

## V. SIMPULAN DAN SARAN

### A. SIMPULAN

Berdasarkan penelitian yang telah dilakukan, diperoleh simpulan sebagai berikut:

1. Konsentrasi substitusi tepung umbi talas dan ekstrak ceker ayam yang paling baik dalam pembuatan mie basah yaitu pada perlakuan C (70:30:20).
2. Substitusi tepung umbi talas dan ekstrak ceker ayam berpengaruh nyata terhadap kualitas kimia yang berupa kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar serat tidak larut, dan kadar serat larut, kualitas fisika yang berupa daya serap air dan *cooking loss*, kualitas mikrobiologi yang berupa angka lempeng total (ALT), serta kualitas organoleptik yang berupa warna, aroma, rasa, dan tekstur mie basah. Substitusi tepung umbi talas dan ekstrak ceker ayam tidak berpengaruh nyata terhadap kualitas fisika yang berupa *tensile strength* dan kualitas mikrobiologi yang berupa angka kapang khamir (AKK) mie basah.

### B. SARAN

Berdasarkan penelitian yang telah dilakukan, dapat disarankan hal-hal sebagai berikut:

1. Perlu dilakukan perlakuan perendaman umbi talas dengan bawang putih agar aroma khas umbi talas dapat diminimalisir.

2. Perlu dilakukan penelitian lebih lanjut terkait kekenyalan berupa uji tekstur dari mie basah, sehingga data yang diperoleh dari uji fisika lebih lengkap.



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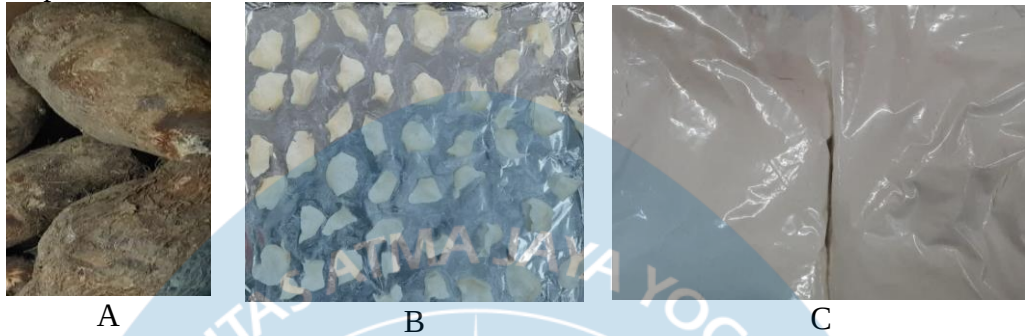
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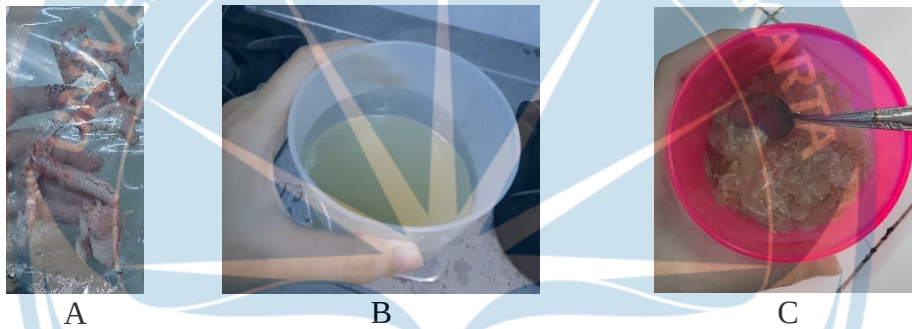
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## LAMPIRAN

### Lampiran 1. Dokumentasi Foto



Gambar 2. (A) Umbi Talas, (B) *Chips* Umbi Talas, dan (C) Tepung Umbi Talas



Gambar 3. (A) Ceker Ayam, (B) Ekstrak Ceker Ayam, dan (C) Ekstrak Ceker Ayam setelah Dikeringkan dengan Oven

### Uji Kimia



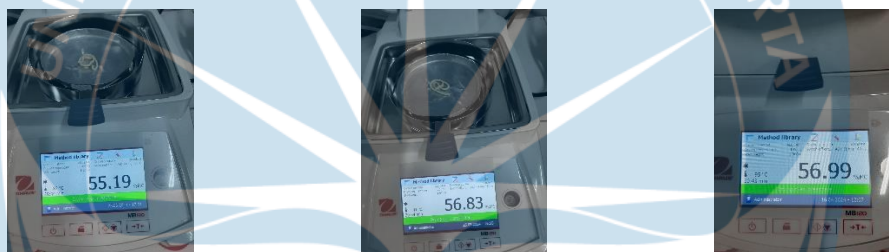
Gambar 4. Kadar Air Tepung Umbi Talas



Gambar 5. Kadar Air Ekstrak Ceker Ayam



Gambar 6. Kadar Air Mie Basah Perlakuan K



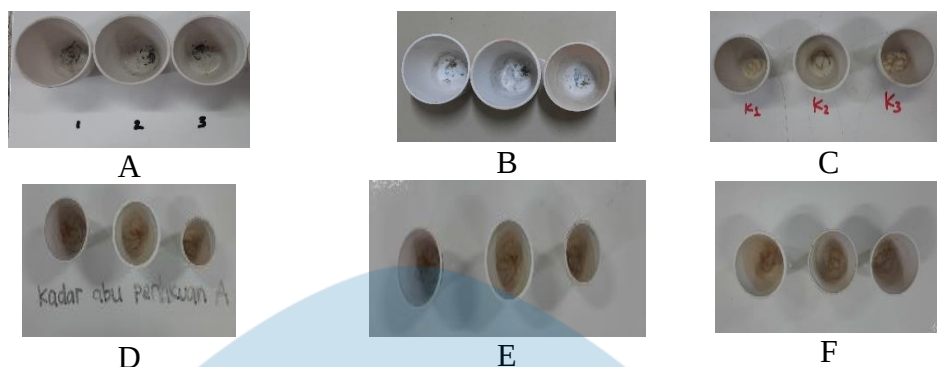
Gambar 7. Kadar Air Mie Basah Perlakuan A



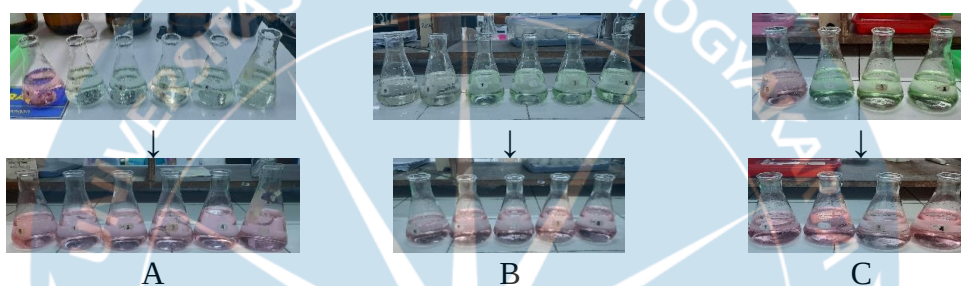
Gambar 8. Kadar Air Mie Basah Perlakuan B



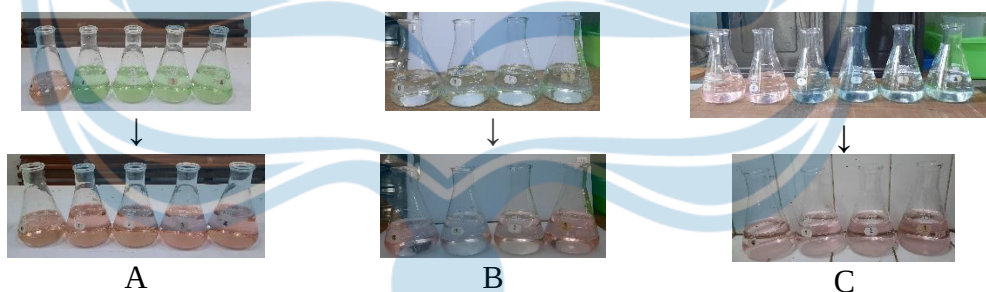
Gambar 9. Kadar Air Mie Basah Perlakuan C



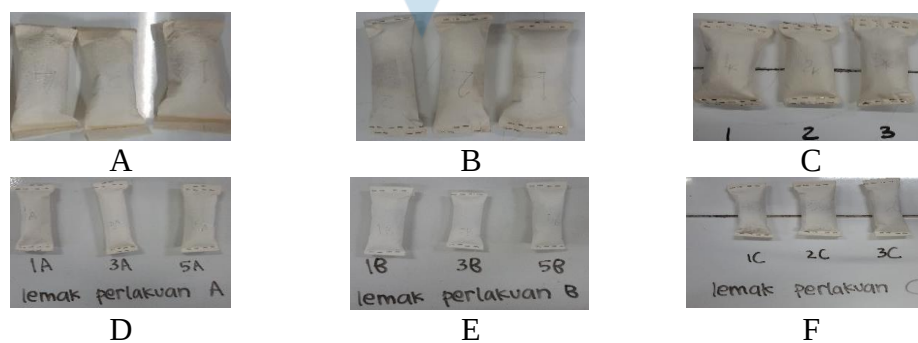
Gambar 10. Kadar Abu (A) Tepung Umbi Talas, (B) Ekstrak Ceker Ayam, (C) Perlakuan K, (D) Perlakuan A, (E) Perlakuan B, (F) Perlakuan C



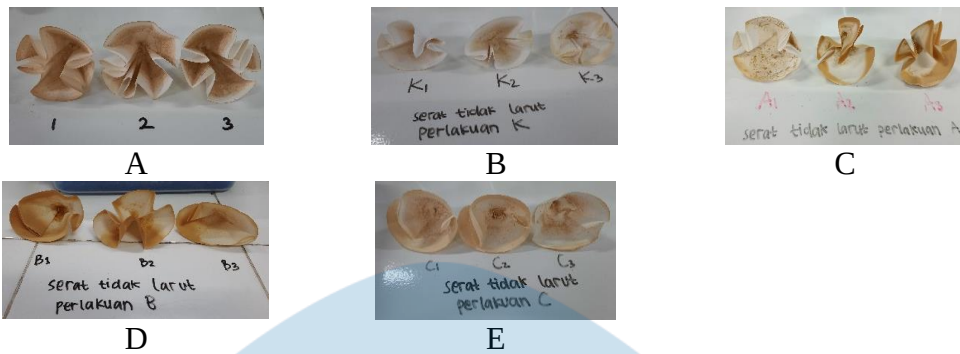
Gambar 11. Kadar Protein Sebelum dan Sesudah Destilasi-Titrasi (A) Tepung Umbi Talas, (B) Ekstrak Ceker Ayam, (C) Perlakuan K



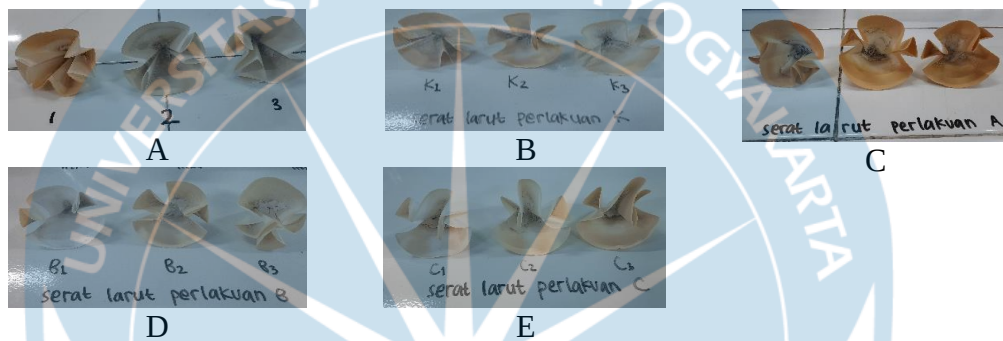
Gambar 12. Kadar Protein Sebelum dan Sesudah Destilasi-Titrasi (A) Perlakuan A, (B) Perlakuan B, (C) Perlakuan C



Gambar 13. Kadar Lemak (A) Tepung Umbi Talas, (B) Ekstrak Ceker Ayam, (C) Perlakuan K, (D) Perlakuan A, (E) Perlakuan B, (F) Perlakuan C

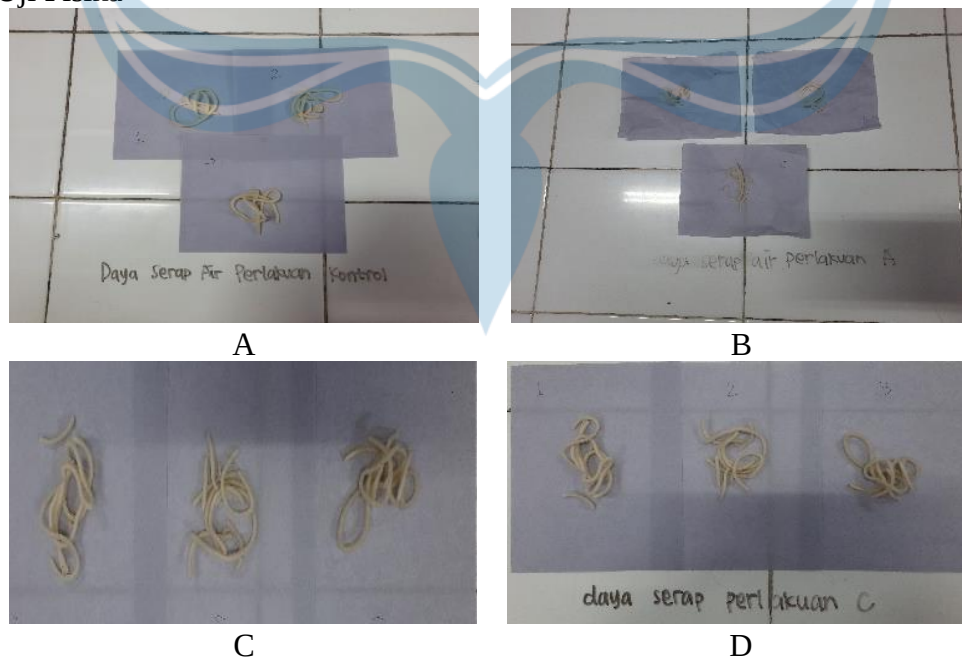


Gambar 14. Kadar Serat Tidak Larut (A) Tepung Umbi Talas, (B) Perlakuan K, (C) Perlakuan A, (D) Perlakuan B, (E) Perlakuan C

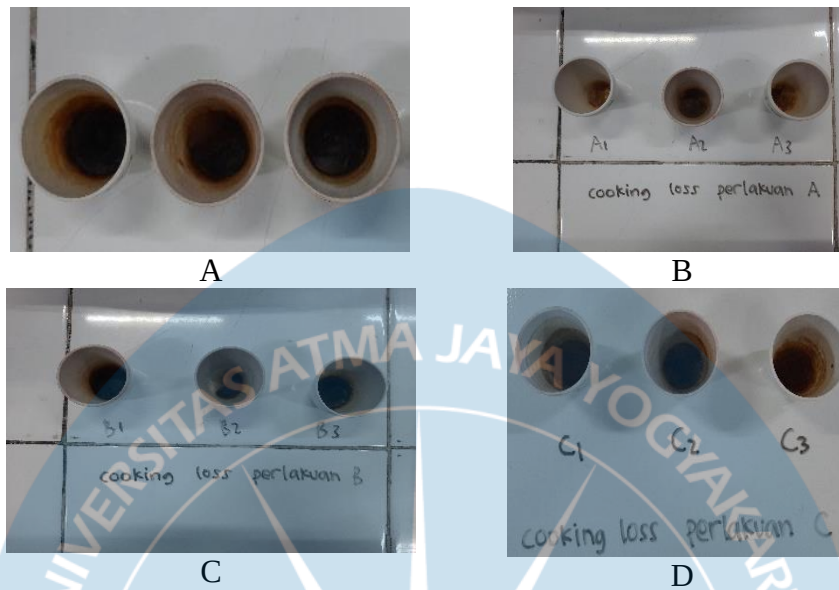


Gambar 15. Kadar Serat Tidak Larut (A) Tepung Umbi Talas, (B) Perlakuan K, (C) Perlakuan A, (D) Perlakuan B, (E) Perlakuan C

### Uji Fisika



Gambar 16. Analisis Daya Serap Air (A) Perlakuan K, (B) Perlakuan A, (C) Perlakuan B, (D) Perlakuan C



Gambar 17. Analisis *Cooking Loss* (A) Perlakuan K, (B) Perlakuan A, (C) Perlakuan B, (D) Perlakuan C

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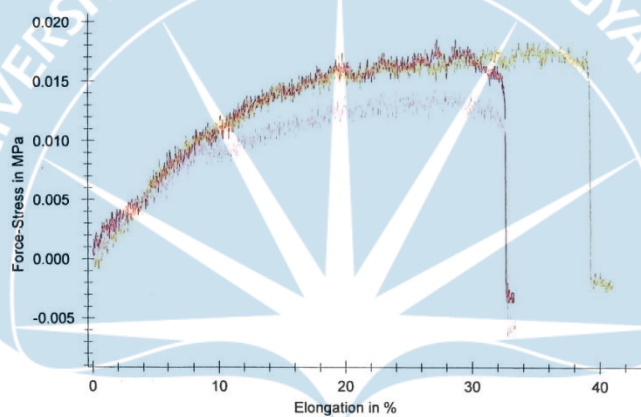
**Parameter table:**

Company name:                      Test standard : Tensile strength  
Customer : Helena                      Material : K  
Tester : Rachmat  
Test speed: 10 mm/min

**Results:**

| Nr | Diameter d0<br>mm | Lc<br>mm | FMax<br>N | Tensile Strength<br>MPa | Strain at Fmax.<br>% |
|----|-------------------|----------|-----------|-------------------------|----------------------|
| 1  | 2                 | 50       | 0.0582    | 0.0185                  | 27.2128              |
| 2  | 2                 | 50       | 0.0573    | 0.0182                  | 33.6676              |
| 3  | 2                 | 50       | 0.0449    | 0.0143                  | 23.9127              |

**Series graphics:**



**Statistics:**

| Series<br>n = 3 | Diameter d0<br>mm | Lc<br>mm | FMax<br>N | Tensile Strength<br>MPa | Strain at Fmax.<br>% |
|-----------------|-------------------|----------|-----------|-------------------------|----------------------|
| $\bar{x}$       | 2                 | 50       | 0.0535    | 0.0170                  | 28.2644              |
| s               | 0.000             | 0.000    | 0.0074    | 0.0024                  | 4.9617               |
| v               | 0.00              | 0.00     | 13.82     | 13.82                   | 17.55                |

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Gambar 18. Uji *Tensile Strength* Kontrol

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**Parameter table:**

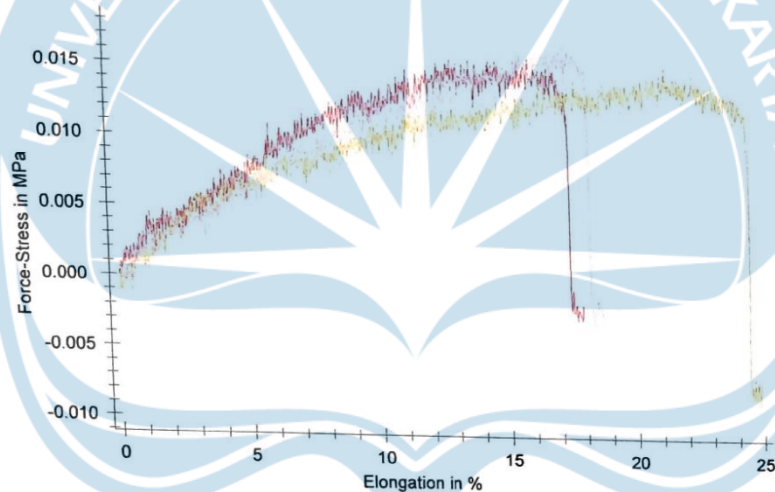
Company name :  
Customer : Helena  
Tester : Rachmat  
Test speed : 10 mm/min

Test standard : Tensile strength  
Material : A

**Results:**

| Nr | Diameter d0<br>mm | Lc<br>mm | FMax<br>N | Tensile Strength<br>MPa | Strain at Fmax.<br>% |
|----|-------------------|----------|-----------|-------------------------|----------------------|
| 1  | 2                 | 50       | 0.0511    | 0.0163                  | 15.7787              |
| 2  | 2                 | 50       | 0.0502    | 0.0160                  | 21.1283              |
| 3  | 2                 | 50       | 0.0537    | 0.0171                  | 17.0098              |

**Series graphics:**



**Statistics:**

| Series<br>n = 3 | Diameter d0<br>mm | Lc<br>mm | FMax<br>N | Tensile Strength<br>MPa | Strain at Fmax.<br>% |
|-----------------|-------------------|----------|-----------|-------------------------|----------------------|
| x               | 2                 | 50       | 0.0517    | 0.0165                  | 17.9723              |
| s               | 0.000             | 0.000    | 0.0018    | 0.0006                  | 2.8016               |
| v               | 0.00              | 0.00     | 3.55      | 3.55                    | 15.59                |

Gambar 19. Uji Tensile Strength Perlakuan A

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**Parameter table:**

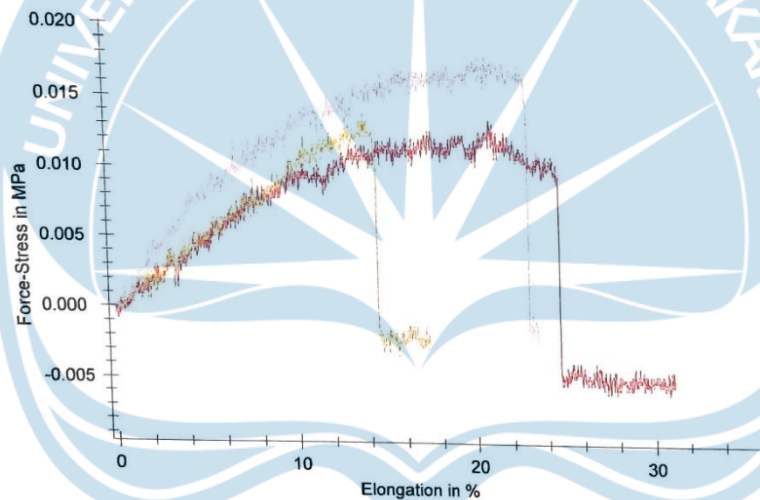
Company name:  
Customer : Helena  
Tester : Rachmat  
Test speed: 10 mm/min

Test standard : Tensile strength  
Material : B

**Results:**

| Nr | Diameter d0<br>mm | Lc<br>mm | FMax<br>N | Tensile Strength<br>MPa | Strain at Fmax.<br>% |
|----|-------------------|----------|-----------|-------------------------|----------------------|
| 1  | 2                 | 50       | 0.0432    | 0.0137                  | 20.8061              |
| 2  | 2                 | 50       | 0.0441    | 0.0140                  | 13.7854              |
| 3  | 2                 | 50       | 0.0582    | 0.0185                  | 20.6362              |

**Series graphics:**



**Statistics:**

| Series<br>n = 3 | Diameter d0<br>mm | Lc<br>mm | FMax<br>N | Tensile Strength<br>MPa | Strain at Fmax.<br>% |
|-----------------|-------------------|----------|-----------|-------------------------|----------------------|
| x               | 2                 | 50       | 0.0485    | 0.0154                  | 18.4092              |
| s               | 0.000             | 0.000    | 0.0084    | 0.0027                  | 4.0053               |
| v               | 0.00              | 0.00     | 17.34     | 17.34                   | 21.76                |

Gambar 20. Uji Tensile Strength Perlakuan B

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**Parameter table:**

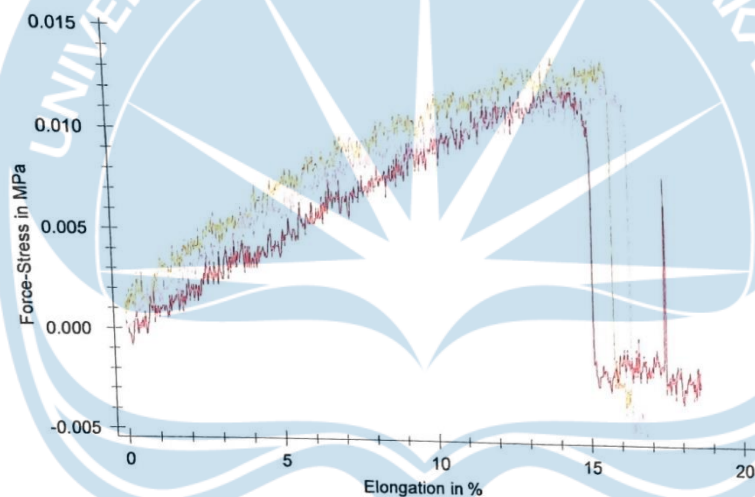
Company name :  
Customer : Helena  
Tester : Rachmat  
Test speed: 10 mm/min

Test standard : Tensile strength  
Material : C

**Results:**

| Nr | Diameter d0<br>mm | Lc<br>mm | FMax<br>N | Tensile Strength<br>MPa | Strain at Fmax.<br>% |
|----|-------------------|----------|-----------|-------------------------|----------------------|
| 1  | 2                 | 50       | 0.0396    | 0.0126                  | 13.7573              |
| 2  | 2                 | 50       | 0.0441    | 0.0140                  | 13.8810              |
| 3  | 2                 | 50       | 0.0414    | 0.0132                  | 15.4425              |

**Series graphics:**

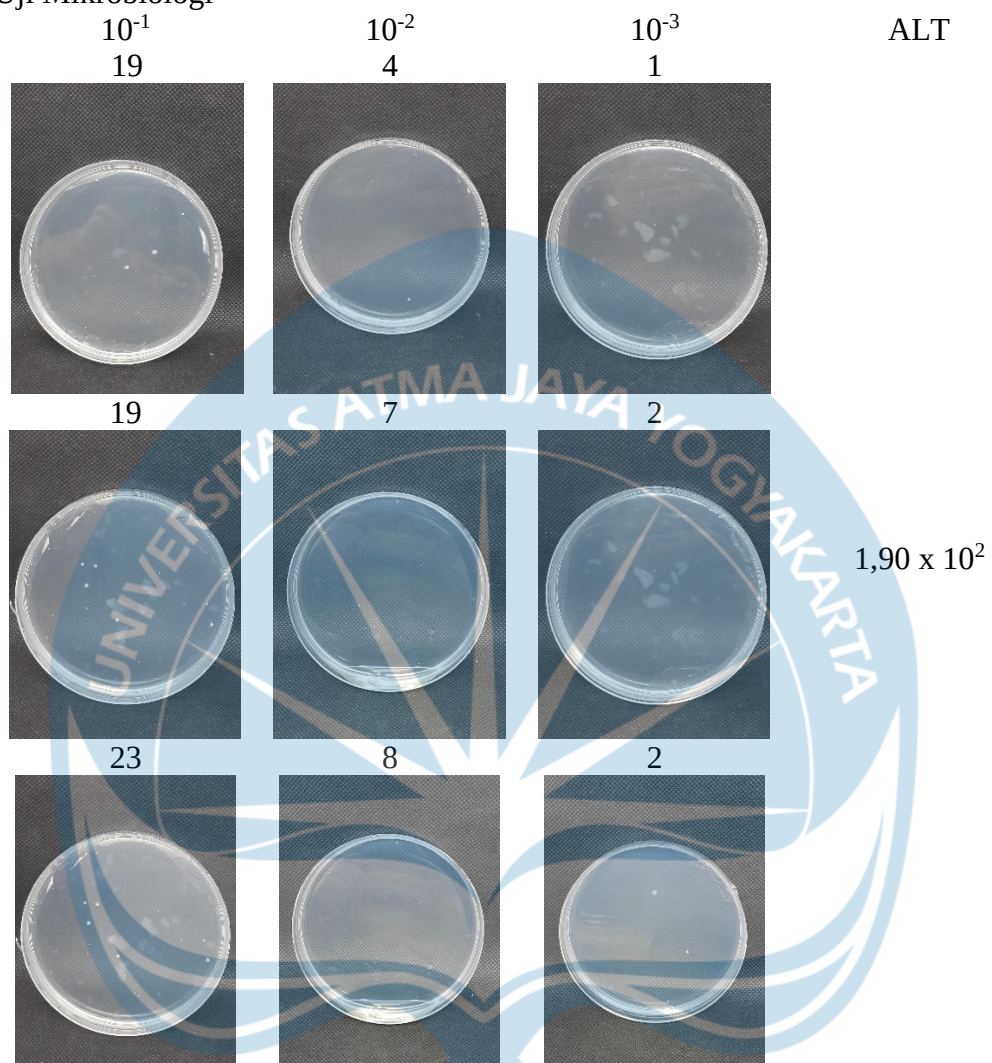


**Statistics:**

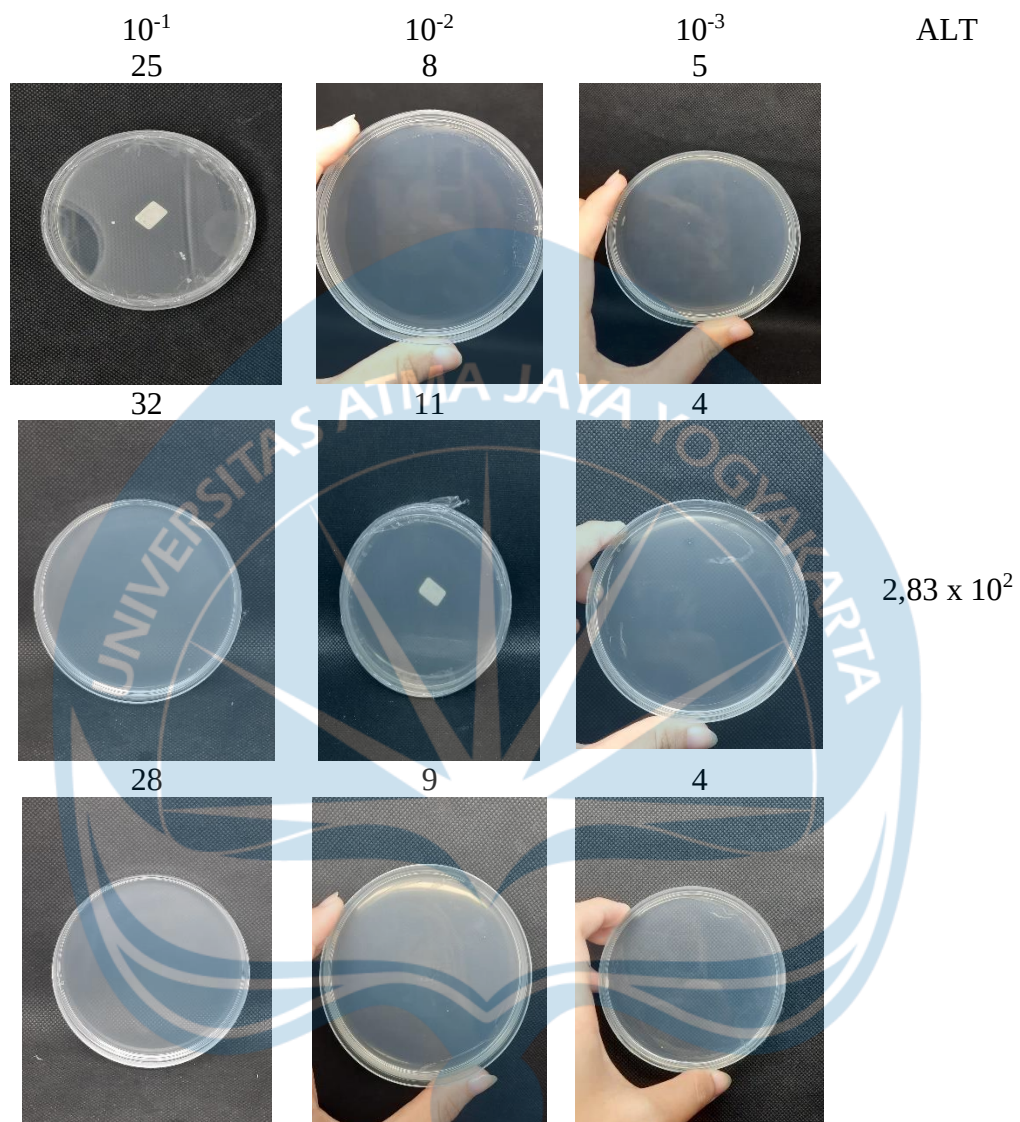
| Series<br>n = 3 | Diameter d0<br>mm | Lc<br>mm | FMax<br>N | Tensile Strength<br>MPa | Strain at Fmax.<br>% |
|-----------------|-------------------|----------|-----------|-------------------------|----------------------|
| x               | 2                 | 50       | 0.0417    | 0.0133                  | 14.3603              |
| s               | 0.000             | 0.000    | 0.0022    | 0.0007                  | 0.9393               |
| v               | 0.00              | 0.00     | 5.32      | 5.32                    | 6.54                 |

Gambar 21. Uji *Tensile Strength* Perlakuan C

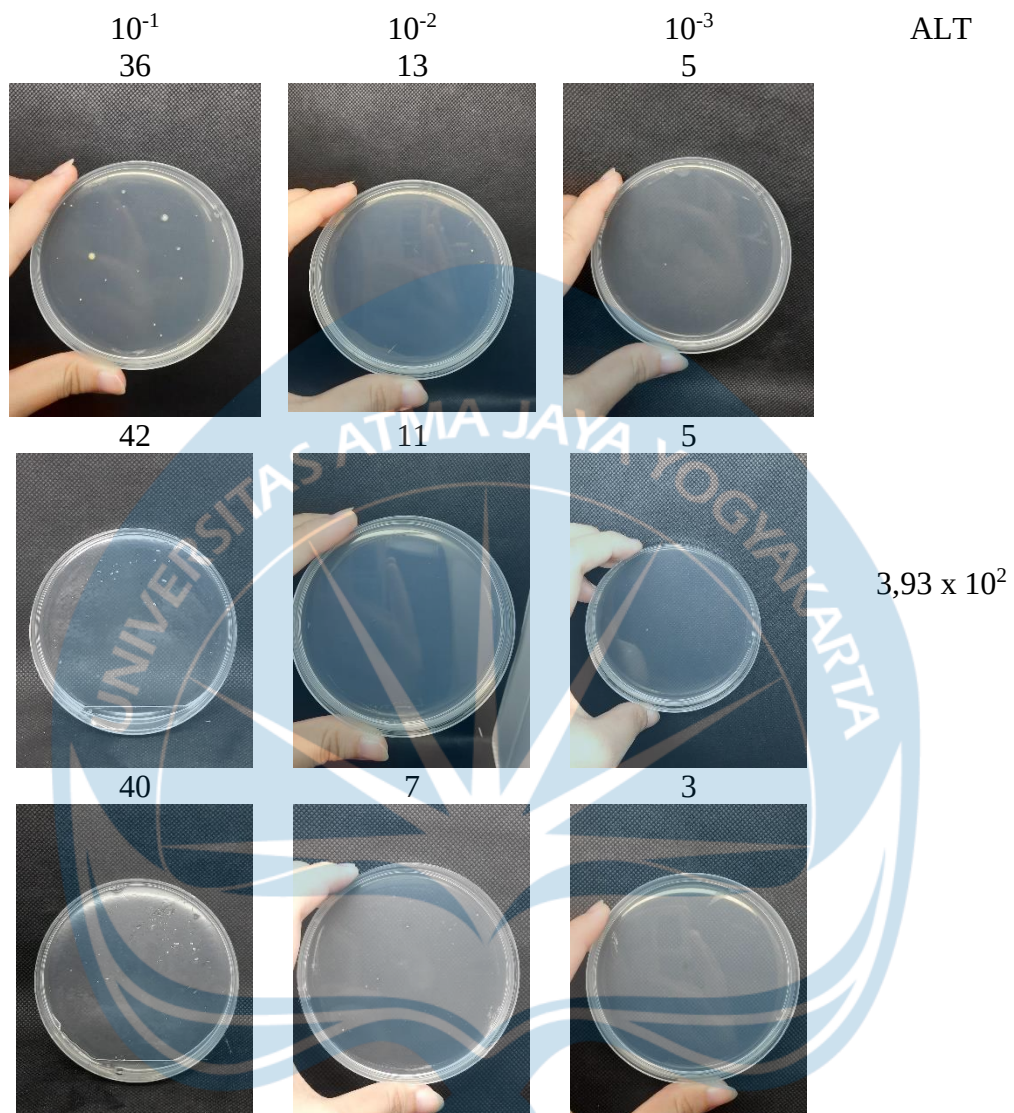
## Uji Mikrobiologi



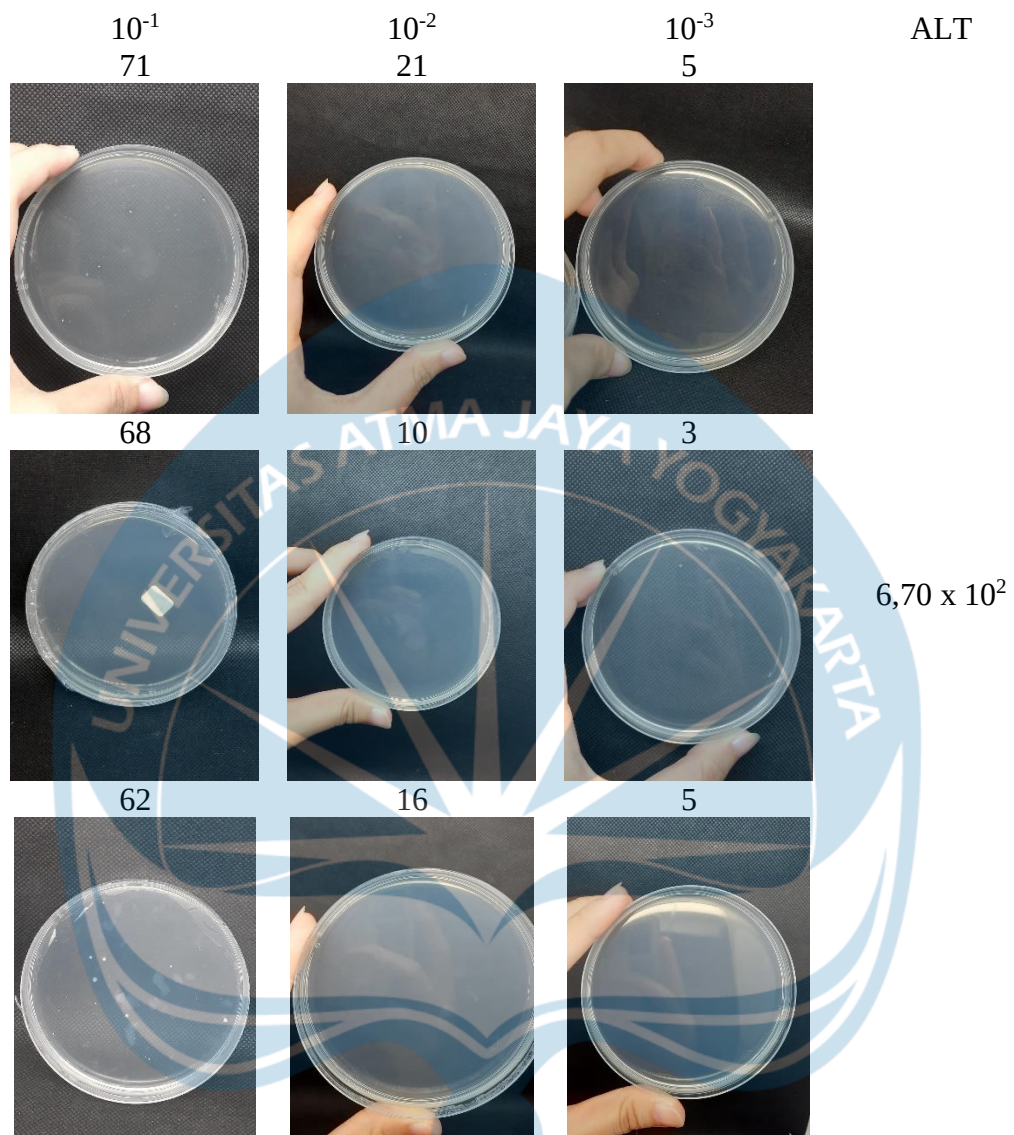
Gambar 22. Hasil Pengamatan ALT 48 Jam Sampel Mie Basah Kontrol



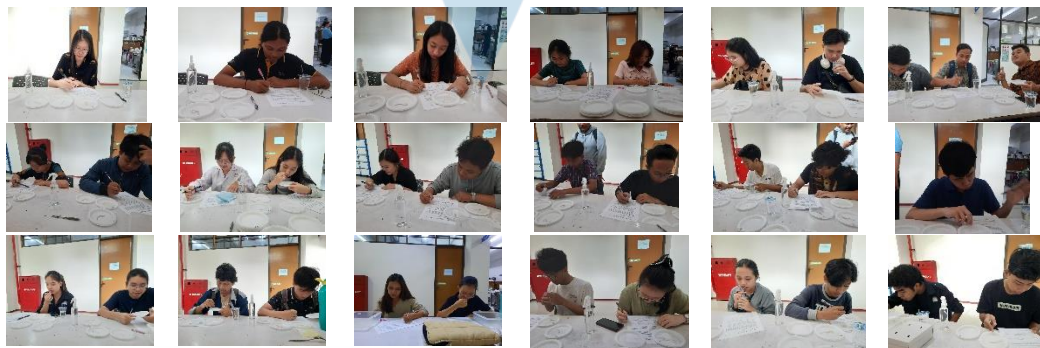
Gambar 23. Hasil Pengamatan ALT 48 Jam Sampel Mie Basah Perlakuan A



Gambar 24. Hasil Pengamatan ALT 48 Jam Sampel Mie Basah Perlakuan B



Gambar 25. Hasil Pengamatan ALT 48 Jam Sampel Mie Basah Perlakuan C



Gambar 26. Uji Organoleptik

## Lampiran 2. Lampiran Tabel

Tabel 21. Syarat Mutu Tepung Gandum Menurut SNI 3751:2009.

| Jenis Uji                                                                                                  | Satuan                                    | Persyaratan                                                                         |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------|
| Keadaan:<br>a. Bentuk<br>b. Bau<br>c. Warna                                                                | -<br>-<br>-                               | serbuk<br>normal (bebas dari bau asing)<br>putih, khas terigu                       |
| Benda asing                                                                                                | -                                         | tidak ada                                                                           |
| Serangga dalam semua bentuk stadia dan potongan-potongannya yang tampak                                    | -                                         | tidak ada                                                                           |
| Kehalusan, lolos ayakan 212 $\mu\text{m}$ (mesh No. 70) (b/b)                                              | %                                         | min. 95                                                                             |
| Kadar air (b/b)                                                                                            | %                                         | maks. 14,5                                                                          |
| Kadar abu (b/b)                                                                                            | %                                         | maks. 0,70                                                                          |
| Kadar protein (b/b)                                                                                        | %                                         | min. 7,0                                                                            |
| Keasaman                                                                                                   | mg KOH/100 g                              | maks. 50                                                                            |
| <i>Falling number</i> (atas dasar kadar air 14 %)                                                          | detik                                     | min. 300                                                                            |
| Besi (Fe)                                                                                                  | mg/kg                                     | min. 50                                                                             |
| Seng (Zn)                                                                                                  | mg/kg                                     | min. 30                                                                             |
| Vitamin B1 (tiamin)                                                                                        | mg/kg                                     | min. 2,5                                                                            |
| Vitamin B2 (riboflavin)                                                                                    | mg/kg                                     | min. 4                                                                              |
| Asam folat                                                                                                 | mg/kg                                     | min. 2                                                                              |
| Cemaran logam :<br>a. Timbal (Pb)<br>b. Raksa (Hg)<br>c. Kadmium (Cd)                                      | mg/kg<br>mg/kg<br>mg/kg                   | maks. 1,0<br>maks. 0,05<br>maks. 0,1                                                |
| Cemaran Arsen                                                                                              | mg/kg                                     | maks. 0,50                                                                          |
| Cemaran mikroba :<br>a. Angka lempeng total<br>b. <i>E. coli</i><br>c. Kapang<br>d. <i>Bacillus cereus</i> | koloni/g<br>APM/g<br>koloni/g<br>koloni/g | maks. $1 \times 10^6$<br>maks. 10<br>maks. $1 \times 10^4$<br>maks. $1 \times 10^4$ |

(Sumber : Badan Standardisasi Nasional, 2009)

Tabel 22. Syarat Mutu Mie Basah Menurut SNI 01-2987-1992.

| No. | Kriteria Uji                                        | Satuan   | Persyaratan                                                                  |
|-----|-----------------------------------------------------|----------|------------------------------------------------------------------------------|
| 1   | Keadaan:                                            |          |                                                                              |
|     | 1.1. Bau                                            |          | normal                                                                       |
|     | 1.2. Rasa                                           |          | normal                                                                       |
|     | 1.3. Warna                                          |          | normal                                                                       |
| 2   | Air                                                 | % , b/b  | 20-35                                                                        |
| 3   | Abu (dihitung atas dasar bahan kering)              | % , b/b  | maks. 3                                                                      |
|     | Protein (N x 6,25) dihitung atas dasar bahan kering | % , b/b  | min. 8                                                                       |
|     | Bahan tambahan makanan                              |          |                                                                              |
|     | 5.1. Boraks dan asam borat                          |          | tidak boleh ada                                                              |
|     | 5.2. Pewarna                                        |          | Sesuai SNI<br>0222 - - M<br>No. ____ /<br>722/MEN.KES/PER/IX/88<br>Revisinya |
|     | 5.3. Formalin                                       |          | tidak boleh ada *                                                            |
| 6   | Cemaran logam:                                      |          |                                                                              |
|     | 6.1. Timbal (Pb)                                    | mg/kg    | maks. 1,0                                                                    |
|     | 6.2. Tembaga (Cu)                                   | mg/kg    | maks. 10,0                                                                   |
|     | 6.3. Seng (Zn)                                      | mg/kg    | maks. 40,0                                                                   |
|     | 6.4. Raksa (Hg)                                     | mg/kg    | maks. 0,05                                                                   |
| 7   | Arsen (As)                                          | mg/kg    | maks. 0,5                                                                    |
| 8   | Cemaran mikroba:                                    |          |                                                                              |
|     | 8.1. Angka lempeng total                            | koloni/g | maks. $1,0 \times 10^6$                                                      |
|     | 8.2. <i>E. coli</i>                                 | APM/g    | maks. 10                                                                     |
|     | 8.3. Kapang                                         | koloni/g | maks. $1,0 \times 10^4$                                                      |

\*) formalin dilarang digunakan

Tabel 23. Syarat Mutu Mie Basah Menurut SNI 2987:2015.

| No. | Kriteria Uji       | Satuan             | Persyaratan      |                  |
|-----|--------------------|--------------------|------------------|------------------|
|     |                    |                    | Mie Basah Mentah | Mie Basah Matang |
| 1   | Keadaan            |                    |                  |                  |
| 1.1 | Bau                | -                  | normal           | normal           |
| 1.2 | Rasa               | -                  | normal           | normal           |
| 1.3 | Warna              | -                  | normal           | normal           |
| 1.4 | Tekstur            | -                  | normal           | normal           |
| 2   | Kadar air          | fraksi massa,<br>% | maks. 35         | maks. 65         |
| 3   | Protein (N x 6,25) | fraksi massa,<br>% | min. 9,0         | min. 6,0         |

Lanjutan Tabel 23. Syarat Mutu Mie Basah Menurut SNI 2987:2015.

|     |                                              |                 |                           |                           |
|-----|----------------------------------------------|-----------------|---------------------------|---------------------------|
| 4   | Kadar abu tidak larut dalam asam             | fraksi massa, % | maks. 0,05                | maks. 0,05                |
| 5   | Bahan berbahaya                              |                 |                           |                           |
| 5.1 | Formalin (HCHO)                              | -               | tidak boleh ada           | tidak boleh ada           |
| 5.2 | Asam borat (H <sub>3</sub> BO <sub>3</sub> ) | -               | tidak boleh ada           | tidak boleh ada           |
| 6   | Cemaran logam                                |                 |                           |                           |
| 6.1 | Timbal (Pb)                                  | mg/kg           | maks. 1,0                 | maks. 1,0                 |
| 6.2 | Kadmium (Cd)                                 | mg/kg           | maks. 0,2                 | maks. 0,2                 |
| 6.3 | Timah (Sn)                                   | mg/kg           | maks. 40,0                | maks. 40,0                |
| 6.4 | Merkuri (Hg)                                 | mg/kg           | maks. 0,05                | maks. 0,05                |
| 7   | Cemaran arsen (As)                           | mg/kg           | Maks 0,5                  | maks. 0,5                 |
| 8   | Cemaran mikroba                              |                 |                           |                           |
| 8.1 | Angka lempeng total                          | koloni/g        | maks. 1 x 10 <sup>6</sup> | maks. 1 x 10 <sup>6</sup> |
| 8.2 | <i>Eschericia coli</i>                       | APM/g           | maks. 10                  | maks. 10                  |
| 8.3 | <i>Salmonella sp.</i>                        | -               | negatif/ 25g              | negatif/ 25g              |
| 8.3 | <i>Staphylococcus aureus</i>                 | koloni/g        | maks. 1 x 10 <sup>3</sup> | maks. 1 x 10 <sup>3</sup> |
| 8.4 | <i>Bacillus cereus</i>                       | koloni/g        | maks. 1 x 10 <sup>3</sup> | maks. 1 x 10 <sup>3</sup> |
| 8.5 | Kapang                                       | koloni/g        | maks. 1 x 10 <sup>4</sup> | maks. 1 x 10 <sup>4</sup> |
| 9   | Deoksinivalenol                              | µg/kg           | maks. 750                 | maks. 750                 |

(Sumber : Badan Standardisasi Nasional, 2015)

Tabel 24. Hasil Analisis Kimia Tepung Umbi Talas (%)

| Parameter         | Ulangan | Hasil |
|-------------------|---------|-------|
| Kadar air         | 1       | 3,39  |
|                   | 2       | 3,39  |
|                   | 3       | 3,67  |
| Kadar abu         | 1       | 3,40  |
|                   | 2       | 3,59  |
|                   | 3       | 3,67  |
| Kadar protein     | 1       | 4,69  |
|                   | 2       | 4,84  |
|                   | 3       | 4,88  |
| Kadar lemak       | 1       | 1,05  |
|                   | 2       | 0,80  |
|                   | 3       | 1,45  |
| Kadar karbohidrat | 1       | 87,47 |
|                   | 2       | 87,38 |
|                   | 3       | 86,33 |

Lanjutan Tabel 24. Hasil Analisis Kimia Tepung Umbi Talas (%)

|                         |   |      |
|-------------------------|---|------|
| Kadar serat tidak larut | 1 | 1,98 |
|                         | 2 | 1,89 |
|                         | 3 | 2,27 |
| Kadar serat larut       | 1 | 7,72 |
|                         | 2 | 7,76 |
|                         | 3 | 7,62 |

Tabel 25. Hasil Analisis Kimia Ekstrak Ceker Ayam (%)

| Parameter     | Ulangan | Hasil |
|---------------|---------|-------|
| Kadar air     | 1       | 98,86 |
|               | 2       | 98,96 |
|               | 3       | 98,70 |
| Kadar abu     | 1       | 0,10  |
|               | 2       | 0,20  |
|               | 3       | 0,10  |
| Kadar protein | 1       | 0,88  |
|               | 2       | 0,89  |
|               | 3       | 0,87  |
| Kadar lemak   | 1       | 0,23  |
|               | 2       | 0,23  |
|               | 3       | 0,28  |

Tabel 26. Hasil Analisis Kimia Mie Basah Tepung Umbi Talas dan Ekstrak Ceker Ayam (%)

| Parameter         | Ulangan | Tepung Umbi Talas:Ekstrak Ceker Ayam |                 |                 |                 |
|-------------------|---------|--------------------------------------|-----------------|-----------------|-----------------|
|                   |         | 100:0:0<br>(K)                       | 90:10:10<br>(A) | 80:20:15<br>(B) | 70:30:20<br>(C) |
| Kadar air         | 1       | 58,16                                | 55,19           | 52,18           | 50,00           |
|                   | 2       | 59,06                                | 56,83           | 52,50           | 50,40           |
|                   | 3       | 59,57                                | 56,99           | 53,56           | 51,55           |
| Kadar abu         | 1       | 0,20                                 | 0,30            | 0,46            | 0,53            |
|                   | 2       | 0,20                                 | 0,33            | 0,49            | 0,56            |
|                   | 3       | 0,17                                 | 0,36            | 0,43            | 0,60            |
| Kadar protein     | 1       | 8,47                                 | 6,01            | 5,41            | 3,01            |
|                   | 2       | 8,07                                 | 6,04            | 5,40            | 3,05            |
|                   | 3       | 8,05                                 | 6,00            | 5,00            | 2,99            |
| Kadar lemak       | 1       | 0,19                                 | 0,34            | 0,57            | 0,85            |
|                   | 2       | 0,20                                 | 0,35            | 0,59            | 0,77            |
|                   | 3       | 0,22                                 | 0,34            | 0,63            | 0,80            |
| Kadar karbohidrat | 1       | 32,98                                | 38,16           | 41,38           | 45,61           |
|                   | 2       | 32,47                                | 36,45           | 41,02           | 45,22           |
|                   | 3       | 31,99                                | 36,31           | 40,38           | 44,06           |

Lanjutan Tabel 26. Hasil Analisis Kimia Mie Basah Tepung Umbi Talas dan Ekstrak Ceker Ayam (%)

|                         |   |      |      |      |      |
|-------------------------|---|------|------|------|------|
| Kadar serat tidak larut | 1 | 1,28 | 1,87 | 2,45 | 3,13 |
|                         | 2 | 1,27 | 1,89 | 2,51 | 3,29 |
|                         | 3 | 1,56 | 1,75 | 2,73 | 3,67 |
| Kadar serat larut       | 1 | 1,74 | 3,58 | 4,96 | 5,61 |
|                         | 2 | 1,67 | 3,70 | 4,73 | 5,80 |
|                         | 3 | 1,44 | 3,47 | 4,54 | 5,12 |

Tabel 27. Hasil Analisis Fisika Mie Basah Tepung Umbi Talas dan Ekstrak Ceker Ayam

| Parameter              | Ulangan | Tepung Umbi Talas:Ekstrak Ceker Ayam |              |              |              |
|------------------------|---------|--------------------------------------|--------------|--------------|--------------|
|                        |         | 100:0:0 (K)                          | 90:10:10 (A) | 80:20:15 (B) | 70:30:20 (C) |
| Daya serap air (%)     | 1       | 59,27                                | 56,48        | 53,89        | 50,64        |
|                        | 2       | 58,08                                | 56,23        | 53,29        | 51,09        |
|                        | 3       | 58,75                                | 57,73        | 54,13        | 50,88        |
| Cooking loss (%)       | 1       | 7,43                                 | 6,39         | 5,79         | 4,64         |
|                        | 2       | 7,04                                 | 6,32         | 5,60         | 4,94         |
|                        | 3       | 7,32                                 | 6,78         | 5,97         | 4,71         |
| Tensile strength (MPa) | 1       | 0,02                                 | 0,02         | 0,01         | 0,01         |
|                        | 2       | 0,02                                 | 0,02         | 0,01         | 0,01         |
|                        | 3       | 0,01                                 | 0,02         | 0,02         | 0,01         |

Tabel 28. Hasil Analisis Mikrobiologi Mie Basah Tepung Umbi Talas dan Ekstrak Ceker Ayam (CFU/g)

| Parameter                 | Ulangan | Tepung Umbi Talas:Ekstrak Ceker Ayam |                    |                    |                    |
|---------------------------|---------|--------------------------------------|--------------------|--------------------|--------------------|
|                           |         | 100:0:0 (K)                          | 90:10:10 (A)       | 80:20:15 (B)       | 70:30:20 (C)       |
| Angka Lempeng Total (ALT) | 1       | $1,90 \times 10^2$                   | $2,50 \times 10^2$ | $3,60 \times 10^2$ | $7,10 \times 10^2$ |
|                           | 2       | $1,90 \times 10^2$                   | $3,20 \times 10^2$ | $4,20 \times 10^2$ | $6,80 \times 10^2$ |
|                           | 3       | $2,30 \times 10^2$                   | $2,80 \times 10^2$ | $4,00 \times 10^2$ | $6,20 \times 10^2$ |
| Angka Kapang Khamir (AKK) | 1       | Negatif                              | Negatif            | Negatif            | Negatif            |
|                           | 2       | Negatif                              | Negatif            | Negatif            | Negatif            |
|                           | 3       | Negatif                              | Negatif            | Negatif            | Negatif            |

Tabel 29. Hasil Penilaian Panelis Organoleptik Mie Basah Tepung Umbi Talas dan Ekstrak Ceker Ayam

| No. | Warna |   |   |   | Aroma |   |   |   | Rasa |   |   |   | Tekstur |   |   |   |
|-----|-------|---|---|---|-------|---|---|---|------|---|---|---|---------|---|---|---|
|     | K     | A | B | C | K     | A | B | C | K    | A | B | C | K       | A | B | C |
| 1   | 4     | 4 | 3 | 2 | 2     | 3 | 3 | 4 | 2    | 3 | 4 | 4 | 2       | 3 | 3 | 4 |
| 2   | 4     | 4 | 3 | 2 | 3     | 2 | 3 | 2 | 3    | 2 | 2 | 3 | 3       | 3 | 3 | 4 |
| 3   | 4     | 3 | 2 | 1 | 3     | 3 | 2 | 3 | 3    | 3 | 3 | 4 | 4       | 4 | 3 | 4 |
| 4   | 4     | 4 | 2 | 2 | 4     | 4 | 2 | 1 | 4    | 4 | 3 | 3 | 3       | 4 | 4 | 4 |

Lanjutan Tabel 29. Hasil Penilaian Panelis Organoleptik Mie Basah Tepung Umbi Talas dan Ekstrak Ceker Ayam

|    |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |
|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5  | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 2 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 |
| 6  | 4 | 4 | 3 | 2 | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 3 |
| 7  | 4 | 3 | 2 | 1 | 2 | 1 | 4 | 3 | 1 | 3 | 4 | 2 | 1 | 3 | 2 | 4 |
| 8  | 3 | 3 | 2 | 2 | 4 | 3 | 3 | 2 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 3 |
| 9  | 4 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 3 | 4 | 3 | 3 |
| 10 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 4 | 4 | 2 | 3 | 3 |
| 11 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 |
| 12 | 3 | 2 | 1 | 4 | 1 | 2 | 3 | 4 | 2 | 1 | 3 | 4 | 2 | 1 | 4 | 4 |
| 13 | 4 | 4 | 3 | 2 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |
| 14 | 4 | 4 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 4 | 3 | 3 |
| 15 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 4 |
| 16 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 |
| 17 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 3 | 3 |
| 18 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 4 | 2 | 2 | 3 | 3 | 3 | 4 | 3 | 4 |
| 19 | 3 | 3 | 2 | 2 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 3 |
| 20 | 3 | 4 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 2 |
| 21 | 4 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 4 | 3 | 2 | 1 | 3 | 2 | 2 | 2 |
| 22 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 |
| 23 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 2 | 4 | 3 | 2 | 2 | 4 | 3 | 3 | 4 |
| 24 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 2 | 4 | 3 | 4 | 2 |
| 25 | 4 | 4 | 3 | 2 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 2 | 4 | 4 | 3 | 2 |
| 26 | 1 | 2 | 3 | 1 | 2 | 2 | 4 | 3 | 1 | 2 | 4 | 3 | 1 | 2 | 4 | 3 |
| 27 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 |
| 28 | 2 | 3 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 2 | 3 | 4 | 4 |
| 29 | 1 | 2 | 3 | 3 | 2 | 3 | 1 | 3 | 2 | 3 | 3 | 4 | 2 | 1 | 3 | 3 |
| 30 | 4 | 3 | 3 | 3 | 4 | 3 | 2 | 2 | 4 | 3 | 3 | 2 | 4 | 4 | 3 | 3 |

### Lampiran 3. Lampiran Perhitungan

#### 1. Kadar air

Rumus:

$$\text{Kadar air (\%)} = \frac{(A+S)-B}{S} \times 100\%$$

Keterangan:

A = Berat konstan cawan (g)

B = Berat konstan cawan + sampel yang telah dipanaskan (g)

S = Berat sampel (g)

##### a. Ekstrak ceker ayam

$$1. \text{Ulangan 1} = \frac{(19,035+2,018)-19,058}{2,018} \times 100\% = 98,86\%$$

$$2. \text{Ulangan 2} = \frac{(16,375+2,005)-16,396}{2,005} \times 100\% = 98,96\%$$

$$3. \text{Ulangan 3} = \frac{(12,610+2,000)-12,636}{2,000} \times 100\% = 98,70\%$$

#### 2. Kadar abu

Rumus:

$$\text{Kadar abu (\%)} = \frac{(\text{berat awal cawan+sampel})-\text{berat akhir}}{\text{berat sampel}} \times 100\%$$

##### a. Tepung umbi talas

$$1. \text{Ulangan 1} = \frac{11,818-11,784}{1,000} \times 100\% = 3,40\%$$

$$2. \text{Ulangan 2} = \frac{11,710-11,674}{1,003} \times 100\% = 3,59\%$$

$$3. \text{Ulangan 3} = \frac{12,865-12,828}{1,007} \times 100\% = 3,67\%$$

##### b. Ekstrak ceker ayam

$$1. \text{Ulangan 1} = \frac{19,067-19,066}{1,010} \times 100\% = 0,10\%$$

$$2. \text{Ulangan 2} = \frac{19,041-19,039}{1,010} \times 100\% = 0,20\%$$

$$3. \text{Ulangan 3} = \frac{12,619-12,618}{1,020} \times 100\% = 0,10\%$$

##### c. Perlakuan K

$$1. \text{Ulangan 1} = \frac{17,311-17,305}{3,020} \times 100\% = 0,20\%$$

$$2. \text{Ulangan 2} = \frac{11,675-11,669}{3,030} \times 100\% = 0,20\%$$

$$3. \text{Ulangan 3} = \frac{18,941-18,936}{3,014} \times 100\% = 0,17\%$$

##### d. Perlakuan A

$$1. \text{Ulangan 1} = \frac{17,021-17,012}{3,006} \times 100\% = 0,30\%$$

$$2. \text{Ulangan 2} = \frac{11,953-11,943}{3,020} \times 100\% = 0,33\%$$

$$3. \text{Ulangan 3} = \frac{16,390-16,377}{3,014} \times 100\% = 0,36\%$$

##### e. Perlakuan B

$$1. \text{Ulangan 1} = \frac{19,081-19,067}{3,014} \times 100\% = 0,46\%$$

$$2. \text{ Ulangan 2} = \frac{12,830 - 12,815}{3,033} \times 100\% = 0,49\%$$

$$3. \text{ Ulangan 3} = \frac{17,893 - 17,880}{3,004} \times 100\% = 0,43\%$$

#### f. Perlakuan C

$$1. \text{ Ulangan 1} = \frac{12,633 - 12,617}{3,022} \times 100\% = 0,53\%$$

$$2. \text{ Ulangan 2} = \frac{11,795 - 11,778}{3,017} \times 100\% = 0,56\%$$

$$3. \text{ Ulangan 3} = \frac{19,604 - 19,586}{3,021} \times 100\% = 0,60\%$$

### 3. Kadar protein

Rumus:

$$\text{Jumlah N total (\%)} = \frac{(\text{v titrasi} - \text{v blanko}) \times \text{N HCl}}{\text{v sampel} \times 1000} \times 14,008 \times 100\%$$

$$\text{Kadar protein} = \% \text{ jumlah N total} \times \text{fp protein}$$

Keterangan:

Faktor konversi protein (umum) = 6,25

V titrasi = volume HCl yang digunakan untuk titrasi sampel

V blanko = volume HCl yang digunakan untuk titrasi blanko

#### a. Tepung umbi talas

1. Ulangan 1

$$\text{Jumlah N total (\%)} = \frac{10,72 \times 0,1}{2 \times 1000} \times 14,008 \times 100\% = 0,7508288\%$$

$$\text{Kadar protein} = 0,7508288 \times 6,25 = 4,69268\%$$

2. Ulangan 2

$$\text{Jumlah N total (\%)} = \frac{11,06 \times 0,1}{2 \times 1000} \times 14,008 \times 100\% = 0,7746424\%$$

$$\text{Kadar protein} = 0,7746424 \times 6,25 = 4,841515\%$$

3. Ulangan 3

$$\text{Jumlah N total (\%)} = \frac{11,15 \times 0,1}{2 \times 1000} \times 14,008 \times 100\% = 0,780946\%$$

$$\text{Kadar protein} = 0,780946 \times 6,25 = 4,8809125\%$$

#### b. Ekstrak ceker ayam

Blanko = v HCl = 0,34

1. Sampel 1 = v HCl = 2,61

$$\text{Jumlah N total (\%)} = \frac{(2,61 - 0,34) \times 0,1}{2 \times 1000} \times 14,008 \times 1 \times 100\% = 0,1589908\%$$

$$\text{Kadar protein} = 0,1589908 \times 6,25 = 0,88\%$$

2. Sampel 2 = v HCl = 2,63

$$\text{Jumlah N total (\%)} = \frac{(2,63 - 0,34) \times 0,1}{2 \times 1000} \times 14,008 \times 1 \times 100\% = 0,1603916\%$$

$$\text{Kadar protein} = 0,1603916 \times 6,25 = 0,89\%$$

3. Sampel 3 = V HCL = 2,58

$$\text{Jumlah N total (\%)} = \frac{(2,58 - 0,34) \times 0,1}{2 \times 1000} \times 14,008 \times 1 \times 100\% = 0,1568896\%$$

$$\text{Kadar protein} = 0,1568896 \times 6,25 = 0,87\%$$

#### c. Perlakuan K

1. Sampel 1 = v HCl = 19,34

$$\text{Jumlah N total (\%)} = \frac{19,34 \times 0,1}{2 \times 1000} \times 14,008 \times 100\% = 1,3545736\%$$

$$\text{Kadar protein} = 1,3545736 \times 6,25 = 8,47\%$$

2. Sampel 2 = v HCl = 18,43

$$\text{Jumlah N total (\%)} = \frac{18,43 \times 0,1}{2 \times 1000} \times 14,008 \times 100\% = 1,2908372\%$$

$$\text{Kadar protein} = 1,2908372 \times 6,25 = 8,07\%$$

3. Sampel 3 = V HCl = 18,40

$$\text{Jumlah N total (\%)} = \frac{18,40 \times 0,1}{2 \times 1000} \times 14,008 \times 100\% = 1,288736\%$$

$$\text{Kadar protein} = 1,288736 \times 6,25 = 8,05\%$$

#### d. Perlakuan A

Blanko = v HCl = 0,23

1. Sampel 1 = v HCl = 13,73

$$\text{Jumlah N total (\%)} = \frac{(13,73-0,23) \times 0,1}{2 \times 1000} \times 14,008 \times 1 \times 100\% = 0,9616492\%$$

$$\text{Kadar protein} = 0,9616492 \times 6,25 = 6,01\%$$

2. Sampel 2 = v HCl = 13,80

$$\text{Jumlah N total (\%)} = \frac{(13,80-0,23) \times 0,1}{2 \times 1000} \times 14,008 \times 1 \times 100\% = 0,966552\%$$

$$\text{Kadar protein} = 0,966552 \times 6,25 = 6,04\%$$

3. Sampel 3 = V HCl = 13,71

$$\text{Jumlah N total (\%)} = \frac{(13,71-0,23) \times 0,1}{2 \times 1000} \times 14,008 \times 1 \times 100\% = 0,9602484\%$$

$$\text{Kadar protein} = 0,9602484 \times 6,25 = 6,00\%$$

#### e. Perlakuan B

Blanko = v HCl = 0,51

1. Sampel 1 = v HCl = 12,36

$$\text{Jumlah N total (\%)} = \frac{(12,36-0,51) \times 0,1}{2 \times 1000} \times 14,008 \times 1 \times 100\% = 0,8656944\%$$

$$\text{Kadar protein} = 0,8656944 \times 6,25 = 5,41\%$$

2. Sampel 2 = v HCl = 12,34

$$\text{Jumlah N total (\%)} = \frac{(12,34-0,51) \times 0,1}{2 \times 1000} \times 14,008 \times 1 \times 100\% = 0,8642936\%$$

$$\text{Kadar protein} = 0,8642936 \times 6,25 = 5,40\%$$

3. Sampel 3 = V HCl = 11,42

$$\text{Jumlah N total (\%)} = \frac{(11,42-0,51) \times 0,1}{2 \times 1000} \times 14,008 \times 1 \times 100\% = 0,7998568\%$$

$$\text{Kadar protein} = 0,7998568 \times 6,25 = 5,00\%$$

#### f. Perlakuan C

1. Sampel 1 = v HCl = 6,87

$$\text{Jumlah N total (\%)} = \frac{6,87 \times 0,1}{2 \times 1000} \times 14,008 \times 100\% = 0,4811748\%$$

$$\text{Kadar protein} = 0,4811748 \times 6,25 = 3,01\%$$

2. Sampel 2 = v HCl = 6,97

$$\text{Jumlah N total (\%)} = \frac{6,97 \times 0,1}{2 \times 1000} \times 14,008 \times 100\% = 0,4881788\%$$

$$\text{Kadar protein} = 0,4881788 \times 6,25 = 3,05\%$$

3. Sampel 3 = v HCl = 6,83

$$\text{Jumlah N total (\%)} = \frac{6,83 \times 0,1}{2 \times 1000} \times 14,008 \times 100\% = 0,4783732\%$$

$$\text{Kadar protein} = 0,4783732 \times 6,25 = 2,99\%$$

#### 4. Kadar lemak

Rumus:

$$\text{Kadar lemak (\%)} = \frac{A-C}{B} \times 100\%$$

Keterangan:

A = Bobot awal selongsong (g)

B = Bobot sampel (g)

C = Bobot akhir selongsong + sampel (g)

##### a. Tepung umbi talas

1. Ulangan 1 =  $\frac{3,901-3,880}{2} \times 100\% = 1,05\%$
2. Ulangan 2 =  $\frac{3,727-3,711}{2} \times 100\% = 0,80\%$
3. Ulangan 3 =  $\frac{3,968-3,939}{2} \times 100\% = 1,45\%$

##### b. Ekstrak ceker ayam

Berat kering:

1.  $\frac{3,845-3,446}{2} \times 100\% = 19,95\%$
2.  $\frac{3,706-3,264}{2} \times 100\% = 22,10\%$
3.  $\frac{3,501-3,072}{2} \times 100\% = 21,45\%$

Berat basah:

1.  $\frac{19,95}{100} \times 1,14\% = 0,23\%$
2.  $\frac{22,10}{100} \times 1,04\% = 0,23\%$
3.  $\frac{21,45}{100} \times 1,30\% = 0,28\%$

##### c. Perlakuan K

Berat kering:

1.  $\frac{3,776-3,767}{2} \times 100\% = 0,45\%$
2.  $\frac{3,534-3,524}{2} \times 100\% = 0,50\%$
3.  $\frac{3,418-3,407}{2} \times 100\% = 0,55\%$

Berat basah:

1.  $\frac{0,45}{100} \times 41,84\% = 0,19\%$
2.  $\frac{0,50}{100} \times 40,94\% = 0,20\%$
3.  $\frac{0,55}{100} \times 40,43\% = 0,22\%$

##### d. Perlakuan A

Berat kering:

1.  $\frac{3,089-3,074}{2} \times 100\% = 0,75\%$
2.  $\frac{3,189-3,173}{2} \times 100\% = 0,80\%$
3.  $\frac{3,173-3,157}{2} \times 100\% = 0,80\%$

Berat basah:

1.  $\frac{0,75}{100} \times 44,81 = 0,34$
2.  $\frac{0,80}{100} \times 43,17 = 0,35$
3.  $\frac{0,80}{100} \times 43,01 = 0,34$

**e. Perlakuan B**

Berat kering:

1.  $\frac{3,114-3,090}{2} \times 100\% = 1,20\%$
2.  $\frac{2,616-2,591}{2} \times 100\% = 1,25\%$
3.  $\frac{2,803-2,776}{2} \times 100\% = 1,35\%$

Berat basah:

1.  $\frac{1,20}{100} \times 47,82 = 0,57$
2.  $\frac{1,25}{100} \times 47,50 = 0,59$
3.  $\frac{1,35}{100} \times 46,44 = 0,63$

**f. Perlakuan C**

Berat kering:

1.  $\frac{2,976-2,942}{2} \times 100\% = 1,70\%$
2.  $\frac{2,874-2,843}{2} \times 100\% = 1,55\%$
3.  $\frac{2,988-2,956}{2} \times 100\% = 1,65\%$

Berat basah:

1.  $\frac{1,70}{100} \times 50,00 = 0,85$
2.  $\frac{1,55}{100} \times 49,60 = 0,77$
3.  $\frac{1,65}{100} \times 48,45 = 0,80$

**5. Kadar karbohidrat**

Rumus:

$$\text{Kadar karbohidrat} = 100\% - (\text{kadar air} + \text{kadar lemak} + \text{kadar protein} + \text{kadar abu})$$

**a. Tepung umbi talas**

1. Ulangan 1 =  $100 - 3,39 - 3,40 - 4,69 - 1,05 = 87,47\%$
2. Ulangan 2 =  $100 - 3,39 - 3,59 - 4,84 - 0,80 = 87,38\%$
3. Ulangan 3 =  $100 - 3,67 - 3,67 - 4,88 - 1,45 = 86,33\%$

**b. Perlakuan K**

1. Ulangan 1 =  $100 - 58,16 - 0,20 - 8,47 - 0,19 = 32,98\%$
2. Ulangan 2 =  $100 - 59,06 - 0,20 - 8,07 - 0,20 = 32,47\%$
3. Ulangan 3 =  $100 - 59,57 - 0,17 - 8,05 - 0,22 = 31,99\%$

**c. Perlakuan A**

1. Ulangan 1 =  $100 - 55,19 - 0,30 - 6,01 - 0,34 = 38,16\%$

$$2. \text{ Ulangan 2} = 100 - 56,83 - 0,33 - 6,04 - 0,35 = 36,45\%$$

$$3. \text{ Ulangan 3} = 100 - 56,99 - 0,36 - 6,00 - 0,34 = 36,31\%$$

**d. Perlakuan B**

$$1. \text{ Ulangan 1} = 100 - 52,18 - 0,46 - 5,41 - 0,57 = 41,38\%$$

$$2. \text{ Ulangan 2} = 100 - 52,50 - 0,49 - 5,40 - 0,59 = 41,02\%$$

$$3. \text{ Ulangan 3} = 100 - 53,56 - 0,43 - 5,00 - 0,63 = 40,38\%$$

**e. Perlakuan C**

$$1. \text{ Ulangan 1} = 100 - 50,00 - 0,53 - 3,01 - 0,85 = 45,61\%$$

$$2. \text{ Ulangan 2} = 100 - 50,40 - 0,56 - 3,05 - 0,77 = 45,22\%$$

$$3. \text{ Ulangan 3} = 100 - 51,55 - 0,60 - 2,99 - 0,80 = 44,06\%$$

**6. Kadar serat tidak larut**

Rumus:

$$\text{Kadar serat tidak larut (\%)} = \frac{W_2 - W_1}{W_0} \times 100\%$$

Keterangan:

W0 = berat sampel (g)

W1 = berat awal kertas saring (g)

W2 = berat akhir kertas saring (g)

**a. Tepung umbi talas**

$$1. \text{ Ulangan 1} = \frac{0,760 - 0,740}{1,010} \times 100\% = 1,98\%$$

$$2. \text{ Ulangan 2} = \frac{0,768 - 0,749}{1,005} \times 100\% = 1,89\%$$

$$3. \text{ Ulangan 3} = \frac{0,772 - 0,749}{1,011} \times 100\% = 2,27\%$$

**b. Perlakuan K**

Berat kering:

$$1. \text{ Ulangan 1} = \frac{0,775 - 0,744}{1,011} \times 100\% = 3,07\%$$

$$2. \text{ Ulangan 2} = \frac{0,783 - 0,752}{1,004} \times 100\% = 3,09\%$$

$$3. \text{ Ulangan 3} = \frac{0,784 - 0,745}{1,008} \times 100\% = 3,87\%$$

Berat basah:

$$1. \text{ Ulangan 1} = \frac{3,07}{100} \times 41,84 = 1,28\%$$

$$2. \text{ Ulangan 2} = \frac{3,09}{100} \times 40,94\% = 1,27\%$$

$$3. \text{ Ulangan 3} = \frac{3,87}{100} \times 40,43\% = 1,56\%$$

**c. Perlakuan A**

Berat kering:

$$1. \text{ Ulangan 1} = \frac{0,789 - 0,747}{1,004} \times 100\% = 4,18\%$$

$$2. \text{ Ulangan 2} = \frac{0,806 - 0,762}{1,004} \times 100\% = 4,58\%$$

$$3. \text{ Ulangan 3} = \frac{0,781 - 0,740}{1,004} \times 100\% = 4,08\%$$

Berat basah:

1. Ulangan 1 =  $\frac{4,18}{100} \times 44,81 = 1,87\%$
2. Ulangan 2 =  $\frac{4,38}{100} \times 43,17 = 1,89\%$
3. Ulangan 3 =  $\frac{4,08}{100} \times 43,01 = 1,75\%$

**d. Perlakuan B**

Berat kering:

1. Ulangan 1 =  $\frac{0,803-0,751}{1,013} \times 100\% = 5,13\%$
2. Ulangan 2 =  $\frac{0,789-0,736}{1,004} \times 100\% = 5,28\%$
3. Ulangan 3 =  $\frac{0,796-0,737}{1,003} \times 100\% = 5,88\%$

Berat basah:

1. Ulangan 1 =  $\frac{5,13}{100} \times 47,82 = 2,45\%$
2. Ulangan 2 =  $\frac{5,28}{100} \times 47,50 = 2,80\%$
3. Ulangan 3 =  $\frac{5,88}{100} \times 46,44 = 2,73\%$

**e. Perlakuan C**

Berat kering:

1. Ulangan 1 =  $\frac{0,805-0,742}{1,008} \times 100\% = 6,25\%$
2. Ulangan 2 =  $\frac{0,792-0,725}{1,009} \times 100\% = 6,64\%$
3. Ulangan 3 =  $\frac{0,809-0,733}{1,004} \times 100\% = 7,57\%$

Berat basah:

1. Ulangan 1 =  $\frac{6,25}{100} \times 50,00 = 3,13\%$
2. Ulangan 2 =  $\frac{6,64}{100} \times 49,60 = 3,29\%$
3. Ulangan 3 =  $\frac{7,57}{100} \times 48,45 = 3,67\%$

**7. Kadar serat larut**

Rumus:

$$\text{Kadar serat larut (\%)} = \frac{W2 - W1 - \text{berat celite (g)}}{W0} \times 100\%$$

Keterangan:

W0 = berat sampel (g)

W1 = berat awal kertas saring (g)

W2 = berat akhir kertas saring (g)

**a. Tepung umbi talas**

1. Pengulangan 1 =  $\frac{1,079-0,748-0,253}{1,010} \times 100\% = 7,72\%$
2. Pengulangan 2 =  $\frac{1,080-0,749-0,253}{1,005} \times 100\% = 7,76\%$
3. Pengulangan 3 =  $\frac{1,071-0,739-0,255}{1,011} \times 100\% = 7,62\%$

**b. Perlakuan K**

Berat kering:

$$1. \text{Ulangan 1} = \frac{1,041 - 0,749 - 0,250}{1,011} \times 100\% = 4,15\%$$

$$2. \text{Ulangan 2} = \frac{1,048 - 0,757 - 0,250}{1,004} \times 100\% = 4,08\%$$

$$3. \text{Ulangan 3} = \frac{1,049 - 0,763 - 0,250}{1,008} \times 100\% = 3,57\%$$

Berat basah:

$$1. \text{Ulangan 1} = \frac{4,15}{100} \times 41,84 = 1,74\%$$

$$2. \text{Ulangan 2} = \frac{4,08}{100} \times 40,94 = 1,67\%$$

$$3. \text{Ulangan 3} = \frac{3,57}{100} \times 40,43 = 1,44\%$$

**c. Perlakuan A**

Berat kering:

$$1. \text{Ulangan 1} = \frac{1,088 - 0,758 - 0,250}{1,004} \times 100\% = 7,97\%$$

$$2. \text{Ulangan 2} = \frac{1,082 - 0,746 - 0,250}{1,004} \times 100\% = 8,57\%$$

$$3. \text{Ulangan 3} = \frac{1,083 - 0,752 - 0,250}{1,004} \times 100\% = 8,07\%$$

Berat basah:

$$1. \text{Ulangan 1} = \frac{7,97}{100} \times 44,81 = 3,57\%$$

$$2. \text{Ulangan 2} = \frac{8,57}{100} \times 43,17 = 3,70\%$$

$$3. \text{Ulangan 3} = \frac{8,07}{100} \times 43,01 = 3,47\%$$

**d. Perlakuan B**

Berat kering:

$$1. \text{Ulangan 1} = \frac{1,107 - 0,752 - 0,250}{1,013} \times 100\% = 10,37\%$$

$$2. \text{Ulangan 2} = \frac{1,114 - 0,764 - 0,250}{1,004} \times 100\% = 9,96\%$$

$$3. \text{Ulangan 3} = \frac{1,104 - 0,756 - 0,250}{1,003} \times 100\% = 9,77\%$$

Berat basah:

$$1. \text{Ulangan 1} = \frac{10,37}{100} \times 47,82 = 4,96\%$$

$$2. \text{Ulangan 2} = \frac{9,96}{100} \times 47,50 = 4,73\%$$

$$3. \text{Ulangan 3} = \frac{9,77}{100} \times 46,44 = 4,54\%$$

**e. Perlakuan C**

Berat kering:

$$1. \text{Ulangan 1} = \frac{1,106 - 0,743 - 0,250}{1,008} \times 100\% = 11,21\%$$

$$2. \text{Ulangan 2} = \frac{1,094 - 0,726 - 0,250}{1,009} \times 100\% = 11,69\%$$

$$3. \text{Ulangan 3} = \frac{1,081 - 0,725 - 0,250}{1,004} \times 100\% = 10,56\%$$

Berat basah:

1. Ulangan 1 =  $\frac{11,21}{100} \times 50,00 = 5,61\%$
2. Ulangan 2 =  $\frac{11,69}{100} \times 49,60 = 5,80\%$
3. Ulangan 3 =  $\frac{10,56}{100} \times 48,45 = 5,12\%$

## 8. Daya Serap Air (DSA)

Rumus:

$$\text{Daya serap (\%)} = \frac{B-A}{A} \times 100\%$$

Keterangan:

A = Berat sampel sebelum direbus (gram)

B = Berat sampel sesudah direbus (gram)

### a. Perlakuan K

1. Ulangan 1 =  $\frac{1,607-1,009}{1,009} \times 100\% = 59,27\%$
2. Ulangan 2 =  $\frac{1,595-1,009}{1,009} \times 100\% = 58,08\%$
3. Ulangan 3 =  $\frac{1,605-1,011}{1,011} \times 100\% = 58,75\%$

### b. Perlakuan A

1. Ulangan 1 =  $\frac{1,582-1,011}{1,011} \times 100\% = 56,48\%$
2. Ulangan 2 =  $\frac{1,581-1,012}{1,012} \times 100\% = 56,23\%$
3. Ulangan 3 =  $\frac{1,582-1,003}{1,003} \times 100\% = 57,73\%$

### c. Perlakuan B

1. Ulangan 1 =  $\frac{1,542-1,002}{1,002} \times 100\% = 53,89\%$
2. Ulangan 2 =  $\frac{1,559-1,017}{1,017} \times 100\% = 53,29\%$
3. Ulangan 3 =  $\frac{1,549-1,005}{1,005} \times 100\% = 54,13\%$

### d. Perlakuan C

1. Ulangan 1 =  $\frac{1,526-1,013}{1,013} \times 100\% = 50,64\%$
2. Ulangan 2 =  $\frac{1,529-1,012}{1,012} \times 100\% = 51,09\%$
3. Ulangan 3 =  $\frac{1,539-1,020}{1,020} \times 100\% = 50,88\%$

## 9. Cooking Loss

Rumus:

$$\text{Cooking loss} = \frac{B-A}{S} \times 100\%$$

Keterangan:

A = Berat awal cawan (g)

B = Berat akhir cawan (g)

S = Berat sampel (g)

**a. Perlakuan K**

$$1. \text{Ulangan 1} = \frac{11,748 - 11,673}{1,009} \times 100\% = 7,43\%$$

$$2. \text{Ulangan 2} = \frac{12,021 - 11,950}{1,009} \times 100\% = 7,04\%$$

$$3. \text{Ulangan 3} = \frac{17,092 - 17,018}{1,011} \times 100\% = 7,32\%$$

**b. Perlakuan A**

$$1. \text{Ulangan 1} = \frac{17,074 - 17,009}{1,017} \times 100\% = 6,39\%$$

$$2. \text{Ulangan 2} = \frac{16,439 - 16,375}{1,015} \times 100\% = 6,32\%$$

$$3. \text{Ulangan 3} = \frac{18,974 - 18,937}{1,003} \times 100\% = 6,78\%$$

**c. Perlakuan B**

$$1. \text{Ulangan 1} = \frac{17,362 - 17,304}{1,002} \times 100\% = 5,79\%$$

$$2. \text{Ulangan 2} = \frac{16,434 - 16,377}{1,017} \times 100\% = 5,60\%$$

$$3. \text{Ulangan 3} = \frac{18,996 - 18,936}{1,005} \times 100\% = 5,97\%$$

**d. Perlakuan C**

$$1. \text{Ulangan 1} = \frac{17,058 - 17,311}{1,013} \times 100\% = 4,64\%$$

$$2. \text{Ulangan 2} = \frac{11,992 - 11,942}{1,012} \times 100\% = 4,94\%$$

$$3. \text{Ulangan 3} = \frac{11,720 - 11,672}{1,020} \times 100\% = 4,71\%$$

**10. Angka Lempeng Total (ALT)****a. Perlakuan K**

$$1. \text{Ulangan 1} = \frac{19}{[(1 \times 1) \times 10^{-1}]} = \frac{19}{10^{-1}} = 19 \times 10^1 = 1,90 \times 10^2$$

$$2. \text{Ulangan 2} = \frac{19}{[(1 \times 1) \times 10^{-1}]} = \frac{19}{10^{-1}} = 19 \times 10^1 = 1,90 \times 10^2$$

$$3. \text{Ulangan 3} = \frac{23}{[(1 \times 1) \times 10^{-1}]} = \frac{23}{10^{-1}} = 23 \times 10^1 = 2,30 \times 10^2$$

**b. Perlakuan A**

$$1. \text{Ulangan 1} = \frac{25}{[(1 \times 1) \times 10^{-1}]} = \frac{25}{10^{-1}} = 25 \times 10^1 = 2,50 \times 10^2$$

$$2. \text{Ulangan 2} = \frac{32}{[(1 \times 1) \times 10^{-1}]} = \frac{32}{10^{-1}} = 32 \times 10^1 = 3,20 \times 10^2$$

$$3. \text{Ulangan 3} = \frac{28}{[(1 \times 1) \times 10^{-1}]} = \frac{28}{10^{-1}} = 28 \times 10^1 = 2,80 \times 10^2$$

**c. Perlakuan B**

$$1. \text{Ulangan 1} = \frac{36}{[(1 \times 1) \times 10^{-1}]} = \frac{36}{10^{-1}} = 36 \times 10^1 = 3,60 \times 10^2$$

$$2. \text{Ulangan 2} = \frac{42}{[(1 \times 1) \times 10^{-1}]} = \frac{42}{10^{-1}} = 42 \times 10^1 = 4,20 \times 10^2$$

$$3. \text{Ulangan 3} = \frac{40}{[(1 \times 1) \times 10^{-1}]} = \frac{40}{10^{-1}} = 40 \times 10^1 = 4,00 \times 10^2$$

**d. Perlakuan C**

$$1. \text{Ulangan 1} = \frac{71}{[(1 \times 1) \times 10^{-1}]} = \frac{71}{10^{-1}} = 71 \times 10^1 = 7,10 \times 10^2$$

$$2. \text{Ulangan 2} = \frac{68}{[(1 \times 1) \times 10^{-1}]} = \frac{68}{10^{-1}} = 68 \times 10^1 = 6,80 \times 10^2$$

$$3. \text{Ulangan } 3 = \frac{62}{[(1 \times 1) \times 10^{-1}]} = \frac{62}{10^{-1}} = 62 \times 10^1 = 6,20 \times 10^2$$



## Lampiran 4. Form Uji Organoleptik

### Uji Organoleptik Hedonik Mie Basah Tepung Talas dengan Ekstrak Ceker Ayam sebagai Pengikat

#### A. Identitas Panelis

Nama lengkap : .....  
 Usia : ..... tahun  
 Jenis kelamin : Laki-laki / Perempuan

#### B. Informasi untuk Panelis

Mie basah tepung umbi talas dengan ekstrak ceker ayam merupakan produk yang dihasilkan pada penelitian ini. Mie basah yang dihasilkan memiliki kandungan serat pangan yang tinggi dari tepung umbi talas dan *cooking loss* yang rendah dari ekstrak ceker ayam yang perannya sebagai pengikat. Penelitian ini diharapkan dapat menghasilkan produk mie basah dengan kualitas yang baik dan disukai, serta dapat meningkatkan pemanfaatan tepung umbi talas dan ekstrak ceker ayam yang saat ini masih kurang dimanfaatkan oleh masyarakat.

#### C. Petunjuk

1. Di hadapan panelis telah disediakan empat macam mie basah yang berbeda dengan kode 101, 040, 922, 026.
2. Panelis dipersilakan untuk mengamati terkait warna, aroma, dan tekstur dari sampel mie basah, kemudian mencicipinya dan memberikan penilaian berdasarkan tingkat kesukaan panelis dengan memberikan tanda centang (✓).
3. Panelis diperbolehkan memberi skor yang sama lebih dari satu kali pada parameter yang sama di sampel dengan perlakuan berbeda.
4. Panelis **wajib** membersihkan indera pengecap dengan *palate cleanser* (air mineral) yang telah disediakan setiap selesai mencicipi 1 sampel.

#### D. Evaluasi

Tabel 1. Uji Organoleptik Mie Basah

| Sampel | Parameter Uji |   |   |   |       |   |   |   |      |   |   |   |         |   |   |   |
|--------|---------------|---|---|---|-------|---|---|---|------|---|---|---|---------|---|---|---|
|        | Warna         |   |   |   | Aroma |   |   |   | Rasa |   |   |   | Tekstur |   |   |   |
|        | 1             | 2 | 3 | 4 | 1     | 2 | 3 | 4 | 1    | 2 | 3 | 4 | 1       | 2 | 3 | 4 |
| 101    |               |   |   |   |       |   |   |   |      |   |   |   |         |   |   |   |
| 040    |               |   |   |   |       |   |   |   |      |   |   |   |         |   |   |   |
| 922    |               |   |   |   |       |   |   |   |      |   |   |   |         |   |   |   |
| 026    |               |   |   |   |       |   |   |   |      |   |   |   |         |   |   |   |

Keterangan:

1 = sangat tidak suka; 2 = tidak suka; 3 = suka; 4 = sangat suka

Setelah selesai mengisi Tabel 1., panelis memberikan peringkat (*ranking*) berdasarkan kualitas dan tingkat kesukaan terhadap keempat sampel mie basah.

Tabel 2. Uji *Ranking* Mie Basah

| Sampel | Ranking |
|--------|---------|
| 101    |         |
| 040    |         |
| 922    |         |
| 026    |         |

Keterangan:

1 = paling suka; 2 = suka; 3 = tidak suka; 4 = paling tidak suka

#### Lampiran 5. Penjelasan Uji Organoleptik

1. Panelis diharapkan tidak mengonsumsi makanan atau minuman berasa selama 1 jam sebelum melakukan organoleptik.
2. Panelis diharapkan tidak menghisap *vape*/rokok selama 1 jam sebelum melakukan organoleptik.
3. Panelis wajib membersihkan indera pengecap dengan *palate cleanser* yang telah disediakan.
4. Panelis akan diberi sampel yang terdapat 4 kode angka. Panelis tidak diberi tahu arti dari kode yang terdapat pada piring saji. Penjelasan kode sampel akan diberikan setelah panelis selesai melakukan organoleptik.
5. Sampel disajikan masing-masing pada tiap piring saji, kemudian panelis melakukan penilaian pada Tabel 1. Setiap pergantian sampel, panelis wajib membersihkan mulut dengan *palate cleanser*. Setelah selesai mengisi Tabel 1., maka panelis mengisi Tabel 2.
6. Penjelasan pengisian tabel adalah sebagai berikut:
  - a. Tabel 1 berisi penilaian panelis terhadap sampel dari skala 1-4. Panelis diperbolehkan mengisi skala yang sama lebih dari satu kali pada parameter yang sama.
  - b. Tabel 2 berisi penilaian panelis dengan memberikan *ranking* masing-masing sampel.
7. Antarpanelis tidak diperbolehkan melakukan diskusi selama organoleptik.

Tabel 30. Penjelasan Kode Sampel Organoleptik

|      | <b>Tepung Gandum:Tepung Umbi Talas:Ekstrak Ceker Ayam</b> |              |              |              |
|------|-----------------------------------------------------------|--------------|--------------|--------------|
|      | 100:0:0 (K)                                               | 90:10:10 (A) | 80:20:15 (B) | 70:30:20 (C) |
| Kode | 101                                                       | 040          | 922          | 026          |

## Lampiran 6. Hasil Uji SPSS Mie Basah

Tabel 31. Hasil Uji Deskriptif Kadar Air Mie Basah

|         | N  | Rata-Rata | Standar Deviasi | Standar Error | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |            | Minimal | Maksimal |
|---------|----|-----------|-----------------|---------------|---------------------------------------------------|------------|---------|----------|
|         |    |           |                 |               | Batas Bawah                                       | Batas Atas |         |          |
| Kontrol | 3  | 58,9300   | ,71393          | ,41219        | 57,1565                                           | 60,7035    | 58,16   | 59,57    |
| A       | 3  | 56,3367   | ,99626          | ,57519        | 53,8618                                           | 58,8115    | 55,19   | 56,99    |
| B       | 3  | 52,7467   | ,72231          | ,41703        | 50,9523                                           | 54,5410    | 52,18   | 52,56    |
| C       | 3  | 50,6500   | ,80467          | ,46458        | 48,6511                                           | 52,6489    | 50,00   | 51,55    |
| Total   | 12 | 54,6658   | 3,40718         | ,98357        | 52,5010                                           | 56,8307    | 50,00   | 59,57    |

Tabel 32. Hasil Uji ANOVA Kadar Air Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F      | Sig. |
|-----------------|----------------|----|-------------------|--------|------|
| Antara Kelompok | 122,355        | 3  | 40,785            | 61,067 | ,000 |
| Dalam Kelompok  | 5,343          | 8  | ,668              |        |      |
| Total           | 127,698        | 11 |                   |        |      |

Tabel 33. Hasil Uji DMRT Kadar Air Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |         |         |         |
|-----------|---|-------------------------|---------|---------|---------|
|           |   | 1                       | 2       | 3       | 4       |
| C         | 3 | 50,6500                 |         |         |         |
| B         | 3 |                         | 52,7467 |         |         |
| A         | 3 |                         |         | 56,3367 |         |
| Kontrol   | 3 |                         |         |         | 58,9300 |
| Sig.      |   | 1,000                   | 1,000   | 1,000   | 1,000   |

Tabel 34. Hasil Uji Deskriptif Kadar Abu Mie Basah

|         | N  | Rata-Rata | Standar Deviasi | Standar Error | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |            | Minimal | Maksimal |
|---------|----|-----------|-----------------|---------------|---------------------------------------------------|------------|---------|----------|
|         |    |           |                 |               | Batas Bawah                                       | Batas Atas |         |          |
| Kontrol | 3  | ,1900     | ,01732          | ,01000        | ,1470                                             | ,2330      | ,17     | ,20      |
| A       | 3  | ,3300     | ,03000          | ,01732        | ,2555                                             | ,4045      | ,30     | ,36      |
| B       | 3  | ,4600     | ,03000          | ,01732        | ,3855                                             | ,5345      | ,43     | ,49      |
| C       | 3  | ,5633     | 0,3512          | ,02028        | ,4761                                             | ,6506      | ,53     | ,60      |
| Total   | 12 | ,3858     | ,14835          | ,04283        | ,2916                                             | ,4801      | ,17     | ,60      |

Tabel 35. Hasil Uji ANOVA Kadar Abu Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F      | Sig. |
|-----------------|----------------|----|-------------------|--------|------|
| Antara Kelompok | ,235           | 3  | ,078              | 94,170 | ,000 |
| Dalam Kelompok  | ,007           | 8  | ,001              |        |      |
| Total           | ,242           | 11 |                   |        |      |

Tabel 36. Hasil Uji DMRT Kadar Abu Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |       |       |       |
|-----------|---|-------------------------|-------|-------|-------|
|           |   | 1                       | 2     | 3     | 4     |
| Kontrol   | 3 | ,1900                   |       |       |       |
| A         | 3 |                         | ,3300 |       |       |
| B         | 3 |                         |       | ,4600 |       |
| C         | 3 |                         |       |       | ,5633 |
| Sig.      |   | 1,000                   | 1,000 | 1,000 | 1,000 |

Tabel 37. Hasil Uji Deskriptif Kadar Protein Mie Basah

|         |    | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |                 |               |             |            |         |          |
|---------|----|---------------------------------------------------|-----------------|---------------|-------------|------------|---------|----------|
|         | N  | Rata-Rata                                         | Standar Deviasi | Standar Error | Batas Bawah | Batas Atas | Minimal | Maksimal |
| Kontrol | 3  | 8,1967                                            | ,23692          | ,13679        | 7,6081      | 8,7852     | 8,05    | 8,47     |
| A       | 3  | 6,0167                                            | ,02082          | ,01202        | 5,9650      | 6,0684     | 6,00    | 6,04     |
| B       | 3  | 5,2700                                            | ,23388          | ,13503        | 4,6890      | 5,8510     | 5,00    | 5,41     |
| C       | 3  | 3,0167                                            | ,03055          | ,01764        | 2,9408      | 3,0926     | 2,99    | 3,05     |
| Total   | 12 | 5,6250                                            | 1,93798         | ,55945        | 4,3937      | 6,8563     | 2,99    | 8,47     |

Tabel 38. Hasil Uji ANOVA Kadar Protein Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F       | Sig. |
|-----------------|----------------|----|-------------------|---------|------|
| Antara Kelompok | 41,089         | 3  | 13,696            | 488,282 | ,000 |
| Dalam Kelompok  | ,224           | 8  | ,028              |         |      |
| Total           | 41,313         | 11 |                   |         |      |

Tabel 39. Hasil Uji DMRT Kadar Protein Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |        |        |        |
|-----------|---|-------------------------|--------|--------|--------|
|           |   | 1                       | 2      | 3      | 4      |
| C         | 3 | 3,0167                  |        |        |        |
| B         | 3 |                         | 5,2700 |        |        |
| A         | 3 |                         |        | 6,0167 |        |
| Kontrol   | 3 |                         |        |        | 8,1967 |

|      |       |       |       |       |
|------|-------|-------|-------|-------|
| Sig. | 1,000 | 1,000 | 1,000 | 1,000 |
|------|-------|-------|-------|-------|

Tabel 40. Hasil Uji Deskriptif Kadar Lemak Mie Basah

|         | N  | Rata-Rata | Standar Deviasi | Standar Error | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |            | Minimal | Maksimal |
|---------|----|-----------|-----------------|---------------|---------------------------------------------------|------------|---------|----------|
|         |    |           |                 |               | Batas Bawah                                       | Batas Atas |         |          |
| Kontrol | 3  | ,2033     | ,01528          | ,00882        | ,1654                                             | ,2413      | ,19     | ,22      |
| A       | 3  | ,3433     | ,00577          | ,00333        | ,3290                                             | ,3577      | ,34     | ,35      |
| B       | 3  | ,5967     | ,03055          | ,01764        | ,5208                                             | ,6726      | ,57     | ,63      |
| C       | 3  | ,8067     | ,04041          | ,02333        | ,7063                                             | ,9071      | ,77     | ,85      |
| Total   | 12 | ,4875     | ,24339          | ,07026        | ,3329                                             | ,6421      | ,19     | ,85      |

Tabel 41. Hasil Uji ANOVA Kadar Lemak Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F       | Sig. |
|-----------------|----------------|----|-------------------|---------|------|
| Antara Kelompok | ,646           | 3  | ,215              | 303,980 | ,000 |
| Dalam Kelompok  | ,006           | 8  | ,001              |         |      |
| Total           | ,652           | 11 |                   |         |      |

Tabel 42. Hasil Uji DMRT Kadar Lemak Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |       |       |       |
|-----------|---|-------------------------|-------|-------|-------|
|           |   | 1                       | 2     | 3     | 4     |
| Kontrol   | 3 | ,2033                   |       |       |       |
| A         | 3 |                         | ,3433 |       |       |
| B         | 3 |                         |       | ,5967 |       |
| C         | 3 |                         |       |       | ,8067 |
| Sig.      |   | 1,000                   | 1,000 | 1,000 | 1,000 |

Tabel 43. Hasil Uji Deskriptif Kadar Karbohidrat Mie Basah

|         | N  | Rata-Rata | Standar Deviasi | Standar Error | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |            | Minimal | Maksimal |
|---------|----|-----------|-----------------|---------------|---------------------------------------------------|------------|---------|----------|
|         |    |           |                 |               | Batas Bawah                                       | Batas Atas |         |          |
| Kontrol | 3  | 32,4800   | ,49508          | ,28583        | 31,2502                                           | 33,7098    | 31,99   | 32,98    |
| A       | 3  | 36,9733   | 1,03006         | ,59471        | 34,4145                                           | 39,5322    | 36,31   | 38,16    |
| B       | 3  | 40,9267   | ,50649          | ,29242        | 39,6685                                           | 42,1849    | 40,38   | 41,38    |
| C       | 3  | 44,9633   | ,80625          | ,46549        | 42,9605                                           | 46,9662    | 44,06   | 45,61    |
| Total   | 12 | 38,8358   | 4,87830         | 1,40824       | 35,7363                                           | 41,9354    | 31,99   | 45,61    |

Tabel 44. Hasil Uji ANOVA Kadar Karbohidrat Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F       | Sig. |
|-----------------|----------------|----|-------------------|---------|------|
| Antara Kelompok | 257,350        | 3  | 85,783            | 155,075 | ,000 |
| Dalam Kelompok  | 4,425          | 8  | ,553              |         |      |
| Total           | 261,775        | 11 |                   |         |      |

Tabel 45. Hasil Uji DMRT Kadar Karbohidrat Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |         |         |         |
|-----------|---|-------------------------|---------|---------|---------|
|           |   | 1                       | 2       | 3       | 4       |
| Kontrol   | 3 | 32,4800                 |         |         |         |
| A         | 3 |                         | 36,9733 |         |         |
| B         | 3 |                         |         | 40,9267 |         |
| C         | 3 |                         |         |         | 44,9633 |
| Sig.      |   | 1,000                   | 1,000   | 1,000   | 1,000   |

Tabel 46. Hasil Uji Deskriptif Kadar Serat tidak Larut Mie Basah

|         |    | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |                 |               |             |            |         |          |
|---------|----|---------------------------------------------------|-----------------|---------------|-------------|------------|---------|----------|
|         | N  | Rata-Rata                                         | Standar Deviasi | Standar Error | Batas Bawah | Batas Atas | Minimal | Maksimal |
| Kontrol | 3  | 1,3567                                            | ,17616          | ,10171        | ,9191       | 1,7943     | 1,25    | 1,56     |
| A       | 3  | 1,8367                                            | ,07572          | ,04372        | 1,6486      | 2,0248     | 1,75    | 1,89     |
| B       | 3  | 2,5633                                            | ,14742          | ,08511        | 2,1971      | 2,9296     | 2,45    | 2,73     |
| C       | 3  | 3,3633                                            | ,27737          | ,16014        | 2,6743      | 4,0524     | 3,13    | 3,67     |
| Total   | 12 | 2,2800                                            | ,80790          | ,23322        | 1,7667      | 2,7933     | 1,25    | 3,67     |

Tabel 47. Hasil Uji ANOVA Kadar Serat tidak Larut Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F      | Sig. |
|-----------------|----------------|----|-------------------|--------|------|
| Antara Kelompok | 6,909          | 3  | 2,303             | 68,018 | ,000 |
| Dalam Kelompok  | ,271           | 8  | ,034              |        |      |
| Total           | 7,180          | 11 |                   |        |      |

Tabel 48. Hasil Uji DMRT Kadar Serat tidak Larut Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |        |        |        |
|-----------|---|-------------------------|--------|--------|--------|
|           |   | 1                       | 2      | 3      | 4      |
| Kontrol   | 3 | 1,3567                  |        |        |        |
| A         | 3 |                         | 1,8367 |        |        |
| B         | 3 |                         |        | 2,5633 |        |
| C         | 3 |                         |        |        | 3,3633 |
| Sig.      |   | 1,000                   | 1,000  | 1,000  | 1,000  |

Tabel 49. Hasil Uji Deskriptif Kadar Serat Larut Mie Basah

|         | N  | Rata-Rata | Standar Deviasi | Standar Error | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |            | Minimal | Maksimal |
|---------|----|-----------|-----------------|---------------|---------------------------------------------------|------------|---------|----------|
|         |    |           |                 |               | Batas Bawah                                       | Batas Atas |         |          |
| Kontrol | 3  | 1,6167    | ,15695          | ,09062        | 1,2268                                            | 2,0066     | 1,44    | 1,74     |
| A       | 3  | 3,5833    | ,11504          | ,06642        | 3,2976                                            | 3,8691     | 3,47    | 3,70     |
| B       | 3  | 4,7433    | ,21032          | ,12143        | 4,2209                                            | 5,2658     | 4,54    | 4,96     |
| C       | 3  | 5,5100    | ,35086          | ,20257        | 4,6384                                            | 6,3816     | 5,12    | 5,80     |
| Total   | 12 | 3,8633    | 1,54466         | ,44591        | 2,8819                                            | 4,8448     | 1,44    | 5,80     |

Tabel 50. Hasil Uji ANOVA Kadar Serat Larut Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F       | Sig. |
|-----------------|----------------|----|-------------------|---------|------|
| Antara Kelompok | 25,835         | 3  | 8,612             | 167,872 | ,000 |
| Dalam Kelompok  | ,410           | 8  | ,051              |         |      |
| Total           | 26,246         | 11 |                   |         |      |

Tabel 51. Hasil Uji DMRT Kadar Serat Larut Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |        |        |        |
|-----------|---|-------------------------|--------|--------|--------|
|           |   | 1                       | 2      | 3      | 4      |
| Kontrol   | 3 | 1,6167                  |        |        |        |
| A         | 3 |                         | 3,5833 |        |        |
| B         | 3 |                         |        | 4,7433 |        |
| C         | 3 |                         |        |        | 5,5100 |
| Sig.      |   | 1,000                   | 1,000  | 1,000  | 1,000  |

Tabel 52. Hasil Uji Deskriptif Daya Serap Air Mie Basah

|         | N  | Rata-Rata | Standar Deviasi | Standar Error | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |            | Minimal | Maksimal |
|---------|----|-----------|-----------------|---------------|---------------------------------------------------|------------|---------|----------|
|         |    |           |                 |               | Batas Bawah                                       | Batas Atas |         |          |
| Kontrol | 3  | 58,7000   | ,59657          | ,34443        | 57,2180                                           | 60,1820    | 58,08   | 59,27    |
| A       | 3  | 56,8133   | ,80364          | ,46398        | 54,8170                                           | 58,8097    | 56,23   | 57,73    |
| B       | 3  | 53,7700   | ,43267          | ,24980        | 52,6952                                           | 54,8448    | 53,29   | 54,13    |
| C       | 3  | 50,8700   | ,22517          | ,13000        | 50,3107                                           | 51,4293    | 50,64   | 51,09    |
| Total   | 12 | 55,0383   | 3,14939         | ,90915        | 53,0373                                           | 57,0394    | 50,64   | 59,27    |

Tabel 53. Hasil Uji ANOVA Daya Serap Air Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F       | Sig. |
|-----------------|----------------|----|-------------------|---------|------|
| Antara Kelompok | 106,626        | 3  | 35,542            | 114,686 | ,000 |
| Dalam Kelompok  | 2,479          | 8  | ,310              |         |      |
| Total           | 109,106        | 11 |                   |         |      |

Tabel 54. Hasil Uji DMRT Daya Serap Air Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |         |         |         |
|-----------|---|-------------------------|---------|---------|---------|
|           |   | 1                       | 2       | 3       | 4       |
| C         | 3 | 50,8700                 |         |         |         |
| B         | 3 |                         | 53,7700 |         |         |
| A         | 3 |                         |         | 56,8133 |         |
| Kontrol   | 3 |                         |         |         | 58,7000 |
| Sig.      |   | 1,000                   | 1,000   | 1,000   | 1,000   |

Tabel 55. Hasil Uji Deskriptif *Cooking Loss* Mie Basah

|         | N  | Rata-Rata | Standar Deviasi | Standar Error | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |            | Minimal | Maksimal |
|---------|----|-----------|-----------------|---------------|---------------------------------------------------|------------|---------|----------|
|         |    |           |                 |               | Batas Bawah                                       | Batas Atas |         |          |
| Kontrol | 3  | 7,2633    | ,20108          | ,11609        | 6,7638                                            | 7,7628     | 7,04    | 7,43     |
| A       | 3  | 6,4967    | ,24786          | ,14310        | 5,8810                                            | 7,1124     | 6,32    | 6,78     |
| B       | 3  | 5,7867    | ,18502          | ,10682        | 5,3270                                            | 6,2463     | 5,60    | 5,97     |
| C       | 3  | 4,7633    | ,15695          | ,09062        | 4,3734                                            | 5,1532     | 4,64    | 4,94     |
| Total   | 12 | ,97710    | ,97710          | ,28207        | 5,4567                                            | 6,6983     | 4,64    | 7,43     |

Tabel 56. Hasil Uji ANOVA *Cooking Loss* Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F      | Sig. |
|-----------------|----------------|----|-------------------|--------|------|
| Antara Kelompok | 10,181         | 3  | 3,394             | 84,451 | ,000 |
| Dalam Kelompok  | ,321           | 8  | ,040              |        |      |
| Total           | 10,502         | 11 |                   |        |      |

Tabel 57. Hasil Uji DMRT *Cooking Loss* Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |        |        |        |
|-----------|---|-------------------------|--------|--------|--------|
|           |   | 1                       | 2      | 3      | 4      |
| C         | 3 | 4,7633                  |        |        |        |
| B         | 3 |                         | 5,7867 |        |        |
| A         | 3 |                         |        | 6,4967 |        |
| Kontrol   | 3 |                         |        |        | 7,2633 |
| Sig.      |   | 1,000                   | 1,000  | 1,000  | 1,000  |

Tabel 58. Hasil Uji Deskriptif *Tensile Strength* Mie Basah

|         |    | Interval Rata-Rata dengan Tingkat Kepercayaan 95% |                 |               |             |            |         |          |
|---------|----|---------------------------------------------------|-----------------|---------------|-------------|------------|---------|----------|
|         | N  | Rata-Rata                                         | Standar Deviasi | Standar Error | Batas Bawah | Batas Atas | Minimal | Maksimal |
| Kontrol | 3  | ,0167                                             | ,00577          | ,00333        | ,0023       | ,0310      | ,01     | ,02      |
| A       | 3  | ,0200                                             | ,00000          | ,00000        | ,0200       | ,0200      | ,02     | ,02      |
| B       | 3  | ,0133                                             | ,00577          | ,00333        | -,0010      | ,0277      | ,01     | ,02      |
| C       | 3  | ,0100                                             | ,00000          | ,00000        | ,0100       | ,0100      | ,02     | ,01      |
| Total   | 12 | ,0150                                             | ,00522          | ,00151        | ,0117       | ,0183      | ,01     | ,02      |

Tabel 59. Hasil Uji ANOVA *Tensile Strength* Mie Basah

|                 | Jumlah Kuadran | df | Rata-Rata Kuadran | F     | Sig. |
|-----------------|----------------|----|-------------------|-------|------|
| Antara Kelompok | ,000           | 3  | ,000              | 3,333 | ,077 |
| Dalam Kelompok  | ,000           | 8  | ,000              |       |      |
| Total           | ,000           | 11 |                   |       |      |

Tabel 60. Hasil Uji DMRT *Tensile Strength* Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |       |
|-----------|---|-------------------------|-------|
|           |   | 1                       | 2     |
| C         | 3 | ,0100                   |       |
| B         | 3 | ,0133                   | ,0133 |
| A         | 3 | ,0167                   | ,0167 |
| Kontrol   | 3 |                         | ,0200 |
| Sig.      |   | ,091                    | ,091  |

Tabel 61. Hasil Uji Deskriptif ALT Mie Basah

|         |    |               |                    |                  | Interval Rata-Rata<br>dengan Tingkat<br>Kepercayaan 95% |               |              |               |
|---------|----|---------------|--------------------|------------------|---------------------------------------------------------|---------------|--------------|---------------|
|         | N  | Rata-<br>Rata | Standar<br>Deviasi | Standar<br>Error | Batas<br>Bawah                                          | Batas<br>Atas | Mini-<br>mal | Mak-<br>simal |
| Kontrol | 3  | 2,0333        | ,23094             | ,13333           | 1,4596                                                  | 2,6070        | 1,90         | 2,30          |
| A       | 3  | 2,8333        | ,35119             | ,20276           | 1,9609                                                  | 3,7057        | 2,50         | 3,20          |
| B       | 3  | 3,9333        | ,30551             | ,17638           | 3,1744                                                  | 4,6922        | 3,60         | 4,20          |
| C       | 3  | 6,7000        | ,45826             | ,26458           | 5,5616                                                  | 7,8384        | 6,20         | 7,10          |
| Total   | 12 | 3,8750        | 1,86700            | ,53896           | 2,6888                                                  | 5,0612        | 1,90         | 7,10          |

Tabel 62. Hasil Uji ANOVA ALT Mie Basah

|                    | Jumlah<br>Kuadran | df | Rata-Rata<br>Kuadran | F       | Sig. |
|--------------------|-------------------|----|----------------------|---------|------|
| Antara<br>Kelompok | 37,382            | 3  | 12,461               | 103,840 | ,000 |
| Dalam<br>Kelompok  | ,960              | 8  | ,120                 |         |      |
| Total              | 38,342            | 11 |                      |         |      |

Tabel 63. Hasil Uji DMRT ALT Mie Basah

| Perlakuan | N | Subset untuk alfa = .05 |        |        |        |
|-----------|---|-------------------------|--------|--------|--------|
|           |   | 1                       | 2      | 3      | 4      |
| Kontrol   | 3 | 2,0333                  |        |        |        |
| A         | 3 |                         | 2,8333 |        |        |
| B         | 3 |                         |        | 3,9333 |        |
| C         | 3 |                         |        |        | 6,7000 |
| Sig.      |   | 1,000                   | 1,000  | 1,000  | 1,000  |