,4950 | 7,4169 | 2,4723 |
| Rata-Rata Sub Total | | 0,8304 | 0,8102 | 0,8317 | 2,4723 | 0,8241 |
| a2 ( 50°C ) | 1 | 0,8007 | 0,8790 | 0,8412 | 2,5209 | 0,8403 |
| 2 | 0,7795 | 0,8250 | 0,8646 | 2,4692 | 0,8231 |
| 3 | 0,7500 | 0,8582 | 0,7990 | 2,4072 | 0,8024 |
| Sub Total | | 2,3302 | 2,5623 | 2,5048 | 7,3973 | 2,4658 |
| Rata-Rata Sub Total | | 0,7767 | 0,8541 | 0,8349 | 2,4658 | 0,8219 |
| a3 ( 70°C ) | 1 | 0,9911 | 0,7792 | 0,8695 | 2,6398 | 0,8799 |
| 2 | 0,8748 | 0,8405 | 0,7016 | 2,4170 | 0,8057 |
| 3 | 0,8036 | 0,8845 | 0,6969 | 2,3850 | 0,7950 |
| Sub Total | | 2,6695 | 2,5042 | 2,2681 | 7,4418 | 2,4806 |
| Rata-Rata Sub Total | | 0,8898 | 0,8347 | 0,7560 | 2,4806 | 0,8269 |
| Total | | 7,4910 | 7,4971 | 7,2679 | 22,2560 | 7,4187 |
| Total Rata-Rata | | 2,4970 | 2,4990 | 2,4226 | 7,4187 | 2,4729 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,025980 | 0,012990 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,000110 | 0,000055 | 0,02tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,003790 | 0,001895 | 0,75tn | 3,63 |
| Interaksi AB | 4 | 0,033947 | 0,008487 | 3,37\* | 3,01 |
| Galat | 16 | 0,040265 | 0,002517 |  |  |
| total | 26 | 0,104093 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

Berdasarkan tabel ANAVA dapat disimpulkan bahwa faktor interaksi (AB) berbeda nyata terhadap kadar lemak tahu sehingga dilakukan uji lanjut Duncan.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel uji jarak berganda Duncan untuk Interaksi (AB) | | | | |  |  |  |  |  |  |  |  |  |
| SSR 5% | LSR 5% | perlakuan | Rata-rata perlakuan | perlakuan | | | | | | | | | taraf nyata 5% |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |  |
|  |  | a3b3 | 0,756030 | - |  |  |  |  |  |  |  |  | a |
| 3,00 | 0,050165 | a2b1 | 0,776747 | 0,020717 tn | - |  |  |  |  |  |  |  | ab |
| 3,15 | 0,052674 | a1b2 | 0,810188 | 0,054158\* | 0,033441 tn | - |  |  |  |  |  |  | abc |
| 3,23 | 0,054011255 | a1b1 | 0,830426 | 0,074396\* | 0,053679 tn | 0,020238 tn | - |  |  |  |  |  | abc |
| 3,3 | 0,055181777 | a1b3 | 0,831671 | 0,075641\* | 0,054924 tn | 0,021483 tn | 0,0012 tn | - |  |  |  |  | abc |
| 3,34 | 0,055850647 | a3b2 | 0,834746 | 0,078717\* | 0,058000\* | 0,024559 tn | 0,004321 tn | 0,003076 tn | - |  |  |  | cd |
| 3,37 | 0,0563523 | a2b3 | 0,834934 | 0,078904\* | 0,058187\* | 0,024746 tn | 0,004508 tn | 0,003263 tn | 0,000187 tn | - |  |  | cd |
| 3,39 | 0,056686735 | a2b2 | 0,854090 | 0,098060\* | 0,077344\* | 0,043903 tn | 0,023665 tn | 0,022420 tn | 0,019344 tn | 0,019157 tn | - |  | cd |
| 3,41 | 0,05702117 | a3b1 | 0,889821 | 0,133791\* | 0,113074\* | 0,079633\* | 0,059396\* | 0,058150\* | 0,055075 tn | 0,054888 tn | 0,035731 tn | - | d |

Keterangan : \* = Berbeda nyata

tn = Tidak Berbeda nyata

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel Uji dua arah terhadap rata-rata suhu air ekstraksi 30oC (a1) | | | | | |  |  |
| SSR 5% | LSR 5% | perlakuan | rata2perlakuan | perlakuan | | | taraf nyata 5% |
| 1 | 2 | 3 |
|  |  | a1b2 | 0,810188 | - |  |  | a |
| 3,00 | 0,050165 | a1b1 | 0,830426 | 0,020238 tn | - |  | a |
| 3,15 | 0,052674 | a1b3 | 0,831671 | 0,021483 tn | 0,001245 tn | - | a |

Keterangan : \* = Berbeda nyata

tn = Tidak Berbeda nyata

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel Uji dua arah terhadap rata-rata suhu air ekstraksi 50 oC (a2) | | | | | |  |  |
| SSR 5% | LSR 5% | perlakuan | rata2perlakuan | perlakuan | | | taraf nyata 5% |
| 1 | 2 | 3 |
|  |  | a2b1 | 0,776747 | - |  |  | a |
| 3,00 | 0,050165 | a2b3 | 0,834934 | 0,058187\* | - |  | b |
| 3,15 | 0,052674 | a2b2 | 0,854090 | 0,077344\* | 0,019157 tn | - | b |

Keterangan : \* = Berbeda nyata

tn = Tidak Berbeda nyata

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel Uji dua arah terhadap rata-rata suhu air ekstraksi 70 oC (a3) | | | | | |  |  |
| SSR 5% | LSR 5% | perlakuan | rata2perlakuan | perlakuan | | | taraf nyata 5% |
| 1 | 2 | 3 |
|  |  | a3b3 | 0,756030 | - |  |  | a |
| 3,00 | 0,050165 | a3b2 | 0,834746 | 0,078717\* | - |  | b |
| 3,15 | 0,052674 | a3b1 | 0,889821 | 0,133791\* | 0,055075\* | - | c |

Keterangan : \* = Berbeda nyata

tn = Tidak Berbeda nyata

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel Uji dua arah terhadap rata-rata jumlah air ekstraksi 1 : 5 (b1) | | | | | | |  |
| SSR 5% | LSR 5% | perlakuan | rata2perlakuan | perlakuan | | | taraf nyata 5% |
| 1 | 2 | 3 |
|  |  | a2b1 | 0,776747 | - |  |  | A |
| 3,00 | 0,050165 | a1b1 | 0,830426 | 0,053679\* | - |  | B |
| 3,15 | 0,052674 | a3b1 | 0,889821 | 0,113074\* | 0,059396\* | - | C |

Keterangan : \* = Berbeda nyata

tn = Tidak Berbeda nyata

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel Uji dua arah terhadap rata-rata jumlah air ekstraksi 1 : 7 (b2) | | | | | | |  |
| SSR 5% | LSR 5% | perlakuan | rata2perlakuan | perlakuan | | | taraf nyata 5% |
| 1 | 2 | 3 |
|  |  | a1b2 | 0,810188 | - |  |  | A |
| 3,00 | 0,050165 | a3b2 | 0,834746 | 0,024559 tn | - |  | A |
| 3,15 | 0,052674 | a2b2 | 0,854090 | 0,043903 tn | 0,019344 tn | - | A |

Keterangan : \* = Berbeda nyata

tn = Tidak Berbeda nyata

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel Uji dua arah terhadap rata-rata jumlah air ekstraksi 1 : 9 (b3) | | | | | | |  |
| SSR 5% | LSR 5% | perlakuan | rata2perlakuan | perlakuan | | | taraf nyata 5% |
| 1 | 2 | 3 |
|  |  | a3b3 | 0,756030 | - |  |  | A |
| 3,00 | 0,050165 | a1b3 | 0,831671 | 0,075641\* | - |  | B |
| 3,15 | 0,052674 | a2b3 | 0,834934 | 0,078904\* | 0,003263 tn | - | B |

Keterangan : \* = Berbeda nyata

tn = Tidak Berbeda nyata

|  |  |  |  |
| --- | --- | --- | --- |
| Suhu Air Ekstraksi (A) | Jumlah Air Ekstraksi (B) | | |
| (1 : 5) b1 | (1 : 7) b2 | (1 : 9) b3 |
| 30°C (a1) | 0,830426 B  a | 0,810188 A  a | 0,831671 B  a |
| 50°C (a2) | 0,776747 A  a | 0,854090 A  b | 0,834934 B  b |
| 70°C (a3) | 0,889821 C  c | 0,834746 A  b | 0,756030 A  a |

Keterangan :

* Nilai yang ditandai huruf yang sama menunjukkan tidak berbeda nyata pada taraf 5% menurut uji lanjut jarak berganda Duncan.
* Notasi huruf kecil dibaca horizontal, dan notasi huruf besar dibaca vertikal.

**LAMPIRAN 11**

**Perhitungan Statistik Hasil Analisis Kimia Kadar** **Protein**

Tabel Data Asli Hasil Perhitungan Terhadap Kadar Protein Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 11,95 | 9,25 | 10,97 | 32,17 | 10,72 |
| a1b2 | 10,29 | 9,28 | 11,45 | 31,02 | 10,34 |
| a1b3 | 10,76 | 9,03 | 12,19 | 31,98 | 10,66 |
| a2b1 | 10,90 | 9,73 | 13,24 | 33,87 | 11,29 |
| a2b2 | 9,87 | 12,12 | 13,52 | 35,50 | 11,83 |
| a2b3 | 10,83 | 10,37 | 10,93 | 32,13 | 10,71 |
| a3b1 | 10,86 | 10,54 | 12,12 | 33,53 | 11,18 |
| a3b2 | 10,14 | 10,46 | 12,39 | 32,99 | 11,00 |
| a3b3 | 10,03 | 6,82 | 14,24 | 31,08 | 10,36 |
| Total | 95,62 | 87,60 | 111,05 | 294,27 | 98,09 |
| Rata-rata | 10,62 | 9,73 | 12,34 | 32,70 | 10,90 |

Tabel Data Transformasi Hasil Perhitungan Terhadap Kadar Protein Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 1,11 | 1,01 | 1,08 | 3,20 | 1,07 |
| a1b2 | 1,05 | 1,01 | 1,10 | 3,16 | 1,05 |
| a1b3 | 1,07 | 1,00 | 1,12 | 3,19 | 1,06 |
| a2b1 | 1,08 | 1,03 | 1,15 | 3,26 | 1,09 |
| a2b2 | 1,04 | 1,12 | 1,16 | 3,32 | 1,11 |
| a2b3 | 1,07 | 1,06 | 1,08 | 3,21 | 1,07 |
| a3b1 | 1,07 | 1,06 | 1,12 | 3,25 | 1,08 |
| a3b2 | 1,05 | 1,06 | 1,13 | 3,23 | 1,08 |
| a3b3 | 1,04 | 0,89 | 1,18 | 3,12 | 1,04 |
| Total | 9,58 | 9,24 | 10,11 | 28,94 | 9,65 |
| Rata-rata | 1,06 | 1,03 | 1,12 | 3,22 | 1,07 |

Tabel Rata-rata Data Asli Terhadap Kadar Protein Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 11,9526 | 10,2862 | 10,7604 | 32,9992 | 10,9997 |
| 2 | 9,2456 | 9,2787 | 9,0314 | 27,5557 | 9,1852 |
| 3 | 10,9733 | 11,4548 | 12,1912 | 34,6194 | 11,5398 |
| Sub Total | | 32,1716 | 31,0197 | 31,9831 | 95,1744 | 31,7248 |
| Rata-Rata Sub Total | | 10,7239 | 10,3399 | 10,6610 | 31,7248 | 10,5749 |
| a2 ( 50°C ) | 1 | 10,8969 | 9,8665 | 10,8251 | 31,5885 | 10,5295 |
| 2 | 9,7329 | 12,1168 | 10,3748 | 32,2246 | 10,7415 |
| 3 | 13,2427 | 13,5169 | 10,9274 | 37,6871 | 12,5624 |
| Sub Total | | 33,8726 | 35,5003 | 32,1273 | 101,5002 | 33,8334 |
| Rata-Rata Sub Total | | 11,2909 | 11,8334 | 10,7091 | 33,8334 | 11,2778 |
| a3 ( 70°C ) | 1 | 10,8633 | 10,1390 | 10,0265 | 31,0287 | 10,3429 |
| 2 | 10,5443 | 10,4610 | 6,8158 | 27,8211 | 9,2737 |
| 3 | 12,1240 | 12,3860 | 14,2380 | 38,7479 | 12,9160 |
| Sub Total | | 33,5316 | 32,9860 | 31,0802 | 97,5978 | 32,5326 |
| Rata-Rata Sub Total | | 11,1772 | 10,9953 | 10,3601 | 32,5326 | 10,8442 |
| Total | | 99,5758 | 99,5059 | 95,1906 | 294,2723 | 98,0908 |
| Total Rata-Rata | | 33,1919 | 33,1686 | 31,7302 | 98,0908 | 32,6969 |
| Rata-rata perlakuan | | 11,0640 | 11,0562 | 10,5767 |  |  |

Tabel Rata-rata Data Transformasi Terhadap Kadar Protein Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 1,1124 | 1,0525 | 1,0704 | 3,2353 | 1,0784 |
| 2 | 1,0105 | 1,0119 | 1,0014 | 3,0238 | 1,0079 |
| 3 | 1,0782 | 1,0953 | 1,1203 | 3,2938 | 1,0979 |
| Sub Total | | 3,2011 | 3,1598 | 3,1921 | 9,5530 | 3,1843 |
| Rata-Rata Sub Total | | 1,0670 | 1,0533 | 1,0640 | 3,1843 | 1,0614 |
| a2 ( 50°C ) | 1 | 1,0754 | 1,0361 | 1,0728 | 3,1843 | 1,0614 |
| 2 | 1,0307 | 1,1178 | 1,0559 | 3,2045 | 1,0682 |
| 3 | 1,1536 | 1,1619 | 1,0765 | 3,3920 | 1,1307 |
| Sub Total | | 3,2597 | 3,3158 | 3,2053 | 9,7808 | 3,2603 |
| Rata-Rata Sub Total | | 1,0866 | 1,1053 | 1,0684 | 3,2603 | 1,0868 |
| a3 ( 70°C ) | 1 | 1,0742 | 1,0468 | 1,0424 | 3,1635 | 1,0545 |
| 2 | 1,0624 | 1,0592 | 0,8930 | 3,0146 | 1,0049 |
| 3 | 1,1181 | 1,1266 | 1,1829 | 3,4276 | 1,1425 |
| Sub Total | | 3,2546 | 3,2327 | 3,1183 | 9,6057 | 3,2019 |
| Rata-Rata Sub Total | | 1,0849 | 1,0776 | 1,0394 | 3,2019 | 1,0673 |
| Total | | 9,7155 | 9,7083 | 9,5157 | 28,9395 | 9,6465 |
| Total Rata-Rata | | 3,2385 | 3,2361 | 3,1719 | 9,6465 | 3,2155 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,042778 | 0,021389 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,003161 | 0,001581 | 0,69tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,002855 | 0,001427 | 0,62tn | 3,63 |
| Interaksi AB | 4 | 0,003066 | 0,000766 | 0,33tn | 3,01 |
| Galat | 16 | 0,036791 | 0,002299 |  |  |
| total | 26 | 0,088651 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

**LAMPIRAN 12**

**Perhitungan Statistik Hasil Analisis Kimia Kadar** **Serat Kasar**

Tabel Data Asli Hasil Perhitungan Terhadap Kadar Serat Kasar Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 0,07 | 0,06 | 0,08 | 0,22 | 0,07 |
| a1b2 | 0,09 | 0,08 | 0,04 | 0,21 | 0,07 |
| a1b3 | 0,07 | 0,09 | 0,08 | 0,24 | 0,08 |
| a2b1 | 0,09 | 0,05 | 0,05 | 0,20 | 0,07 |
| a2b2 | 0,04 | 0,04 | 0,06 | 0,14 | 0,05 |
| a2b3 | 0,05 | 0,10 | 0,04 | 0,20 | 0,07 |
| a3b1 | 0,07 | 0,05 | 0,05 | 0,17 | 0,06 |
| a3b2 | 0,06 | 0,05 | 0,05 | 0,17 | 0,06 |
| a3b3 | 0,08 | 0,09 | 0,06 | 0,24 | 0,08 |
| Total | 0,63 | 0,62 | 0,54 | 1,78 | 0,59 |
| Rata-rata | 0,07 | 0,07 | 0,06 | 0,20 | 0,07 |

Tabel Data Transformasi Hasil Perhitungan Terhadap Kadar Serat Kasar Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 0,03 | 0,02 | 0,04 | 0,09 | 0,03 |
| a1b2 | 0,04 | 0,03 | 0,02 | 0,09 | 0,03 |
| a1b3 | 0,03 | 0,04 | 0,03 | 0,10 | 0,03 |
| a2b1 | 0,04 | 0,02 | 0,02 | 0,08 | 0,03 |
| a2b2 | 0,02 | 0,02 | 0,03 | 0,06 | 0,02 |
| a2b3 | 0,02 | 0,04 | 0,02 | 0,08 | 0,03 |
| a3b1 | 0,03 | 0,02 | 0,02 | 0,07 | 0,02 |
| a3b2 | 0,03 | 0,02 | 0,02 | 0,07 | 0,02 |
| a3b3 | 0,03 | 0,04 | 0,03 | 0,10 | 0,03 |
| Total | 0,26 | 0,26 | 0,23 | 0,75 | 0,25 |
| Rata-rata | 0,03 | 0,03 | 0,03 | 0,08 | 0,03 |

Tabel Rata-rata Data Asli Terhadap Kadar Serat Kasar Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,0733 | 0,0858 | 0,0650 | 0,2241 | 0,0747 |
| 2 | 0,0580 | 0,0836 | 0,0950 | 0,2365 | 0,0788 |
| 3 | 0,0844 | 0,0445 | 0,0800 | 0,2088 | 0,0696 |
| Sub Total | | 0,2157 | 0,2139 | 0,2399 | 0,6695 | 0,2232 |
| Rata-Rata Sub Total | | 0,0719 | 0,0713 | 0,0800 | 0,2232 | 0,0744 |
| a2 ( 50°C ) | 1 | 0,0878 | 0,0439 | 0,0525 | 0,1843 | 0,0614 |
| 2 | 0,0540 | 0,0393 | 0,0991 | 0,1925 | 0,0642 |
| 3 | 0,0544 | 0,0596 | 0,0448 | 0,1588 | 0,0529 |
| Sub Total | | 0,1962 | 0,1428 | 0,1965 | 0,5356 | 0,1785 |
| Rata-Rata Sub Total | | 0,0654 | 0,0476 | 0,0655 | 0,1785 | 0,0595 |
| a3 ( 70°C ) | 1 | 0,0692 | 0,0648 | 0,0838 | 0,2177 | 0,0726 |
| 2 | 0,0488 | 0,0548 | 0,0897 | 0,1933 | 0,0644 |
| 3 | 0,0494 | 0,0540 | 0,0645 | 0,1679 | 0,0560 |
| Sub Total | | 0,1674 | 0,1736 | 0,2379 | 0,5789 | 0,1930 |
| Rata-Rata Sub Total | | 0,0558 | 0,0579 | 0,0793 | 0,1930 | 0,0643 |
| Total | | 0,5793 | 0,5303 | 0,6744 | 1,7840 | 0,5947 |
| Total Rata-Rata | | 0,1931 | 0,1768 | 0,2248 | 0,5947 | 0,1982 |
| Rata-rata perlakuan | | 0,0644 | 0,0589 | 0,0749 |  |  |

Tabel Rata-rata Data Transformasi Terhadap Kadar Serat Kasar Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,0307 | 0,0357 | 0,0273 | 0,0938 | 0,0313 |
| 2 | 0,0245 | 0,0349 | 0,0394 | 0,0987 | 0,0329 |
| 3 | 0,0352 | 0,0189 | 0,0334 | 0,0875 | 0,0292 |
| Sub Total | | 0,0904 | 0,0895 | 0,1002 | 0,2801 | 0,0934 |
| Rata-Rata Sub Total | | 0,0301 | 0,0298 | 0,0334 | 0,0934 | 0,0311 |
| a2 ( 50°C ) | 1 | 0,0366 | 0,0187 | 0,0222 | 0,0775 | 0,0258 |
| 2 | 0,0229 | 0,0167 | 0,0411 | 0,0806 | 0,0269 |
| 3 | 0,0230 | 0,0252 | 0,0191 | 0,0672 | 0,0224 |
| Sub Total | | 0,0824 | 0,0606 | 0,0823 | 0,2253 | 0,0751 |
| Rata-Rata Sub Total | | 0,0275 | 0,0202 | 0,0274 | 0,0751 | 0,0250 |
| a3 ( 70°C ) | 1 | 0,0290 | 0,0273 | 0,0349 | 0,0912 | 0,0304 |
| 2 | 0,0207 | 0,0232 | 0,0373 | 0,0812 | 0,0271 |
| 3 | 0,0209 | 0,0228 | 0,0271 | 0,0709 | 0,0236 |
| Sub Total | | 0,0707 | 0,0733 | 0,0994 | 0,2433 | 0,0811 |
| Rata-Rata Sub Total | | 0,0236 | 0,0244 | 0,0331 | 0,0811 | 0,0270 |
| Total | | 0,2435 | 0,2233 | 0,2819 | 0,7487 | 0,2496 |
| Total Rata-Rata | | 0,0812 | 0,0744 | 0,0940 | 0,2496 | 0,0832 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,000096 | 0,000048 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,000173 | 0,000087 | 1,79tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,000196 | 0,000098 | 2,03tn | 3,63 |
| Interaksi AB | 4 | 0,000100 | 0,000025 | 0,52tn | 3,01 |
| Galat | 16 | 0,000774 | 0,000048 |  |  |
| total | 26 | 0,001340 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

**LAMPIRAN 13**

**Perhitungan Statistik Hasil Analisis Kimia Kadar** **Rendemen**

Tabel Data Asli Hasil Perhitungan Terhadap Kadar Rendemen dengan Koreksi Kadar Air Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 57,25 | 37,78 | 47,05 | 142,08 | 47,36 |
| a1b2 | 45,26 | 38,14 | 46,59 | 129,99 | 43,33 |
| a1b3 | 52,15 | 47,17 | 46,45 | 145,76 | 48,59 |
| a2b1 | 50,98 | 41,87 | 39,78 | 132,63 | 44,21 |
| a2b2 | 49,61 | 42,70 | 37,09 | 129,40 | 43,13 |
| a2b3 | 45,95 | 47,56 | 38,99 | 132,50 | 44,17 |
| a3b1 | 59,54 | 40,54 | 33,97 | 134,04 | 44,68 |
| a3b2 | 51,12 | 49,53 | 56,05 | 156,70 | 52,23 |
| a3b3 | 48,30 | 49,27 | 46,91 | 144,47 | 48,16 |
| Total | 460,16 | 394,55 | 392,86 | 1247,57 | 415,86 |
| Rata-rata | 51,13 | 43,84 | 43,65 | 138,62 | 46,21 |

Tabel Data Transformasi Hasil Perhitungan Terhadap Kadar Rendemen dengan Koreksi Kadar Air Tahu

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Perlakuan | ulangan | | | Total | Rata-rata |
| I | II | III |
| a1b1 | 1,77 | 1,59 | 1,68 | 5,04 | 1,68 |
| a1b2 | 1,67 | 1,59 | 1,68 | 4,94 | 1,65 |
| a1b3 | 1,73 | 1,68 | 1,68 | 5,08 | 1,69 |
| a2b1 | 1,72 | 1,63 | 1,61 | 4,96 | 1,65 |
| a2b2 | 1,70 | 1,64 | 1,58 | 4,93 | 1,64 |
| a2b3 | 1,67 | 1,69 | 1,60 | 4,96 | 1,65 |
| a3b1 | 1,78 | 1,62 | 1,54 | 4,94 | 1,65 |
| a3b2 | 1,72 | 1,70 | 1,76 | 5,18 | 1,73 |
| a3b3 | 1,69 | 1,70 | 1,68 | 5,07 | 1,69 |
| Total | 15,44 | 14,85 | 14,81 | 45,09 | 15,03 |
| Rata-rata | 1,72 | 1,65 | 1,65 | 5,01 | 1,67 |

Tabel Rata-rata Data Asli Terhadap Kadar Rendemen dengan Koreksi Kadar Air Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 57,2516 | 45,2553 | 52,1453 | 154,6522 | 51,5507 |
| 2 | 37,7775 | 38,1424 | 47,1705 | 123,0904 | 41,0301 |
| 3 | 47,0475 | 46,5914 | 46,4454 | 140,0843 | 46,6948 |
| Sub Total | | 142,0766 | 129,9891 | 145,7612 | 417,8269 | 139,2756 |
| Rata-Rata Sub Total | | 47,3589 | 43,3297 | 48,5871 | 139,2756 | 46,4252 |
| a2 ( 50°C ) | 1 | 50,9796 | 49,6133 | 45,9516 | 146,5445 | 48,8482 |
| 2 | 41,8705 | 42,7015 | 47,5592 | 132,1312 | 44,0437 |
| 3 | 39,7800 | 37,0886 | 38,9862 | 115,8548 | 38,6183 |
| Sub Total | | 132,6301 | 129,4034 | 132,4970 | 394,5305 | 131,5102 |
| Rata-Rata Sub Total | | 44,2100 | 43,1345 | 44,1657 | 131,5102 | 43,8367 |
| a3 ( 70°C ) | 1 | 59,5375 | 51,1235 | 48,2995 | 158,9605 | 52,9868 |
| 2 | 40,5391 | 49,5276 | 49,2663 | 139,3330 | 46,4443 |
| 3 | 33,9680 | 56,0509 | 46,9050 | 136,9239 | 45,6413 |
| Sub Total | | 134,0446 | 156,7020 | 144,4708 | 435,2174 | 145,0725 |
| Rata-Rata Sub Total | | 44,6815 | 52,2340 | 48,1569 | 145,0725 | 48,3575 |
| Total | | 408,7513 | 416,0945 | 422,7290 | 1247,5748 | 415,8583 |
| Total Rata-Rata | | 136,2504 | 138,6982 | 140,9097 | 415,8583 | 138,6194 |
| Rata-rata perlakuan | | 45,4168 | 46,2327 | 46,9699 |  |  |

Tabel Rata-rata Data Transformasi Terhadap Kadar Rendemen dengan Koreksi Kadar Air Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 1,7653 | 1,6652 | 1,7255 | 5,1559 | 1,7186 |
| 2 | 1,5886 | 1,5926 | 1,6828 | 4,8640 | 1,6213 |
| 3 | 1,6817 | 1,6775 | 1,6762 | 5,0354 | 1,6785 |
| Sub Total | | 5,0356 | 4,9353 | 5,0844 | 15,0553 | 5,0184 |
| Rata-Rata Sub Total | | 1,6785 | 1,6451 | 1,6948 | 5,0184 | 1,6728 |
| a2 ( 50°C ) | 1 | 1,7158 | 1,7043 | 1,6717 | 5,0917 | 1,6972 |
| 2 | 1,6322 | 1,6405 | 1,6863 | 4,9589 | 1,6530 |
| 3 | 1,6104 | 1,5808 | 1,6019 | 4,7932 | 1,5977 |
| Sub Total | | 4,9584 | 4,9256 | 4,9598 | 14,8438 | 4,9479 |
| Rata-Rata Sub Total | | 1,6528 | 1,6419 | 1,6533 | 4,9479 | 1,6493 |
| a3 ( 70°C ) | 1 | 1,7820 | 1,7170 | 1,6928 | 5,1919 | 1,7306 |
| 2 | 1,6185 | 1,7035 | 1,7013 | 5,0233 | 1,6744 |
| 3 | 1,5437 | 1,7563 | 1,6804 | 4,9803 | 1,6601 |
| Sub Total | | 4,9442 | 5,1768 | 5,0745 | 15,1955 | 5,0652 |
| Rata-Rata Sub Total | | 1,6481 | 1,7256 | 1,6915 | 5,0652 | 1,6884 |
| Total | | 14,9381 | 15,0377 | 15,1188 | 45,0946 | 15,0315 |
| Total Rata-Rata | | 4,9794 | 5,0126 | 5,0396 | 15,0315 | 5,0105 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,027826 | 0,013913 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,006964 | 0,003482 | 1,30tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,001819 | 0,000909 | 0,34tn | 3,63 |
| Interaksi AB | 4 | 0,011350 | 0,002838 | 1,06tn | 3,01 |
| Galat | 16 | 0,042766 | 0,002673 |  |  |
| total | 26 | 0,090725 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

**LAMPIRAN 14**

**Perhitungan Statistik Hasil Analisis Organoleptik Terhadap** **Rasa**

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Rasa Tahu Ulangan I

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 |
| 2 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 |
| 3 | 3 | 0,60 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 1 | 0,30 | 2 | 0,48 |
| 4 | 5 | 0,78 | 2 | 0,48 | 1 | 0,30 | 3 | 0,60 | 5 | 0,78 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 |
| 5 | 6 | 0,85 | 2 | 0,48 | 4 | 0,70 | 2 | 0,48 | 6 | 0,85 | 2 | 0,48 | 2 | 0,48 | 6 | 0,85 | 1 | 0,30 |
| 6 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 7 | 0,90 | 5 | 0,78 | 6 | 0,85 |
| 7 | 2 | 0,48 | 6 | 0,85 | 4 | 0,70 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 4 | 0,70 | 2 | 0,48 | 5 | 0,78 |
| 8 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 | 2 | 0,48 | 3 | 0,60 | 4 | 0,70 | 2 | 0,48 | 5 | 0,78 | 4 | 0,70 |
| 9 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 3 | 0,60 |
| 10 | 1 | 0,30 | 7 | 0,90 | 2 | 0,48 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 2 | 0,48 | 2 | 0,48 | 4 | 0,70 |
| 11 | 2 | 0,48 | 6 | 0,85 | 4 | 0,70 | 3 | 0,60 | 2 | 0,48 | 3 | 0,60 | 2 | 0,48 | 7 | 0,90 | 7 | 0,90 |
| 12 | 1 | 0,30 | 3 | 0,60 | 4 | 0,70 | 1 | 0,30 | 1 | 0,30 | 3 | 0,60 | 1 | 0,30 | 2 | 0,48 | 6 | 0,85 |
| 13 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 |
| 14 | 2 | 0,48 | 6 | 0,85 | 5 | 0,78 | 1 | 0,30 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 6 | 0,85 |
| 15 | 3 | 0,60 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 4 | 0,70 |
| Jumlah | 48 | 8,84 | 65 | 10,50 | 56 | 9,77 | 48 | 8,82 | 63 | 10,32 | 52 | 9,43 | 47 | 8,75 | 61 | 9,99 | 62 | 10,19 |
| Rata-Rata | 3,20 | 0,59 | 4,333 | 0,70 | 3,733 | 0,65 | 3,20 | 0,59 | 4,2 | 0,69 | 3,47 | 0,63 | 3,13 | 0,58 | 4,07 | 0,67 | 4,133 | 0,68 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Rasa Tahu Ulangan II

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 3 | 0,60 | 5 | 0,78 | 7 | 0,90 | 6 | 0,85 |
| 2 | 4 | 0,70 | 3 | 0,60 | 2 | 0,48 | 1 | 0,30 | 5 | 0,78 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 |
| 3 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 2 | 0,48 | 4 | 0,70 | 4 | 0,70 |
| 4 | 2 | 0,48 | 2 | 0,48 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 |
| 5 | 4 | 0,70 | 3 | 0,60 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 5 | 0,78 |
| 6 | 3 | 0,60 | 3 | 0,60 | 1 | 0,30 | 2 | 0,48 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 |
| 7 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 7 | 0,90 | 4 | 0,70 | 6 | 0,85 |
| 8 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 |
| 9 | 2 | 0,48 | 6 | 0,85 | 7 | 0,90 | 2 | 0,48 | 4 | 0,70 | 7 | 0,90 | 7 | 0,90 | 2 | 0,48 | 7 | 0,90 |
| 10 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 2 | 0,48 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 11 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 1 | 0,30 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 |
| 12 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 13 | 2 | 0,48 | 1 | 0,30 | 5 | 0,78 | 2 | 0,48 | 6 | 0,85 | 1 | 0,30 | 1 | 0,30 | 4 | 0,70 | 7 | 0,90 |
| 14 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 |
| 15 | 3 | 0,60 | 5 | 0,78 | 2 | 0,48 | 7 | 0,90 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 4 | 0,70 |
| Jumlah | 62 | 10,33 | 62 | 10,28 | 69 | 10,79 | 66 | 10,49 | 76 | 11,65 | 60 | 9,96 | 73 | 11,09 | 69 | 11,06 | 77 | 11,69 |
| Rata-Rata | 4,13 | 0,69 | 4,133 | 0,69 | 4,6 | 0,72 | 4,40 | 0,70 | 5,0667 | 0,78 | 4,00 | 0,66 | 4,87 | 0,74 | 4,60 | 0,74 | 5,133 | 0,78 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Rasa Tahu Ulangan III

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 1 | 0,30 | 4 | 0,70 | 5 | 0,78 | 7 | 0,90 | 6 | 0,85 |
| 2 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 |
| 3 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 3 | 0,60 | 4 | 0,70 |
| 4 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 |
| 5 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 |
| 6 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 |
| 7 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 |
| 8 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 |
| 9 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 3 | 0,60 | 5 | 0,78 |
| 10 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 |
| 11 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 12 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 13 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 4 | 0,70 | 5 | 0,78 | 7 | 0,90 | 5 | 0,78 |
| 14 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 |
| 15 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 | 6 | 0,85 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 |
| Jumlah | 75 | 11,61 | 80 | 11,98 | 80 | 11,94 | 83 | 12,20 | 79 | 11,69 | 75 | 11,60 | 81 | 12,01 | 79 | 11,81 | 81 | 12,05 |
| Rata-Rata | 5,00 | 0,77 | 5,333 | 0,80 | 5,333 | 0,80 | 5,53 | 0,81 | 5,2667 | 0,78 | 5,00 | 0,77 | 5,40 | 0,80 | 5,27 | 0,79 | 5,4 | 0,80 |

Tabel Rata-rata Data Asli Uji Hedonik Terhadap Rasa Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 3,2000 | 4,3333 | 3,7333 | 11,2667 | 3,7556 |
| 2 | 4,1333 | 4,1333 | 4,6000 | 12,8667 | 4,2889 |
| 3 | 5,0000 | 5,3333 | 5,3333 | 15,6667 | 5,2222 |
| Sub Total | | 12,3333 | 13,8000 | 13,6667 | 39,8000 | 13,2667 |
| Rata-Rata Sub Total | | 4,1111 | 4,6000 | 4,5556 | 13,2667 | 4,4222 |
| a2 ( 50°C ) | 1 | 3,2000 | 4,2000 | 3,4667 | 10,8667 | 3,6222 |
| 2 | 4,4000 | 5,0667 | 4,0000 | 13,4667 | 4,4889 |
| 3 | 5,5333 | 5,2667 | 5,0000 | 15,8000 | 5,2667 |
| Sub Total | | 13,1333 | 14,5333 | 12,4667 | 40,1333 | 13,3778 |
| Rata-Rata Sub Total | | 4,3778 | 4,8444 | 4,1556 | 13,3778 | 4,4593 |
| a3 ( 70°C ) | 1 | 3,1333 | 4,0667 | 4,1333 | 11,3333 | 3,7778 |
| 2 | 4,8667 | 4,6000 | 5,1333 | 14,6000 | 4,8667 |
| 3 | 5,4000 | 5,2667 | 5,4000 | 16,0667 | 5,3556 |
| Sub Total | | 13,4000 | 13,9333 | 14,6667 | 42,0000 | 14,0000 |
| Rata-Rata Sub Total | | 4,4667 | 4,6444 | 4,8889 | 14,0000 | 4,6667 |
| Total | | 38,8667 | 42,2667 | 40,8000 | 121,9333 | 40,6444 |
| Total Rata-Rata | | 12,9556 | 14,0889 | 13,6000 | 40,6444 | 13,5481 |
| Rata-rata perlakuan | | 4,3185 | 4,6963 | 4,5333 |  |  |

Tabel Rata-rata Data Transformasi Uji Hedonik Terhadap Rasa Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,5891 | 0,6998 | 0,6517 | 1,9405 | 0,6468 |
| 2 | 0,6884 | 0,6852 | 0,7190 | 2,0926 | 0,6975 |
| 3 | 0,7741 | 0,7988 | 0,7960 | 2,3689 | 0,7896 |
| Sub Total | | 2,0515 | 2,1838 | 2,1667 | 6,4020 | 2,1340 |
| Rata-Rata Sub Total | | 0,6838 | 0,7279 | 0,7222 | 2,1340 | 0,7113 |
| a2 ( 50°C ) | 1 | 0,5883 | 0,6878 | 0,6290 | 1,9050 | 0,6350 |
| 2 | 0,6992 | 0,7765 | 0,6637 | 2,1394 | 0,7131 |
| 3 | 0,8133 | 0,7792 | 0,7735 | 2,3660 | 0,7887 |
| Sub Total | | 2,1007 | 2,2435 | 2,0662 | 6,4104 | 2,1368 |
| Rata-Rata Sub Total | | 0,7002 | 0,7478 | 0,6887 | 2,1368 | 0,7123 |
| a3 ( 70°C ) | 1 | 0,5832 | 0,6663 | 0,6795 | 1,9290 | 0,6430 |
| 2 | 0,7395 | 0,7376 | 0,7796 | 2,2567 | 0,7522 |
| 3 | 0,8007 | 0,7876 | 0,8033 | 2,3916 | 0,7972 |
| Sub Total | | 2,1234 | 2,1914 | 2,2623 | 6,5772 | 2,1924 |
| Rata-Rata Sub Total | | 0,7078 | 0,7305 | 0,7541 | 2,1924 | 0,7308 |
| Total | | 6,2757 | 6,6188 | 6,4952 | 19,3896 | 6,4632 |
| Total Rata-Rata | | 2,0919 | 2,2063 | 2,1651 | 6,4632 | 2,1544 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,101648 | 0,050824 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,002170 | 0,001085 | 1,03tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,006710 | 0,003355 | 3,17tn | 3,63 |
| Interaksi AB | 4 | 0,005850 | 0,001462 | 1,38tn | 3,01 |
| Galat | 16 | 0,016909 | 0,001057 |  |  |
| total | 26 | 0,133286 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

**LAMPIRAN 15**

**Perhitungan Statistik Hasil Analisis Organoleptik Terhadap** **Warna**

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Warna Tahu Ulangan I

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 |
| 2 | 5 | 0,78 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 |
| 3 | 5 | 0,78 | 6 | 0,85 | 3 | 0,60 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 | 4 | 0,70 | 3 | 0,60 |
| 4 | 4 | 0,70 | 3 | 0,60 | 5 | 0,78 | 1 | 0,30 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 3 | 0,60 | 6 | 0,85 |
| 5 | 4 | 0,70 | 2 | 0,48 | 6 | 0,85 | 2 | 0,48 | 6 | 0,85 | 2 | 0,48 | 7 | 0,90 | 6 | 0,85 | 2 | 0,48 |
| 6 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 | 5 | 0,78 |
| 7 | 4 | 0,70 | 3 | 0,60 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 | 6 | 0,85 | 2 | 0,48 | 2 | 0,48 | 6 | 0,85 |
| 8 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 2 | 0,48 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 5 | 0,78 | 4 | 0,70 |
| 9 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 10 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 | 4 | 0,70 | 4 | 0,70 | 2 | 0,48 | 6 | 0,85 |
| 11 | 3 | 0,60 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 3 | 0,60 | 6 | 0,85 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 |
| 12 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 13 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 14 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 |
| 15 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 |
| Jumlah | 68 | 10,99 | 66 | 10,63 | 64 | 10,47 | 62 | 10,15 | 61 | 10,24 | 64 | 10,53 | 71 | 11,10 | 61 | 10,27 | 68 | 10,82 |
| Rata-Rata | 4,53 | 0,73 | 4,4 | 0,71 | 4,267 | 0,70 | 4,13 | 0,68 | 4,067 | 0,68 | 4,27 | 0,70 | 4,73 | 0,74 | 4,07 | 0,68 | 4,533 | 0,72 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Warna Tahu Ulangan II

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 4 | 0,70 | 5 | 0,78 | 3 | 0,60 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 |
| 2 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 2 | 0,48 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 3 | 0,60 |
| 3 | 5 | 0,78 | 2 | 0,48 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 2 | 0,48 | 3 | 0,60 | 4 | 0,70 | 1 | 0,30 |
| 4 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 2 | 0,48 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 2 | 0,48 |
| 5 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 3 | 0,60 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 |
| 6 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 7 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 |
| 8 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 |
| 9 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 |
| 10 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 11 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 |
| 12 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 |
| 13 | 4 | 0,70 | 2 | 0,48 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 2 | 0,48 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 |
| 14 | 4 | 0,70 | 7 | 0,90 | 4 | 0,70 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 |
| 15 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| Jumlah | 71 | 11,29 | 73 | 11,30 | 69 | 11,14 | 73 | 11,31 | 73 | 11,29 | 70 | 11,05 | 80 | 11,92 | 83 | 12,14 | 71 | 11,00 |
| Rata-Rata | 4,73 | 0,75 | 4,867 | 0,75 | 4,6 | 0,74 | 4,87 | 0,75 | 4,867 | 0,75 | 4,67 | 0,74 | 5,33 | 0,79 | 5,53 | 0,81 | 4,733 | 0,73 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Warna Tahu Ulangan III

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 |
| 2 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 |
| 3 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 |
| 4 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 3 | 0,60 | 2 | 0,48 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 |
| 5 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 |
| 6 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 3 | 0,60 | 2 | 0,48 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 |
| 7 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 |
| 8 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 |
| 9 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 10 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 11 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 12 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 13 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 7 | 0,90 |
| 14 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 |
| 15 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 |
| Jumlah | 65 | 10,81 | 68 | 11,06 | 69 | 11,13 | 71 | 11,33 | 67 | 10,94 | 68 | 10,91 | 68 | 11,08 | 73 | 11,48 | 75 | 11,59 |
| Rata-Rata | 4,33 | 0,72 | 4,533 | 0,74 | 4,6 | 0,74 | 4,73 | 0,76 | 4,467 | 0,73 | 4,53 | 0,73 | 4,53 | 0,74 | 4,87 | 0,77 | 5 | 0,77 |

Tabel Rata-rata Data Asli Uji Hedonik Terhadap Warna Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 4,5333 | 4,4000 | 4,2667 | 13,2000 | 4,4000 |
| 2 | 4,7333 | 4,8667 | 4,6000 | 14,2000 | 4,7333 |
| 3 | 4,3333 | 4,5333 | 4,6000 | 13,4667 | 4,4889 |
| Sub Total | | 13,6000 | 13,8000 | 13,4667 | 40,8667 | 13,6222 |
| Rata-Rata Sub Total | | 4,5333 | 4,6000 | 4,4889 | 13,6222 | 4,5407 |
| a2 ( 50°C ) | 1 | 4,1333 | 4,0667 | 4,2667 | 12,4667 | 4,1556 |
| 2 | 4,8667 | 4,8667 | 4,6667 | 14,4000 | 4,8000 |
| 3 | 4,7333 | 4,4667 | 4,5333 | 13,7333 | 4,5778 |
| Sub Total | | 13,7333 | 13,4000 | 13,4667 | 40,6000 | 13,5333 |
| Rata-Rata Sub Total | | 4,5778 | 4,4667 | 4,4889 | 13,5333 | 4,5111 |
| a3 ( 70°C ) | 1 | 4,7333 | 4,0667 | 4,5333 | 13,3333 | 4,4444 |
| 2 | 5,3333 | 5,5333 | 4,7333 | 15,6000 | 5,2000 |
| 3 | 4,5333 | 4,8667 | 5,0000 | 14,4000 | 4,8000 |
| Sub Total | | 14,6000 | 14,4667 | 14,2667 | 43,3333 | 14,4444 |
| Rata-Rata Sub Total | | 4,8667 | 4,8222 | 4,7556 | 14,4444 | 4,8148 |
| Total | | 41,9333 | 41,6667 | 41,2000 | 124,8000 | 41,6000 |
| Total Rata-Rata | | 13,9778 | 13,8889 | 13,7333 | 41,6000 | 13,8667 |
| Rata-rata perlakuan | | 4,6593 | 4,6296 | 4,5778 |  |  |

Tabel Rata-rata Data Transformasi Uji Hedonik Terhadap Warna Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,7325 | 0,7087 | 0,6979 | 2,1391 | 0,7130 |
| 2 | 0,7524 | 0,7536 | 0,7428 | 2,2488 | 0,7496 |
| 3 | 0,7206 | 0,7373 | 0,7417 | 2,1996 | 0,7332 |
| Sub Total | | 2,2054 | 2,1997 | 2,1824 | 6,5875 | 2,1958 |
| Rata-Rata Sub Total | | 0,7351 | 0,7332 | 0,7275 | 2,1958 | 0,7319 |
| a2 ( 50°C ) | 1 | 0,6764 | 0,6829 | 0,7021 | 2,0614 | 0,6871 |
| 2 | 0,7539 | 0,7525 | 0,7370 | 2,2433 | 0,7478 |
| 3 | 0,7554 | 0,7291 | 0,7271 | 2,2116 | 0,7372 |
| Sub Total | | 2,1857 | 2,1645 | 2,1662 | 6,5164 | 2,1721 |
| Rata-Rata Sub Total | | 0,7286 | 0,7215 | 0,7221 | 2,1721 | 0,7240 |
| a3 ( 70°C ) | 1 | 0,7397 | 0,6847 | 0,7216 | 2,1460 | 0,7153 |
| 2 | 0,7948 | 0,8096 | 0,7332 | 2,3377 | 0,7792 |
| 3 | 0,7384 | 0,7651 | 0,7727 | 2,2762 | 0,7587 |
| Sub Total | | 2,2729 | 2,2595 | 2,2275 | 6,7599 | 2,2533 |
| Rata-Rata Sub Total | | 0,7576 | 0,7532 | 0,7425 | 2,2533 | 0,7511 |
| Total | | 6,6640 | 6,6236 | 6,5761 | 19,8638 | 6,6213 |
| Total Rata-Rata | | 2,2213 | 2,2079 | 2,1920 | 6,6213 | 2,2071 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,013704 | 0,006852 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,003484 | 0,001742 | 3,52tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,000430 | 0,000215 | 0,43tn | 3,63 |
| Interaksi AB | 4 | 0,000121 | 0,000030 | 0,06tn | 3,01 |
| Galat | 16 | 0,007916 | 0,000495 |  |  |
| total | 26 | 0,025656 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

**LAMPIRAN 16**

**Perhitungan Statistik Hasil Analisis Organoleptik Terhadap** **Aroma**

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Aroma Tahu Ulangan I

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 |
| 2 | 2 | 0,48 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 |
| 3 | 1 | 0,30 | 5 | 0,78 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 |
| 4 | 6 | 0,85 | 2 | 0,48 | 5 | 0,78 | 4 | 0,70 | 2 | 0,48 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 4 | 0,70 |
| 5 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 |
| 6 | 3 | 0,60 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 4 | 0,70 |
| 7 | 2 | 0,48 | 4 | 0,70 | 1 | 0,30 | 5 | 0,78 | 4 | 0,70 | 1 | 0,30 | 6 | 0,85 | 3 | 0,60 | 7 | 0,90 |
| 8 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 2 | 0,48 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 3 | 0,60 |
| 9 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 |
| 10 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 6 | 0,85 | 6 | 0,85 | 2 | 0,48 | 6 | 0,85 | 2 | 0,48 | 5 | 0,78 |
| 11 | 6 | 0,85 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 5 | 0,78 |
| 12 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 2 | 0,48 | 1 | 0,30 | 3 | 0,60 | 6 | 0,85 |
| 13 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 14 | 3 | 0,60 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 |
| 15 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 3 | 0,60 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 |
| Jumlah | 55 | 9,60 | 63 | 10,49 | 63 | 10,34 | 59 | 10,14 | 66 | 10,69 | 56 | 9,71 | 64 | 10,38 | 71 | 11,09 | 70 | 11,03 |
| Rata-Rata | 3,67 | 0,64 | 4,2 | 0,70 | 4,2 | 0,69 | 3,93 | 0,68 | 4,4 | 0,71 | 3,73 | 0,65 | 4,27 | 0,69 | 4,73 | 0,74 | 4,667 | 0,74 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Aroma Tahu Ulangan II

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 6 | 0,85 | 6 | 0,85 | 3 | 0,60 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 4 | 0,70 | 4 | 0,70 |
| 2 | 5 | 0,78 | 2 | 0,48 | 7 | 0,90 | 2 | 0,48 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 |
| 3 | 4 | 0,70 | 2 | 0,48 | 1 | 0,30 | 3 | 0,60 | 2 | 0,48 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 7 | 0,90 |
| 4 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 3 | 0,60 | 4 | 0,70 | 6 | 0,85 | 3 | 0,60 | 2 | 0,48 | 3 | 0,60 |
| 5 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 2 | 0,48 | 4 | 0,70 | 3 | 0,60 | 2 | 0,48 | 6 | 0,85 | 2 | 0,48 |
| 6 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 7 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 5 | 0,78 | 7 | 0,90 | 5 | 0,78 | 4 | 0,70 | 7 | 0,90 | 4 | 0,70 |
| 8 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 |
| 9 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 2 | 0,48 | 6 | 0,85 | 7 | 0,90 | 2 | 0,48 | 7 | 0,90 | 7 | 0,90 |
| 10 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 11 | 2 | 0,48 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 |
| 12 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 |
| 13 | 2 | 0,48 | 2 | 0,48 | 4 | 0,70 | 2 | 0,48 | 6 | 0,85 | 2 | 0,48 | 4 | 0,70 | 2 | 0,48 | 6 | 0,85 |
| 14 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 4 | 0,70 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 |
| 15 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 3 | 0,60 | 2 | 0,48 | 3 | 0,60 |
| Jumlah | 70 | 11,05 | 69 | 10,94 | 74 | 11,27 | 60 | 10,09 | 74 | 11,36 | 73 | 11,30 | 63 | 10,47 | 73 | 11,12 | 70 | 11,05 |
| Rata-Rata | 4,67 | 0,74 | 4,6 | 0,73 | 4,933 | 0,75 | 4,00 | 0,67 | 4,933 | 0,76 | 4,87 | 0,75 | 4,20 | 0,70 | 4,87 | 0,74 | 4,667 | 0,74 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Aroma Tahu Ulangan III

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 |
| 2 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 |
| 3 | 4 | 0,70 | 5 | 0,78 | 3 | 0,60 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 |
| 4 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 | 2 | 0,48 | 5 | 0,78 | 6 | 0,85 | 4 | 0,70 |
| 5 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 3 | 0,60 | 2 | 0,48 | 3 | 0,60 | 3 | 0,60 |
| 6 | 2 | 0,48 | 3 | 0,60 | 4 | 0,70 | 2 | 0,48 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 |
| 7 | 3 | 0,60 | 3 | 0,60 | 2 | 0,48 | 2 | 0,48 | 4 | 0,70 | 3 | 0,60 | 2 | 0,48 | 4 | 0,70 | 3 | 0,60 |
| 8 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 |
| 9 | 3 | 0,60 | 3 | 0,60 | 3 | 0,60 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 |
| 10 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 |
| 11 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 |
| 12 | 4 | 0,70 | 5 | 0,78 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 |
| 13 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 |
| 14 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 |
| 15 | 3 | 0,60 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 2 | 0,48 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 |
| Jumlah | 58 | 10,18 | 61 | 10,46 | 63 | 10,55 | 59 | 10,23 | 61 | 10,43 | 63 | 10,54 | 65 | 10,69 | 72 | 11,33 | 63 | 10,63 |
| Rata-Rata | 3,87 | 0,68 | 4,067 | 0,70 | 4,2 | 0,70 | 3,93 | 0,68 | 4,067 | 0,70 | 4,20 | 0,70 | 4,33 | 0,71 | 4,80 | 0,76 | 4,2 | 0,71 |

Tabel Rata-rata Data Asli Uji Hedonik Terhadap Aroma Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 3,6667 | 4,2000 | 4,2000 | 12,0667 | 4,0222 |
| 2 | 4,6667 | 4,6000 | 4,9333 | 14,2000 | 4,7333 |
| 3 | 3,8667 | 4,0667 | 4,2000 | 12,1333 | 4,0444 |
| Sub Total | | 12,2000 | 12,8667 | 13,3333 | 38,4000 | 12,8000 |
| Rata-Rata Sub Total | | 4,0667 | 4,2889 | 4,4444 | 12,8000 | 4,2667 |
| a2 ( 50°C ) | 1 | 3,9333 | 4,4000 | 3,7333 | 12,0667 | 4,0222 |
| 2 | 4,0000 | 4,9333 | 4,8667 | 13,8000 | 4,6000 |
| 3 | 3,9333 | 4,0667 | 4,2000 | 12,2000 | 4,0667 |
| Sub Total | | 11,8667 | 13,4000 | 12,8000 | 38,0667 | 12,6889 |
| Rata-Rata Sub Total | | 3,9556 | 4,4667 | 4,2667 | 12,6889 | 4,2296 |
| a3 ( 70°C ) | 1 | 4,2667 | 4,7333 | 4,6667 | 13,6667 | 4,5556 |
| 2 | 4,2000 | 4,8667 | 4,6667 | 13,7333 | 4,5778 |
| 3 | 4,3333 | 4,8000 | 4,2000 | 13,3333 | 4,4444 |
| Sub Total | | 12,8000 | 14,4000 | 13,5333 | 40,7333 | 13,5778 |
| Rata-Rata Sub Total | | 4,2667 | 4,8000 | 4,5111 | 13,5778 | 4,5259 |
| Total | | 36,8667 | 40,6667 | 39,6667 | 117,2000 | 39,0667 |
| Total Rata-Rata | | 12,2889 | 13,5556 | 13,2222 | 39,0667 | 13,0222 |
| Rata-rata perlakuan | | 4,0963 | 4,5185 | 4,4074 |  |  |

Tabel Rata-rata Data Transformasi Uji Hedonik Terhadap Aroma Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,6401 | 0,6997 | 0,6894 | 2,0292 | 0,6764 |
| 2 | 0,7370 | 0,7291 | 0,7511 | 2,2171 | 0,7390 |
| 3 | 0,6786 | 0,6975 | 0,7032 | 2,0793 | 0,6931 |
| Sub Total | | 2,0558 | 2,1263 | 2,1436 | 6,3257 | 2,1086 |
| Rata-Rata Sub Total | | 0,6853 | 0,7088 | 0,7145 | 2,1086 | 0,7029 |
| a2 ( 50°C ) | 1 | 0,6762 | 0,7127 | 0,6472 | 2,0361 | 0,6787 |
| 2 | 0,6724 | 0,7575 | 0,7530 | 2,1830 | 0,7277 |
| 3 | 0,6820 | 0,6957 | 0,7028 | 2,0805 | 0,6935 |
| Sub Total | | 2,0306 | 2,1659 | 2,1030 | 6,2995 | 2,0998 |
| Rata-Rata Sub Total | | 0,6769 | 0,7220 | 0,7010 | 2,0998 | 0,6999 |
| a3 ( 70°C ) | 1 | 0,6919 | 0,7391 | 0,7352 | 2,1662 | 0,7221 |
| 2 | 0,6981 | 0,7415 | 0,7368 | 2,1765 | 0,7255 |
| 3 | 0,7127 | 0,7553 | 0,7084 | 2,1764 | 0,7255 |
| Sub Total | | 2,1027 | 2,2359 | 2,1805 | 6,5191 | 2,1730 |
| Rata-Rata Sub Total | | 0,7009 | 0,7453 | 0,7268 | 2,1730 | 0,7243 |
| Total | | 6,1891 | 6,5280 | 6,4272 | 19,1443 | 6,3814 |
| Total Rata-Rata | | 2,0630 | 2,1760 | 2,1424 | 6,3814 | 2,1271 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,006959 | 0,003479 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,003196 | 0,001598 | 2,81tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,006732 | 0,003366 | 5,92\* | 3,63 |
| Interaksi AB | 4 | 0,000750 | 0,000188 | 0,33tn | 3,01 |
| Galat | 16 | 0,009098 | 0,000569 |  |  |
| total | 26 | 0,026734 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Tabel uji jarak berganda Duncan untuk Jumlah Air Ekstraksi (B) | | | | | |  |  |
| SSR 5% | LSR 5% | perlakuan | rata2perlakuan | perlakuan | | | taraf nyata 5% |
| 1 | 2 | 3 |
|  |  | b1 | 2,063029 | - |  |  | a |
| 3,00 | 0,023845 | b3 | 2,142394 | 0,079365\* | - |  | b |
| 3,15 | 0,025038 | b2 | 2,176015 | 0,112986\* | 0,033621\* | - | c |

Keterangan : \* = Berbeda nyata

tn = Tidak Berbeda nyata

**LAMPIRAN 17**

**Perhitungan Statistik Hasil Analisis Organoleptik Terhadap** **Tekstur**

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Tekstur Tahu Ulangan I

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 5 | 0,78 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 |
| 2 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 |
| 3 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 1 | 0,30 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 4 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 3 | 0,60 | 6 | 0,85 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 |
| 5 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 |
| 6 | 4 | 0,70 | 6 | 0,85 | 2 | 0,48 | 7 | 0,90 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 |
| 7 | 6 | 0,85 | 3 | 0,60 | 2 | 0,48 | 5 | 0,78 | 1 | 0,30 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 1 | 0,30 |
| 8 | 3 | 0,60 | 3 | 0,60 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 3 | 0,60 | 3 | 0,60 | 5 | 0,78 | 6 | 0,85 |
| 9 | 1 | 0,30 | 1 | 0,30 | 1 | 0,30 | 4 | 0,70 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 |
| 10 | 2 | 0,48 | 7 | 0,90 | 2 | 0,48 | 6 | 0,85 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 4 | 0,70 |
| 11 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 3 | 0,60 | 2 | 0,48 | 3 | 0,60 | 3 | 0,60 | 6 | 0,85 | 7 | 0,90 |
| 12 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 4 | 0,70 | 2 | 0,48 | 1 | 0,30 | 4 | 0,70 | 6 | 0,85 |
| 13 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 |
| 14 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 2 | 0,48 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 |
| 15 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 |
| Jumlah | 66 | 10,67 | 72 | 11,12 | 60 | 10,02 | 59 | 9,90 | 54 | 9,44 | 57 | 9,82 | 55 | 9,60 | 64 | 10,50 | 67 | 10,58 |
| Rata-Rata | 4,40 | 0,71 | 4,8 | 0,74 | 4 | 0,67 | 3,93 | 0,66 | 3,6 | 0,63 | 3,80 | 0,65 | 3,67 | 0,64 | 4,27 | 0,70 | 4,467 | 0,71 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Tekstur Tahu Ulangan II

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 5 | 0,78 | 7 | 0,90 | 3 | 0,60 | 7 | 0,90 | 4 | 0,70 | 1 | 0,30 | 1 | 0,30 | 7 | 0,90 | 3 | 0,60 |
| 2 | 3 | 0,60 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 |
| 3 | 2 | 0,48 | 3 | 0,60 | 1 | 0,30 | 2 | 0,48 | 2 | 0,48 | 4 | 0,70 | 4 | 0,70 | 7 | 0,90 | 5 | 0,78 |
| 4 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 4 | 0,70 | 6 | 0,85 |
| 5 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 |
| 6 | 4 | 0,70 | 6 | 0,85 | 3 | 0,60 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 | 5 | 0,78 | 3 | 0,60 | 5 | 0,78 |
| 7 | 7 | 0,90 | 4 | 0,70 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 |
| 8 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 9 | 6 | 0,85 | 2 | 0,48 | 6 | 0,85 | 2 | 0,48 | 4 | 0,70 | 7 | 0,90 | 7 | 0,90 | 4 | 0,70 | 7 | 0,90 |
| 10 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 |
| 11 | 7 | 0,90 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 |
| 12 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 13 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 2 | 0,48 | 7 | 0,90 | 4 | 0,70 | 4 | 0,70 |
| 14 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 6 | 0,85 | 7 | 0,90 |
| 15 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 7 | 0,90 | 6 | 0,85 |
| Jumlah | 75 | 11,43 | 72 | 11,26 | 73 | 11,19 | 77 | 11,50 | 74 | 11,44 | 72 | 11,06 | 71 | 11,06 | 74 | 11,42 | 80 | 11,85 |
| Rata-Rata | 5,00 | 0,76 | 4,8 | 0,75 | 4,867 | 0,75 | 5,13 | 0,77 | 4,933 | 0,76 | 4,80 | 0,74 | 4,73 | 0,74 | 4,93 | 0,76 | 5,333 | 0,79 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Tekstur Tahu Ulangan III

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 3 | 0,60 | 4 | 0,70 | 2 | 0,48 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 |
| 2 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 |
| 3 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 |
| 4 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 |
| 5 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 |
| 6 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 |
| 7 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 |
| 8 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 |
| 9 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 |
| 10 | 2 | 0,48 | 3 | 0,60 | 2 | 0,48 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 |
| 11 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 |
| 12 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 |
| 13 | 6 | 0,85 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 | 7 | 0,90 | 6 | 0,85 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 |
| 14 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 |
| 15 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 3 | 0,60 | 5 | 0,78 | 4 | 0,70 |
| Jumlah | 71 | 11,20 | 72 | 11,35 | 71 | 11,10 | 77 | 11,67 | 81 | 11,95 | 81 | 11,93 | 76 | 11,58 | 79 | 11,81 | 83 | 12,14 |
| Rata-Rata | 4,73 | 0,75 | 4,8 | 0,76 | 4,733 | 0,74 | 5,13 | 0,78 | 5,4 | 0,80 | 5,40 | 0,80 | 5,07 | 0,77 | 5,27 | 0,79 | 5,533 | 0,81 |

Tabel Rata-rata Data Asli Uji Hedonik Terhadap Tekstur Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 4,4000 | 4,8000 | 4,0000 | 13,2000 | 4,4000 |
| 2 | 5,0000 | 4,8000 | 4,8667 | 14,6667 | 4,8889 |
| 3 | 4,7333 | 4,8000 | 4,7333 | 14,2667 | 4,7556 |
| Sub Total | | 14,1333 | 14,4000 | 13,6000 | 42,1333 | 14,0444 |
| Rata-Rata Sub Total | | 4,7111 | 4,8000 | 4,5333 | 14,0444 | 4,6815 |
| a2 ( 50°C ) | 1 | 3,9333 | 3,6000 | 3,8000 | 11,3333 | 3,7778 |
| 2 | 5,1333 | 4,9333 | 4,8000 | 14,8667 | 4,9556 |
| 3 | 5,1333 | 5,4000 | 5,4000 | 15,9333 | 5,3111 |
| Sub Total | | 14,2000 | 13,9333 | 14,0000 | 42,1333 | 14,0444 |
| Rata-Rata Sub Total | | 4,7333 | 4,6444 | 4,6667 | 14,0444 | 4,6815 |
| a3 ( 70°C ) | 1 | 3,6667 | 4,2667 | 4,4667 | 12,4000 | 4,1333 |
| 2 | 4,7333 | 4,9333 | 5,3333 | 15,0000 | 5,0000 |
| 3 | 5,0667 | 5,2667 | 5,5333 | 15,8667 | 5,2889 |
| Sub Total | | 13,4667 | 14,4667 | 15,3333 | 43,2667 | 14,4222 |
| Rata-Rata Sub Total | | 4,4889 | 4,8222 | 5,1111 | 14,4222 | 4,8074 |
| Total | | 41,8000 | 42,8000 | 42,9333 | 127,5333 | 42,5111 |
| Total Rata-Rata | | 13,9333 | 14,2667 | 14,3111 | 42,5111 | 14,1704 |
| Rata-rata perlakuan | | 4,6444 | 4,7556 | 4,7704 |  |  |

Tabel Rata-rata Data Transformasi Uji Hedonik Terhadap Tekstur Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,7113 | 0,7415 | 0,6681 | 2,1209 | 0,7070 |
| 2 | 0,7622 | 0,7506 | 0,7460 | 2,2588 | 0,7529 |
| 3 | 0,7469 | 0,7567 | 0,7397 | 2,2433 | 0,7478 |
| Sub Total | | 2,2204 | 2,2488 | 2,1538 | 6,6230 | 2,2077 |
| Rata-Rata Sub Total | | 0,7401 | 0,7496 | 0,7179 | 2,2077 | 0,7359 |
| a2 ( 50°C ) | 1 | 0,6602 | 0,6292 | 0,6546 | 1,9440 | 0,6480 |
| 2 | 0,7669 | 0,7623 | 0,7377 | 2,2669 | 0,7556 |
| 3 | 0,7778 | 0,7965 | 0,7953 | 2,3696 | 0,7899 |
| Sub Total | | 2,2049 | 2,1880 | 2,1875 | 6,5804 | 2,1935 |
| Rata-Rata Sub Total | | 0,7350 | 0,7293 | 0,7292 | 2,1935 | 0,7312 |
| a3 ( 70°C ) | 1 | 0,6401 | 0,6999 | 0,7054 | 2,0454 | 0,6818 |
| 2 | 0,7374 | 0,7614 | 0,7900 | 2,2888 | 0,7629 |
| 3 | 0,7719 | 0,7876 | 0,8090 | 2,3685 | 0,7895 |
| Sub Total | | 2,1495 | 2,2488 | 2,3044 | 6,7028 | 2,2343 |
| Rata-Rata Sub Total | | 0,7165 | 0,7496 | 0,7681 | 2,2343 | 0,7448 |
| Total | | 6,5748 | 6,6857 | 6,6457 | 19,9062 | 6,6354 |
| Total Rata-Rata | | 2,1916 | 2,2286 | 2,2152 | 6,6354 | 2,2118 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,047496 | 0,023748 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,000857 | 0,000429 | 0,61tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,000700 | 0,000350 | 0,50tn | 3,63 |
| Interaksi AB | 4 | 0,005059 | 0,001265 | 1,79tn | 3,01 |
| Galat | 16 | 0,011278 | 0,000705 |  |  |
| total | 26 | 0,065390 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata

**LAMPIRAN 18**

**Perhitungan Statistik Hasil Analisis Organoleptik Terhadap** **Kenampakan**

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Kenampakan Tahu Ulangan I

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 |
| 2 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 | 2 | 0,48 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 |
| 3 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 4 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 |
| 5 | 6 | 0,85 | 2 | 0,48 | 2 | 0,48 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 6 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 2 | 0,48 | 6 | 0,85 | 6 | 0,85 |
| 7 | 1 | 0,30 | 4 | 0,70 | 2 | 0,48 | 5 | 0,78 | 6 | 0,85 | 1 | 0,30 | 7 | 0,90 | 6 | 0,85 | 1 | 0,30 |
| 8 | 4 | 0,70 | 2 | 0,48 | 3 | 0,60 | 3 | 0,60 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 |
| 9 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 3 | 0,60 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 |
| 10 | 2 | 0,48 | 7 | 0,90 | 2 | 0,48 | 2 | 0,48 | 2 | 0,48 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 | 2 | 0,48 |
| 11 | 3 | 0,60 | 6 | 0,85 | 2 | 0,48 | 5 | 0,78 | 7 | 0,90 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 | 7 | 0,90 |
| 12 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 13 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 3 | 0,60 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 4 | 0,70 |
| 14 | 4 | 0,70 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 6 | 0,85 |
| 15 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| Jumlah | 67 | 10,74 | 72 | 11,11 | 62 | 10,23 | 62 | 10,35 | 72 | 11,15 | 70 | 10,83 | 72 | 11,21 | 77 | 11,55 | 67 | 10,54 |
| Rata-Rata | 4,47 | 0,72 | 4,8 | 0,74 | 4,133 | 0,68 | 4,13 | 0,69 | 4,8 | 0,74 | 4,67 | 0,72 | 4,80 | 0,75 | 5,13 | 0,77 | 4,4667 | 0,70 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Kenampakan Tahu Ulangan II

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 1 | 0,30 | 7 | 0,90 | 4 | 0,70 |
| 2 | 1 | 0,30 | 3 | 0,60 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 4 | 0,70 | 4 | 0,70 |
| 3 | 2 | 0,48 | 2 | 0,48 | 1 | 0,30 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 7 | 0,90 | 2 | 0,48 | 1 | 0,30 |
| 4 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 2 | 0,48 | 4 | 0,70 | 4 | 0,70 | 2 | 0,48 |
| 5 | 2 | 0,48 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 | 6 | 0,85 | 2 | 0,48 | 3 | 0,60 | 2 | 0,48 | 7 | 0,90 |
| 6 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 7 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 | 5 | 0,78 | 7 | 0,90 | 7 | 0,90 | 5 | 0,78 |
| 8 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 5 | 0,78 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 |
| 9 | 5 | 0,78 | 2 | 0,48 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 10 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 |
| 11 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 |
| 12 | 6 | 0,85 | 4 | 0,70 | 3 | 0,60 | 3 | 0,60 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 |
| 13 | 5 | 0,78 | 5 | 0,78 | 2 | 0,48 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 |
| 14 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 4 | 0,70 | 7 | 0,90 | 6 | 0,85 | 4 | 0,70 | 7 | 0,90 | 6 | 0,85 |
| 15 | 7 | 0,90 | 7 | 0,90 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| Jumlah | 76 | 11,26 | 77 | 11,49 | 71 | 11,00 | 75 | 11,49 | 86 | 12,34 | 75 | 11,40 | 70 | 10,93 | 73 | 11,21 | 68 | 10,77 |
| Rata-Rata | 5,07 | 0,75 | 5,1333 | 0,77 | 4,733 | 0,73 | 5,00 | 0,77 | 5,733 | 0,82 | 5,00 | 0,76 | 4,67 | 0,73 | 4,87 | 0,75 | 4,5333 | 0,72 |

Tabel Data Asli dan Data Transformasi Hasil Perhitungan Terhadap Kenampakan Tahu Ulangan III

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Panelis | Perlakuan | | | | | | | | | | | | | | | | | |
| a1b1 | | a1b2 | | a1b3 | | a2b1 | | a2b2 | | a2b3 | | a3b1 | | a3b2 | | a3b3 | |
| DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT | DA | DT |
| 1 | 3 | 0,60 | 5 | 0,78 | 6 | 0,85 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 |
| 2 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 |
| 3 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 |
| 4 | 6 | 0,85 | 5 | 0,78 | 7 | 0,90 | 4 | 0,70 | 5 | 0,78 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 |
| 5 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 3 | 0,60 | 4 | 0,70 |
| 6 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 6 | 0,85 |
| 7 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 |
| 8 | 4 | 0,70 | 4 | 0,70 | 3 | 0,60 | 6 | 0,85 | 3 | 0,60 | 4 | 0,70 | 5 | 0,78 | 2 | 0,48 | 2 | 0,48 |
| 9 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 5 | 0,78 |
| 10 | 4 | 0,70 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 | 4 | 0,70 | 4 | 0,70 | 5 | 0,78 | 5 | 0,78 |
| 11 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 | 7 | 0,90 |
| 12 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 7 | 0,90 | 7 | 0,90 | 6 | 0,85 | 7 | 0,90 | 6 | 0,85 |
| 13 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 7 | 0,90 | 5 | 0,78 | 7 | 0,90 | 6 | 0,85 | 6 | 0,85 | 6 | 0,85 |
| 14 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 5 | 0,78 | 6 | 0,85 | 5 | 0,78 | 6 | 0,85 |
| 15 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 | 5 | 0,78 | 4 | 0,70 | 6 | 0,85 | 6 | 0,85 | 5 | 0,78 | 4 | 0,70 |
| Jumlah | 78 | 11,75 | 75 | 11,59 | 77 | 11,68 | 83 | 12,14 | 79 | 11,84 | 82 | 12,04 | 86 | 12,34 | 82 | 11,96 | 80 | 11,87 |
| Rata-Rata | 5,20 | 0,78 | 5 | 0,77 | 5,133 | 0,78 | 5,53 | 0,81 | 5,267 | 0,79 | 5,47 | 0,80 | 5,73 | 0,82 | 5,47 | 0,80 | 5,3333 | 0,79 |

Tabel Rata-rata Data Asli Uji Hedonik Terhadap Kenampakan Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 4,4667 | 4,8000 | 4,1333 | 13,4000 | 4,4667 |
| 2 | 5,0667 | 5,1333 | 4,7333 | 14,9333 | 4,9778 |
| 3 | 5,2000 | 5,0000 | 5,1333 | 15,3333 | 5,1111 |
| Sub Total | | 14,7333 | 14,9333 | 14,0000 | 43,6667 | 14,5556 |
| Rata-Rata Sub Total | | 4,9111 | 4,9778 | 4,6667 | 14,5556 | 4,8519 |
| a2 ( 50°C ) | 1 | 4,1333 | 4,8000 | 4,6667 | 13,6000 | 4,5333 |
| 2 | 5,0000 | 5,7333 | 5,0000 | 15,7333 | 5,2444 |
| 3 | 5,5333 | 5,2667 | 5,4667 | 16,2667 | 5,4222 |
| Sub Total | | 14,6667 | 15,8000 | 15,1333 | 45,6000 | 15,2000 |
| Rata-Rata Sub Total | | 4,8889 | 5,2667 | 5,0444 | 15,2000 | 5,0667 |
| a3 ( 70°C ) | 1 | 4,8000 | 5,1333 | 4,4667 | 14,4000 | 4,8000 |
| 2 | 4,6667 | 4,8667 | 4,5333 | 14,0667 | 4,6889 |
| 3 | 5,7333 | 5,4667 | 5,3333 | 16,5333 | 5,5111 |
| Sub Total | | 15,2000 | 15,4667 | 14,3333 | 45,0000 | 15,0000 |
| Rata-Rata Sub Total | | 5,0667 | 5,1556 | 4,7778 | 15,0000 | 5,0000 |
| Total | | 44,6000 | 46,2000 | 43,4667 | 134,2667 | 44,7556 |
| Total Rata-Rata | | 14,8667 | 15,4000 | 14,4889 | 44,7556 | 14,9185 |
| Rata-rata perlakuan | | 4,9556 | 5,1333 | 4,8296 |  |  |

Tabel Rata-rata Data Transformasi Uji Hedonik Terhadap Kenampakan Tahu dengan menggunakan metode Rancangan Acak Kelompok 3 x 3 dengan 3 kali ulangan

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Suhu Air Ekstraksi | Kelompok | Jumlah Air Ekstraksi | | | Total | Rata-Rata |
| b1 ( 1 : 5 ) | b2 ( 1 : 7 ) | b3( 1 : 9 ) |
| a1 ( 30°C ) | 1 | 0,7157 | 0,7405 | 0,6817 | 2,1379 | 0,7126 |
| 2 | 0,7507 | 0,7663 | 0,7332 | 2,2502 | 0,7501 |
| 3 | 0,7835 | 0,7729 | 0,7790 | 2,3353 | 0,7784 |
| Sub Total | | 2,2499 | 2,2797 | 2,1939 | 6,7234 | 2,2411 |
| Rata-Rata Sub Total | | 0,7500 | 0,7599 | 0,7313 | 2,2411 | 0,7470 |
| a2 ( 50°C ) | 1 | 0,6900 | 0,7435 | 0,7221 | 2,1556 | 0,7185 |
| 2 | 0,7661 | 0,8224 | 0,7600 | 2,3484 | 0,7828 |
| 3 | 0,8096 | 0,7892 | 0,8029 | 2,4017 | 0,8006 |
| Sub Total | | 2,2657 | 2,3551 | 2,2850 | 6,9058 | 2,3019 |
| Rata-Rata Sub Total | | 0,7552 | 0,7850 | 0,7617 | 2,3019 | 0,7673 |
| a3 ( 70°C ) | 1 | 0,7475 | 0,7701 | 0,7028 | 2,2204 | 0,7401 |
| 2 | 0,7290 | 0,7472 | 0,7182 | 2,1943 | 0,7314 |
| 3 | 0,8224 | 0,7975 | 0,7916 | 2,4115 | 0,8038 |
| Sub Total | | 2,2989 | 2,3148 | 2,2126 | 6,8263 | 2,2754 |
| Rata-Rata Sub Total | | 0,7663 | 0,7716 | 0,7375 | 2,2754 | 0,7585 |
| Total | | 6,8145 | 6,9496 | 6,6914 | 20,4555 | 6,8185 |
| Total Rata-Rata | | 2,2715 | 2,3165 | 2,2305 | 6,8185 | 2,2728 |















Tabel Analisis Variansi (ANAVA)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| sumber keragaman | db | JK | KT | F Hitung | F Tabel 5% |
| Kelompok | 2 | 0,022477 | 0,011238 |  |  |
| Perlakuan | 8 |  |  |  |  |
| Suhu Air Ekstraksi (A) | 2 | 0,001857 | 0,000929 | 1,56tn | 3,63 |
| Jumlah Air Ekstraksi (B) | 2 | 0,003705 | 0,001852 | 3,11tn | 3,63 |
| Interaksi AB | 4 | 0,001053 | 0,000263 | 0,44tn | 3,01 |
| Galat | 16 | 0,009541 | 0,000596 |  |  |
| total | 26 | 0,038633 |  |  |  |

Keterangan : \* = Berpengaruh nyata

tn = Tidak Berpengaruh nyata