

# LAMPIRAN

## Lampiran 1. Izin Penelitian



**SEKOLAH TINGGI ILMU KESEHATAN PANTI RAPIH YOGYAKARTA**  
**PROGRAM STUDI GIZI PROGRAM SARJANA**

Jalan Tantular 401, Pringwulung, Condongcatur, Depok, Sleman 55283  
 Telp: (0274) 518977, Fax (0274) 587143 Email: prodigizistikespr@gmail.com



16 Mei 2025

Nomor : 031/S1-GZ/V/2025

Hal : Permohonan izin peminjaman alat dan ruang laboratorium

**Yth. Ketua STIKes Panti Rapih Yogyakarta**  
**Jalan Tantular, No. 401, Condongcatur,**  
**Depok, Sleman, Yogyakarta**

Dalam rangka menyelesaikan tugas pada Mata Kuliah Skripsi (SG VIII.8) bagi Mahasiswa Program Studi Gizi Program Sarjana Sekolah Tinggi Ilmu Kesehatan Panti Rapih Yogyakarta Tahun Akademik 2024/2025, maka dengan ini kami mohon mahasiswa yang tercantum dalam surat ini diperkenankan untuk meminjam ruang serta peralatan laboratorium Gizi di STIKes Panti Rapih Yogyakarta. Adapun mahasiswa tersebut adalah:

| NPM       | Nama Mahasiswa      | Judul Penelitian                                                                                                                                        | Nama Ruang           |
|-----------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|
| 202133006 | Angelica Pribandari | Pengaruh Penambahan Tepung Eucheuma cottonii Terhadap Karakteristik Kimia dan Organoleptik Beras Analog Tepung Beras dan Ubi Jalar Putih Untuk Obesitas | Lab Teknologi Pangan |

**Waktu :**

1. 26- 28 Mei 2025 pukul 08.00 -15.00 pengeringan sampel, uji coba sampel
2. 11 Juni 2025 pukul 08.00 - 16.00 uji organoleptik
3. 17 Juni 2025 pukul 08.00 - 16.00 uji organoleptik

**Nama Alat, Bahan dan Jumlah Barang yang Dipinjam:**

- |                           |                      |
|---------------------------|----------------------|
| 1. 10 Loyang besar        | 5. 1 Mangkok melamin |
| 2. 1 Cabinet dryer        | 6. 1 Kompor          |
| 3. 2 Kukusan/penanak nasi | 7. 2 Spatula/solet   |
| 4. 1 Centong nasi         |                      |

Demikian surat permohonan izin dari kami. Atas perhatian dan izin yang diberikan, kami ucapkan terima kasih.



Kaprodi Gizi Program Sarjana

**Huasinta Anatasia Purnawijayanti, S.T.P., M.P**

## Lampiran 2. Jawaban Izin Penelitian



**YAYASAN PANTI RAPIH**  
**SEKOLAH TINGGI ILMU KESEHATAN PANTI RAPIH YOGYAKARTA**

Jalan Tantular 401 Pringwulung, Condongcatur, Depok, Sleman, Yogyakarta  
Telp (0274) 518977, 542744 Fax (0274) 587143  
Website : [www.stikespantirapih.ac.id](http://www.stikespantirapih.ac.id) E-mail : [stikespr@stikespantirapih.ac.id](mailto:stikespr@stikespantirapih.ac.id)



21 Mei 2025

Nomor : 1013/STIKes-PR/B/V/2025  
Lampiran : 1 Lembar  
Hal : Izin peminjaman alat dan ruang laboratorium

Yth. Kaprodi Gizi Program Sarjana  
STIKes Panti Rapih Yogyakarta  
Jalan Tantular No. 401, Pringwulung, Condongcatur  
Depok, Sleman, DIY

Dengan hormat,  
Menanggapi surat Saudara No: 031/S1-GZ/V/2025 pada tanggal 16 Mei 2025 tentang permohonan izin peminjaman alat dan ruang laboratorium gizi di Sekolah Tinggi Ilmu Kesehatan Panti Rapih Yogyakarta dengan ini kami sampaikan bahwa mahasiswa beserta Judul Penelitian sebagai berikut,

NPM : 202133006  
Nama Mahasiswa : Angelica Pribandari  
Judul Penelitian : Pengaruh Penambahan Tepung *Eucheuma cottonii* Terhadap Karakteristik Kimia dan Organoleptik Beras Analog Tepung Beras dan Ubi Jalar Putih Untuk Obesitas

Kami izinkan untuk meminjam peralatan dan ruang Laboratorium Teknologi Pangan di Sekolah Tinggi Ilmu Kesehatan Panti Rapih Yogyakarta, dengan ketentuan sebagai berikut:

1. Mengumpulkan proposal skripsi yang sudah direvisi dan di ACC oleh dosen pembimbing dalam bentuk soft file pada Ka Bidang PPM.
2. Mengambil papan identitas di Bidang PPM sebelum melakukan peminjaman alat dan laboratorium.
3. Menggunakan papan identitas selama melakukan kegiatan

Adapun Untuk Waktu, Nama Alat, Bahan dan Jumlah Barang yang Dipinjam Terlampir dalam Surat Ini.

Demikian surat dari kami. Atas kerja sama dan perhatiannya, kami ucapkan terima kasih.





**YAYASAN PANTI RAPIH**  
**SEKOLAH TINGGI ILMU KESEHATAN PANTI RAPIH YOGYAKARTA**

Jalan Tantular 401 Pringwulung, Condongcatur, Depok, Sleman, Yogyakarta  
Telp. (0274) 518977, 542744 Fax (0274) 587143  
Website : [www.stikespantirapih.ac.id](http://www.stikespantirapih.ac.id) E-mail : [stikespri@stikespantirapih.ac.id](mailto:stikespri@stikespantirapih.ac.id)



Lampiran surat nomor: 1013/STIKes-PR/B/V/2025

**Waktu:**

| No | Tanggal         | Waktu            | Kegiatan                            |
|----|-----------------|------------------|-------------------------------------|
| 1. | 26- 28 Mei 2025 | 08.00 -15.00 WIB | Pengeringan sampel, uji coba sampel |
| 2. | 11 Juni 2025    | 08.00 -16.00 WIB | Uji organoleptik                    |
| 3. | 17 Juni 2025    | 08.00 -16.00 WIB | Uji organoleptik                    |

**Nama Alat**

| No | Nama Alat            | Jumlah |
|----|----------------------|--------|
| 1. | Loyang besar         | 10     |
| 2. | Cabinet dryer        | 1      |
| 3. | Kukusan/penanak nasi | 3      |
| 4. | Centong nasi         | 1      |
| 5. | Mangkok melamin      | 1      |
| 6. | Kompor               | 1      |
| 7. | Spatula/solet        | 2      |
| 8. | Ayakan               | 1      |



**RUMAH SAKIT PANTI RAPIH**  
**KOMITE ETIK DAN HUKUM RUMAH SAKIT (KEHRS)**

Jln. Cik Di Tiro 30 - Yogyakarta 55223 Telp. 0274 – 562233, 562233, 563333

**SUB KOMITE ETIK PENELITIAN KESEHATAN**  
**RUMAH SAKIT PANTI RAPIH**

**KETERANGAN KELAIKAN ETIK**  
**("ETHICAL CLEARANCE")**  
No. 077/SKEPK-KKE/VI/2025

Sub Komite Etik Penelitian Kesehatan Rumah Sakit Panti Rapih, setelah mempelajari dengan seksama rancangan penelitian yang diusulkan:  
*The Health Research Ethical Sub Committee of Panti Rapih Hospital, after studying the proposed research design carefully :*

**"Pengaruh Penambahan Tepung *Eucheuma cottonii* Terhadap Karakteristik Kimia dan Organoleptik Beras Analog Tepung Beras dan Ubi Jalar Putih untuk Obesitas"**

Peneliti Utama : Angelica Pribandari  
*Principal Investigator*  
Anggota Peneliti :  
*Investigator member*  
Lokasi penelitian : STIKes Panti Rapih Yogyakarta  
*Location Institute of Health Science Panti Rapih Yogyakarta*  
Unit/Lembaga : STIKes Panti Rapih  
*Institution*

**Maka dengan ini menyatakan bahwa rencana penelitian tersebut telah memenuhi syarat atau dinyatakan laik etik untuk dilaksanakan.**

*Thus hereby declare that the research design has qualified and been approved for the implementation.*

Demikian surat keterangan lolos kaji etik ini dibuat untuk diketahui dan dimaklumi oleh yang berkepentingan dan berlaku sejak tanggal 03 Juni 2025 sampai dengan 01 Juni 2026.  
*This ethical clearance is issued to be used appropriately and understood by all stakeholders and valid from 03 June 2025 until 01 June 2026.*

Yogyakarta, 03 Juni 2025

Komite Etik dan Hukum Rumah Sakit  
  
dr. Maria Silvia Merry, M.Sc, Sp.MK  
Ketua

Sub Komite Etik Penelitian Kesehatan  
(SKEPK)  
  
dr. Emilia Theresia, Sp.PA  
Ketua

**Catatan (Notes):**

Kewajiban peneliti (*The obligations of researcher*):

1. Menjaga kerahasiaan identitas subjek penelitian.  
*Keeping the confidentiality of the research subject identity.*
2. Memberitahukan status penelitian apabila setelah masa berlakunya keterangan lolos kaji etik, penelitian masih belum selesai, atau ada perubahan protokol. Peneliti wajib mengajukan kembali permohonan kajian etik penelitian (amandemen protokol).  
*Informing about the research status if the research is not completed after passes the validity period of the ethical clearance, or there is a change in the protocol. The researchers must reappplies the application for a research ethical review (amendment protocol).*
3. Melaporkan status penelitian apabila penelitian berhenti di tengah jalan, ada kejadian serius yang tidak diinginkan dan melaporkan pelaksanaan penelitian secara berkala.  
*Reporting the research status if it stops before it is completed, there are serious adverse events, and reporting the research conduct periodically.*
4. Peneliti tidak boleh melakukan tindakan apa pun pada subjek sebelum penelitian lolos kaji etik, ada surat izin penelitian dan memberikan informed consent kepada subjek penelitian.  
*Researchers should not take any action on the subject before the study passes an ethical review, having a research license, and provides informed consent to the research subjects.*
5. Setelah selesai penelitian, peneliti wajib memberikan laporan penelitian kepada Sub Komite Etik Penelitian Kesehatan RS Panti Rapih.  
*After completing the research, the researchers is obliged to provide a report to the Health Research Ethical Sub Committee of Panti Rapih Hospital.*

### LEMBAR PENJELASAN PENELITIAN

Saya, Angelica Pribandari mahasiswa STIKes Panti Rapih Yogyakarta Program Studi Gizi Program Sarjana. Saya memohon kesediaan anda untuk ikut berpartisipasi secara sukarela dalam penelitian saya yang berjudul “Pengaruh Penambahan Tepung *Eucheuma cottonii* Terhadap Karakteristik Kimia Dan Organoleptik Beras Analog Tepung Beras Dan Ubi Jalar Putih Untuk Obesitas”. Penelitian ini telah disetujui dan dinyatakan layak etik oleh komisi etik Rumah Sakit Panti Rapih Yogyakarta dengan nomor *Ethical Clearance* (EC) No. 077/SKEPK-KKE/VI/2025.

Tujuan dari penelitian ini adalah mengetahui penambahan tepung rumput laut *Eucheuma cottonii* terhadap karakteristik kimia dan organoleptik beras analog tepung beras dan ubi jalar putih. Diharapkan penelitian ini dapat menjadi informasi bagi peneliti untuk mendapatkan data mengenai penilaian organoleptik produk beras analog sebagai makanan pokok bagi penderita obesitas.

Anda memiliki hak untuk ikut maupun tidak ikut serta dalam penelitian ini. Jika anda memutuskan untuk berpartisipasi dalam penelitian ini, anda juga memiliki hak untuk mengundurkan diri sewaktu-waktu dari penelitian ini dan tidak berpengaruh pada proses perawatan anda.

Dalam penelitian ini dibutuhkan panelis yang memenuhi persyaratan sebagai berikut:

1. Bersedia menjadi panelis penelitian
2. Panelis dalam keadaan sehat jasmani
3. Panelis tidak memiliki alergi terhadap bahan yang digunakan pada beras analog (tepung beras, ubi jalar putih, tepung rumput laut *Eucheuma cottonii*)
4. Mahasiswa/mahasiswi sebelumnya telah mengikuti uji organoleptik
5. Mahasiswa/mahasiswi rentang usia 18-25 tahun

Panelis yang memenuhi persyaratan di atas diminta untuk mencicipi dan menilai

karakteristik organoleptik meliputi kenampakan, tekstur, aroma, citarasa, dan kesukaan keseluruhan dari setiap sampel yang diberikan. Panelis akan diberikan waktu sekitar 20-25 menit untuk melakukan penilaian organoleptik. Dalam penelitian ini, terdapat resiko yang mungkin terjadi bagi panelis yang memiliki alergi atau intoleransi terhadap kandungan bahan yang digunakan pada beras analog. Apabila panelis membutuhkan informasi terkait penelitian dapat disampaikan kepada peneliti dengan menghubungi nomor *WhatsApp*: 085607768208 (Angelica Pribandari) atau melalui email [angelicacikaa1309@gmail.com](mailto:angelicacikaa1309@gmail.com). Seluruh informasi dan data pribadi yang dikumpulkan akan dijaga kerahasiaannya dan hanya digunakan untuk kepentingan penelitian ini.

|                                                                                                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Judul Penelitian:</b>                                                                                                                                              |
| <b>Pengaruh Penambahan Tepung <i>Eucheuma cottonii</i> Terhadap Karakteristik Kimia Dan Organoleptik Beras Analog Tepung Beras dan Ubi Jalar Putih Untuk Obesitas</b> |

| <b>Saya (Nama lengkap):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"><li>1. Secara sukarela menyetujui bahwa saya akan terlibat dalam penelitian ini.</li><li>2. Saya memahami terkait tujuan, proses, dan risiko yang akan terjadi kepada saya jika ikut serta dalam penelitian ini.</li><li>3. Saya telah memahami bahwa partisipasi saya dalam penelitian ini bersifat sukarela dan dapat keluar sewaktu-waktu dari penelitian ini.</li><li>4. Saya memahami bahwa saya akan menerima salinan dari lembar pernyataan informasi dan persetujuan.</li></ol> |

|                                     |     |         |  |
|-------------------------------------|-----|---------|--|
| Nama dan<br>Tanda tangan<br>Panelis | ( ) | Tanggal |  |
|                                     |     | No. Hp  |  |

Saya telah menjelaskan alur penelitian kepada panelis yang bertanda tangan di atas dan saya yakin bahwa panelis telah memahami tujuan, proses, dan efek yang mungkin terjadi jika terlibat dalam penelitian ini.

|                                      |                                                                                                              |         |              |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------|---------|--------------|
| Nama dan<br>Tanda tangan<br>Peneliti | <br>(Angelica Pribandari) | Tanggal |              |
|                                      |                                                                                                              | No. Hp  | 085607768208 |

## Lampiran 6. Pelaksanaan Kegiatan

### Jadwal Kegiatan

| No | Kegiatan                                    | 2025  |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
|----|---------------------------------------------|-------|--|--|-------|--|--|-----|--|--|------|--|--|------|--|--|---------|--|
|    |                                             | Maret |  |  | April |  |  | Mei |  |  | Juni |  |  | Juli |  |  | Agustus |  |
| 1  | Penyusunan proposal                         |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
| 2  | Seminar proposal                            |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
| 3  | Revisi proposal                             |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
| 4  | Pengurusan izin dan EC                      |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
| 5  | Pembelian dan persiapan bahan               |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
| 6  | Pembuatan, pengeringan, dan uji coba produk |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
| 7  | Uji kimia                                   |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
| 8  | Uji organoleptik                            |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
| 9  | Rekapitulasi dan Pengolahan data            |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
| 10 | Penyusunan laporan                          |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
|    | Seminar hasil                               |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
|    | Revisi laporan                              |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |
|    | Penyusunan naskah publikasi                 |       |  |  |       |  |  |     |  |  |      |  |  |      |  |  |         |  |

### Dokumentasi Kegiatan

#### Pembuatan Beras Analog



## Uji Organoleptik



**Formulir Uji Organoleptik**

Nama Panelis :

Tanggal Uji :

Sampel : Beras Analog Tepung Beras dan Ubi Jalar Putih dengan  
 Penambahan Rumput Laut *Eucheuma cottonii*

Di hadapan anda disajikan empat (4) sampel beras analog yang telah diberi kode. Anda diminta untuk memberikan penilaian kenampakan, aroma, tekstur, citarasa, dan kesukaan keseluruhan untuk masing-masing sampel dengan memberikan penilaian sebagai berikut:

| Skor | Kenampakan     | Aroma       | Tekstur      | Citarasa    | Kesukaan keseluruhan |
|------|----------------|-------------|--------------|-------------|----------------------|
| 1    | Tidak menarik  | Tidak suka  | Tidak pulen  | Tidak suka  | Tidak suka           |
| 2    | Agak menarik   | Agak suka   | Agak pulen   | Agak suka   | Agak suka            |
| 3    | Menarik        | Suka        | Pulen        | Suka        | Suka                 |
| 4    | Sangat menarik | Sangat suka | Sangat pulen | Sangat suka | Sangat suka          |

*Catatan:*

- setiap kali selesai menguji satu (1) sampel, sebelum menguji sampel berikutnya diharapkan meminum air putih terlebih dahulu
- Apabila terjadi reaksi/alergi (gatal-gatal, kemerahan/ruam pada kulit, mual, atau diare) ketika mencicipi sampel dapat segera melapor peneliti untuk diberikan penanganan segera

Isikan skor penilaian anda pada masing-masing nomor berikut:

| Sampel | Kenampakan | Aroma | Tekstur | Citarasa | Kesukaan keseluruhan |
|--------|------------|-------|---------|----------|----------------------|
| 255    |            |       |         |          |                      |
| 309    |            |       |         |          |                      |
| 400    |            |       |         |          |                      |
| 186    |            |       |         |          |                      |

Kritik dan saran:

Yogyakarta, ..... 2025  
 (Nama dan tanda tangan panelis)

## Lampiran 8. Rekapitulasi Data Uji Kimia

| Sampel  | Kadar Air | Kadar Abu | Kadar Protein | Kadar Lemak | Kadar Karbohidrat | Serat Pangan Total |
|---------|-----------|-----------|---------------|-------------|-------------------|--------------------|
| 1_B3.3  | 9,4871    | 2,6405    | 5,4545        | 5,9028      | 76,5558           | 10,1815            |
| 2_B0.1  | 8,9874    | 2,44115   | 5,1911        | 5,30895     | 78,0714           | 7,9479             |
| 3_B1.3  | 10,0743   | 2,3191    | 5,28985       | 5,18305     | 76,515            | 8,4195             |
| 4_B0.3  | 8,6       | 2,1876    | 5,1047        | 6,85385     | 77,2539           | 8,1227             |
| 5_B1.2  | 8,6283    | 3,87655   | 5,55605       | 6,1529      | 76,8089           | 8,99815            |
| 6_B0.2  | 9,3727    | 2,54085   | 5,49135       | 6,2472      | 76,3479           | 7,48635            |
| 7_B3.1  | 9,69905   | 2,2681    | 5,49965       | 5,3054      | 75,007            | 10,98485           |
| 8_B2.2  | 8,4372    | 1,5865    | 5,26895       | 7,76585     | 77,1337           | 9,1863             |
| 9_B1.1  | 9,5423    | 1,4217    | 5,055         | 7,1274      | 77,2278           | 9,06495            |
| 10_B2.3 | 9,28135   | 1,6303    | 5,14685       | 7,38575     | 76,5558           | 9,29445            |
| 11_B2.1 | 10,0636   | 2,58115   | 5,1708        | 7,1775      | 76,8536           | 10,0287            |
| 12_B3.2 | 8,12405   | 2,33275   | 5,5903        | 7,14395     | 76,9415           | 10,72265           |

## Hasil Uji Kimia



### LAPORAN HASIL UJI

Nomor Kode Laboratorium : LS.27.05.25/774  
 Jenis Sampel : Beras Analog  
 Nama Pemohon : Angelica Pribandari  
 Asal Sampel : Stikes Panti Rapih  
 Tgl diterima : 27-05-2025  
 Tgl Pengujian : 02-06-2025 s/d 17-06-2025  
 Jumlah Sampel : 12 Sampel  
 Jenis Analisis : Air, Abu, Protein, Lemak, Karbohidrat, Serat Pangan

| No | Parameter Uji          | Satuan | 1         |           | 2         |           | Metode Uji              |
|----|------------------------|--------|-----------|-----------|-----------|-----------|-------------------------|
|    |                        |        | Ulangan 1 | Ulangan 2 | Ulangan 1 | Ulangan 2 |                         |
| 1  | Air                    | %      | 9,4826    | 9,4916    | 8,9922    | 8,9826    | Gravimetri              |
| 2  | Abu                    |        | 2,7365    | 2,5445    | 2,4877    | 2,3946    |                         |
| 3  | Protein                |        | 5,4317    | 5,4773    | 5,2282    | 5,1540    | Kjldal                  |
| 4  | Lemak                  |        | 5,8423    | 5,9633    | 5,2245    | 5,3934    | Soxhlet                 |
| 5  | Karbohidrat            |        | 76,4667   | 76,6449   | 78,0675   | 78,0753   | Enzimatis<br>Gravimetri |
| 6  | Serat Pangan Tak Larut |        | 9,4068    | 9,2849    | 7,3296    | 7,3318    |                         |
| 7  | Serat Pangan Terlarut  |        | 0,8255    | 0,8458    | 0,6108    | 0,6236    |                         |
| 8  | Serat Pangan Total     |        | 10,2323   | 10,1307   | 7,9404    | 7,9554    |                         |

| No | Parameter Uji          | Satuan | 3         |           | 4         |           | Metode Uji              |
|----|------------------------|--------|-----------|-----------|-----------|-----------|-------------------------|
|    |                        |        | Ulangan 1 | Ulangan 2 | Ulangan 1 | Ulangan 2 |                         |
| 1  | Air                    | %      | 10,0573   | 10,0913   | 8,5385    | 8,6615    | Gravimetri              |
| 2  | Abu                    |        | 2,3833    | 2,2549    | 2,1980    | 2,1772    |                         |
| 3  | Protein                |        | 5,3669    | 5,2128    | 5,0553    | 5,1541    | Kjldal                  |
| 4  | Lemak                  |        | 5,2255    | 5,1406    | 6,8910    | 6,8167    | Soxhlet                 |
| 5  | Karbohidrat            |        | 76,5069   | 76,5232   | 77,3173   | 77,1905   | Enzimatis<br>Gravimetri |
| 6  | Serat Pangan Tak Larut |        | 7,7496    | 7,7499    | 7,5175    | 7,4929    |                         |
| 7  | Serat Pangan Terlarut  |        | 0,6681    | 0,6714    | 0,6249    | 0,6101    |                         |
| 8  | Serat Pangan Total     |        | 8,4177    | 8,4213    | 8,1424    | 8,103     |                         |

#### Catatan:

- Hasil Uji hanya berlaku untuk contoh yang diuji
- Laporan Hasil Uji ini tidak boleh digandakan tanpa izin Kepala UPT Laboratorium Instiper Yogyakarta kecuali secara lengkap

Yogyakarta, 17 Juni 2025  
Ka UPT Laboratorium

Galang Indra Jaya, S.P.,M.Sc

Hal 1 dari 3 hal


**INSTITUT PERTANIAN STIPER**  
**INSTIPER**  
 YOGYAKARTA  
**UPT LABORATORIUM**

**LAPORAN HASIL UJI**

Nomor Kode Laboratorium : LS.27.05.25/774  
 Jenis Sampel : Beras Analog  
 Nama Pemohon : Angelica Pribandari  
 Asal Sampel : Stikes Panti Rapih  
 Tgl diterima : 27-05-2025  
 Tgl Pengujian : 02-06-2025 s/d 17-06-2025  
 Jumlah Sampel : 12 Sampel  
 Jenis Analisis : Air, Abu, Protein, Lemak, Karbohidrat, Serat Pangan

| No | Parameter Uji          | Satuan | 5         |           | 6         |           | Metode Uji              |
|----|------------------------|--------|-----------|-----------|-----------|-----------|-------------------------|
|    |                        |        | Ulangan 1 | Ulangan 2 | Ulangan 1 | Ulangan 2 |                         |
| 1  | Air                    | %      | 8,6254    | 8,6312    | 9,3604    | 9,3850    | Gravimetri              |
| 2  | Abu                    |        | 3,7931    | 3,9600    | 2,5290    | 2,5527    |                         |
| 3  | Protein                |        | 5,5277    | 5,5844    | 5,5420    | 5,4407    | Kjldal                  |
| 4  | Lemak                  |        | 6,1211    | 6,1847    | 6,2836    | 6,2108    | Soxhlet                 |
| 5  | Karbohidrat            |        | 76,9556   | 76,6623   | 76,2850   | 76,4108   | Enzimatik<br>Gravimetri |
| 6  | Serat Pangan Tak larut |        | 8,3888    | 8,1602    | 6,9954    | 6,871     |                         |
| 7  | Serat Pangan Terlarut  |        | 0,7228    | 0,7245    | 0,5543    | 0,552     |                         |
| 8  | Serat Pangan Total     |        | 9,1116    | 8,8847    | 7,5497    | 7,423     |                         |

| No | Parameter Uji          | Satuan | 7         |           | 8         |           | Metode Uji              |
|----|------------------------|--------|-----------|-----------|-----------|-----------|-------------------------|
|    |                        |        | Ulangan 1 | Ulangan 2 | Ulangan 1 | Ulangan 2 |                         |
| 1  | Air                    | %      | 9,7522    | 9,6459    | 8,4632    | 8,4112    | Gravimetri              |
| 2  | Abu                    |        | 2,2390    | 2,2972    | 1,5969    | 1,5761    |                         |
| 3  | Protein                |        | 5,5986    | 5,4007    | 5,3095    | 5,2284    | Kjldal                  |
| 4  | Lemak                  |        | 5,2312    | 5,3796    | 7,8408    | 7,6909    | Soxhlet                 |
| 5  | Karbohidrat            |        | 74,9666   | 75,0474   | 76,9671   | 77,3004   | Enzimatik<br>Gravimetri |
| 6  | Serat Pangan Tak Larut |        | 10,0287   | 10,0497   | 8,4475    | 8,4164    |                         |
| 7  | Serat Pangan Terlarut  |        | 0,936     | 0,9553    | 0,761     | 0,7477    |                         |
| 8  | Serat Pangan Total     |        | 10,9647   | 11,005    | 9,2085    | 9,1641    |                         |

Catatan:

- Hasil Uji hanya berlaku untuk contoh yang diuji
- Laporan Hasil Uji ini tidak boleh digandakan tanpa izin Kepala UPT Laboratorium Instiper Yogyakarta kecuali secara lengkap

Yogyakarta, 17 Juni 2025  
Ka UPT Laboratorium



Galang Indra Jaya, S.P.,M.Sc

Hal 2 dari 3 hal

**LAPORAN HASIL UJI**

Nomor Kode Laboratorium : LS.27.05.25/774  
 Jenis Sampel : Beras Analog  
 Nama Pemohon : Angelica Pribandari  
 Asal Sampel : Stikes Panti Rapih  
 Tgl diterima : 27-05-2025  
 Tgl Pengujian : 02-06-2025 s/d 17-06-2025  
 Jumlah Sampel : 12 Sampel  
 Jenis Analisis : Air, Abu, Protein, Lemak, Karbohidrat, Serat Pangan

| No | Parameter Uji          | Satuan | 9         |           | 10        |           | Metode Uji              |
|----|------------------------|--------|-----------|-----------|-----------|-----------|-------------------------|
|    |                        |        | Ulangan 1 | Ulangan 2 | Ulangan 1 | Ulangan 2 |                         |
| 1  | Air                    | %      | 9,5625    | 9,5221    | 9,3120    | 9,2507    | Gravimetri              |
| 2  | Abu                    |        | 1,4420    | 1,4014    | 1,6309    | 1,6297    |                         |
| 3  | Protein                |        | 5,0723    | 5,0377    | 5,1080    | 5,1857    | Kjidal                  |
| 4  | Lemak                  |        | 7,0625    | 7,1923    | 7,4825    | 7,2890    | Soxhlet                 |
| 5  | Karbohidrat            |        | 77,1790   | 77,2766   | 76,4667   | 76,6449   | Enzimatik<br>Gravimetri |
| 6  | Serat Pangan Tak Larut |        | 8,3127    | 8,3668    | 8,4467    | 8,6345    |                         |
| 7  | Serat Pangan Terlarut  |        | 0,7228    | 0,7276    | 0,747     | 0,7607    |                         |
| 8  | Serat Pangan Total     |        | 9,0355    | 9,0944    | 9,1937    | 9,3952    |                         |

| No | Parameter Uji          | Satuan | 11        |           | 12        |           | Metode Uji              |
|----|------------------------|--------|-----------|-----------|-----------|-----------|-------------------------|
|    |                        |        | Ulangan 1 | Ulangan 2 | Ulangan 1 | Ulangan 2 |                         |
| 1  | Air                    | %      | 10,0884   | 10,0388   | 7,9880    | 8,2601    | Gravimetri              |
| 2  | Abu                    |        | 2,5821    | 2,5802    | 2,3272    | 2,3383    |                         |
| 3  | Protein                |        | 5,1811    | 5,1605    | 5,5891    | 5,5915    | Kjidal                  |
| 4  | Lemak                  |        | 7,1818    | 7,1732    | 7,1400    | 7,1479    | Soxhlet                 |
| 5  | Karbohidrat            |        | 76,8607   | 76,8466   | 76,7896   | 77,0934   | Enzimatik<br>Gravimetri |
| 6  | Serat Pangan Tak Larut |        | 9,1717    | 9,3488    | 9,7038    | 9,9291    |                         |
| 7  | Serat Pangan Terlarut  |        | 0,7753    | 0,7616    | 0,9115    | 0,9009    |                         |
| 8  | Serat Pangan Total     |        | 9,947     | 10,1104   | 10,6153   | 10,83     |                         |

**Catatan:**

- Hasil Uji hanya berlaku untuk contoh yang diuji
- Laporan Hasil Uji ini tidak boleh digandakan tanpa izin Kepala UPT Laboratorium Instipер Yogyakarta kecuali secara lengkap

Yogyakarta, 17 Juni 2025  
Ka UPT Laboratorium



Galang Indra Jaya, S.P., M.Sc

Hal 3 dari 3 hal

Lampiran 9. Rekapitulasi Data Uji Organoleptik

| No | Nama             | Kenampakan |       |       |       | Aroma |       |       |       | Tekstur |       |       |       | Citarasa |       |       |       | Kesukaan Keseluruhan |       |       |       |
|----|------------------|------------|-------|-------|-------|-------|-------|-------|-------|---------|-------|-------|-------|----------|-------|-------|-------|----------------------|-------|-------|-------|
|    |                  | 255        | 309   | 400   | 186   | 255   | 309   | 400   | 186   | 255     | 309   | 400   | 186   | 255      | 309   | 400   | 186   | 255                  | 309   | 400   | 186   |
| 1  | CTP              | 2          | 2     | 2     | 2     | 2     | 1     | 2     | 2     | 3       | 3     | 3     | 2     | 2        | 1     | 2     | 1     | 2                    | 1     | 2     | 1     |
| 2  | WP               | 3          | 2     | 1     | 1     | 4     | 3     | 2     | 2     | 3       | 2     | 2     | 1     | 2        | 2     | 3     | 2     | 2                    | 2     | 3     | 2     |
| 3  | WESMJ            | 1          | 3     | 2     | 2     | 1     | 2     | 2     | 1     | 3       | 2     | 3     | 1     | 4        | 2     | 3     | 1     | 2                    | 2     | 3     | 1     |
| 4  | PKH              | 3          | 2     | 3     | 2     | 2     | 3     | 3     | 2     | 2       | 3     | 2     | 1     | 2        | 1     | 4     | 2     | 2                    | 3     | 2     | 1     |
| 5  | MA               | 3          | 2     | 2     | 3     | 3     | 3     | 1     | 1     | 2       | 1     | 2     | 1     | 3        | 1     | 3     | 1     | 2                    | 1     | 3     | 1     |
| 6  | MA               | 3          | 2     | 3     | 2     | 3     | 3     | 3     | 3     | 2       | 2     | 3     | 2     | 3        | 2     | 3     | 1     | 3                    | 3     | 3     | 1     |
| 7  | BAEP             | 2          | 2     | 2     | 2     | 2     | 1     | 2     | 1     | 2       | 2     | 3     | 2     | 1        | 2     | 3     | 2     | 2                    | 2     | 4     | 2     |
| 8  | YIA              | 3          | 2     | 3     | 2     | 3     | 3     | 3     | 3     | 3       | 2     | 2     | 1     | 4        | 3     | 2     | 2     | 3                    | 3     | 3     | 2     |
| 9  | CSTC             | 2          | 2     | 2     | 2     | 1     | 2     | 2     | 2     | 3       | 2     | 3     | 2     | 1        | 2     | 2     | 2     | 1                    | 2     | 2     | 2     |
| 10 | KCR              | 3          | 2     | 2     | 3     | 2     | 3     | 3     | 3     | 3       | 2     | 2     | 1     | 3        | 2     | 3     | 2     | 3                    | 2     | 3     | 2     |
| 11 | SI               | 2          | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 3       | 3     | 4     | 4     | 3        | 2     | 2     | 2     | 2                    | 2     | 2     | 2     |
| 12 | MA               | 3          | 2     | 2     | 2     | 3     | 1     | 2     | 3     | 3       | 2     | 2     | 3     | 3        | 2     | 3     | 3     | 4                    | 2     | 2     | 3     |
| 13 | MAA              | 3          | 2     | 2     | 2     | 3     | 2     | 1     | 1     | 3       | 2     | 3     | 1     | 3        | 3     | 2     | 2     | 3                    | 2     | 2     | 1     |
| 14 | RAW              | 3          | 2     | 2     | 3     | 2     | 3     | 3     | 3     | 3       | 2     | 3     | 2     | 3        | 3     | 3     | 2     | 2                    | 3     | 3     | 2     |
| 15 | GMSP             | 3          | 2     | 3     | 4     | 2     | 3     | 3     | 2     | 3       | 1     | 2     | 2     | 3        | 2     | 2     | 2     | 2                    | 2     | 3     | 2     |
| 16 | YA               | 2          | 1     | 3     | 2     | 3     | 4     | 4     | 4     | 3       | 1     | 2     | 1     | 3        | 4     | 2     | 2     | 3                    | 4     | 2     | 2     |
| 17 | BKAR             | 4          | 2     | 2     | 3     | 3     | 1     | 3     | 3     | 3       | 2     | 3     | 1     | 3        | 2     | 3     | 4     | 3                    | 2     | 1     | 4     |
| 18 | CFH              | 3          | 2     | 2     | 2     | 3     | 2     | 2     | 1     | 2       | 2     | 3     | 1     | 2        | 1     | 2     | 1     | 2                    | 2     | 3     | 2     |
| 19 | RPW              | 3          | 3     | 2     | 3     | 2     | 3     | 3     | 2     | 3       | 3     | 3     | 2     | 3        | 2     | 3     | 2     | 3                    | 3     | 3     | 2     |
| 20 | MMSS             | 1          | 2     | 3     | 1     | 3     | 3     | 3     | 3     | 2       | 3     | 3     | 2     | 3        | 4     | 2     | 2     | 3                    | 4     | 3     | 2     |
| 21 | BO               | 3          | 2     | 4     | 3     | 3     | 3     | 3     | 2     | 3       | 2     | 2     | 1     | 3        | 3     | 2     | 1     | 3                    | 3     | 2     | 1     |
| 22 | CRA              | 3          | 3     | 3     | 4     | 3     | 1     | 3     | 2     | 4       | 3     | 3     | 2     | 3        | 2     | 3     | 1     | 3                    | 2     | 3     | 2     |
| 23 | DPPN             | 2          | 1     | 3     | 2     | 1     | 1     | 2     | 2     | 2       | 1     | 3     | 1     | 1        | 2     | 3     | 1     | 2                    | 2     | 3     | 1     |
| 24 | MPPD             | 3          | 2     | 3     | 3     | 2     | 3     | 3     | 4     | 3       | 3     | 2     | 2     | 2        | 2     | 4     | 4     | 2                    | 3     | 3     | 4     |
| 25 | FNCS             | 4          | 2     | 3     | 4     | 2     | 2     | 3     | 2     | 3       | 1     | 4     | 3     | 4        | 2     | 2     | 2     | 3                    | 2     | 3     | 3     |
| 26 | BB               | 3          | 3     | 3     | 3     | 3     | 4     | 4     | 3     | 1       | 1     | 2     | 2     | 2        | 2     | 3     | 2     | 2                    | 3     | 2     | 3     |
| 27 | MVK              | 3          | 3     | 3     | 3     | 2     | 4     | 4     | 4     | 2       | 2     | 3     | 1     | 3        | 3     | 4     | 3     | 2                    | 3     | 3     | 2     |
| 28 | YLZS             | 3          | 3     | 4     | 3     | 3     | 3     | 2     | 2     | 3       | 2     | 3     | 1     | 3        | 3     | 3     | 3     | 3                    | 3     | 3     | 3     |
| 29 | MDK              | 3          | 2     | 3     | 1     | 3     | 2     | 3     | 2     | 4       | 3     | 2     | 2     | 3        | 2     | 3     | 2     | 3                    | 2     | 2     | 1     |
| 30 | RTNS             | 3          | 3     | 4     | 3     | 3     | 4     | 3     | 2     | 4       | 3     | 3     | 2     | 3        | 3     | 3     | 2     | 4                    | 3     | 3     | 2     |
|    | <b>Rata-rata</b> | 2,733      | 2,167 | 2,600 | 2,467 | 2,467 | 2,500 | 2,633 | 2,300 | 2,767   | 2,100 | 2,667 | 1,667 | 2,700    | 2,233 | 2,733 | 1,967 | 2,533                | 2,433 | 2,633 | 1,967 |

## Lampiran 10. *Output* Analisis Statistik Uji Kimia

### *Output* Analisis Statistik Kadar Air

#### Uji Deskriptif

| Descriptives |                                  |             |            |        |
|--------------|----------------------------------|-------------|------------|--------|
| Sampel       |                                  | Statistic   | Std. Error |        |
| Kadar Air    | B0                               | Mean        | 8.9833     | .22229 |
|              | 95% Confidence Interval for Mean | Lower Bound | 8.0269     |        |
|              |                                  | Upper Bound | 9.9398     |        |
|              | 5% Trimmed Mean                  |             |            |        |
|              | Median                           | 8.9800      |            |        |
|              | Variance                         | .148        |            |        |
|              | Std. Deviation                   | .38501      |            |        |
|              | Minimum                          | 8.60        |            |        |
|              | Maximum                          | 9.37        |            |        |
|              | Range                            | .77         |            |        |
|              | Interquartile Range              |             |            |        |
|              | Skewness                         | .039        | 1.225      |        |
|              | Kurtosis                         |             |            |        |
|              | B1                               | Mean        | 9.4100     | .42360 |
|              | 95% Confidence Interval for Mean | Lower Bound | 7.5874     |        |
|              |                                  | Upper Bound | 11.2326    |        |
|              | 5% Trimmed Mean                  |             |            |        |
|              | Median                           | 9.5400      |            |        |
|              | Variance                         | .538        |            |        |
|              | Std. Deviation                   | .73369      |            |        |
|              | Minimum                          | 8.62        |            |        |
|              | Maximum                          | 10.07       |            |        |
|              | Range                            | 1.45        |            |        |
|              | Interquartile Range              |             |            |        |
|              | Skewness                         | -.772       | 1.225      |        |
|              | Kurtosis                         |             |            |        |
|              | B2                               | Mean        | 9.2567     | .47069 |
|              | 95% Confidence Interval for Mean | Lower Bound | 7.2315     |        |
|              |                                  | Upper Bound | 11.2819    |        |
|              | 5% Trimmed Mean                  |             |            |        |
|              | Median                           | 9.2800      |            |        |
|              | Variance                         | .665        |            |        |
|              | Std. Deviation                   | .81525      |            |        |
|              | Minimum                          | 8.43        |            |        |
|              | Maximum                          | 10.06       |            |        |
|              | Range                            | 1.63        |            |        |
|              | Interquartile Range              |             |            |        |
|              | Skewness                         | -.129       | 1.225      |        |
|              | Kurtosis                         |             |            |        |
|              | B3                               | Mean        | 9.0967     | .49208 |
|              | 95% Confidence Interval for Mean | Lower Bound | 6.9794     |        |
|              |                                  | Upper Bound | 11.2139    |        |
|              | 5% Trimmed Mean                  |             |            |        |
|              | Median                           | 9.4800      |            |        |
|              | Variance                         | .726        |            |        |
|              | Std. Deviation                   | .85231      |            |        |
|              | Minimum                          | 8.12        |            |        |
|              | Maximum                          | 9.69        |            |        |
|              | Range                            | 1.57        |            |        |
|              | Interquartile Range              |             |            |        |
|              | Skewness                         | -1.615      | 1.225      |        |
|              | Kurtosis                         |             |            |        |

## Uji Normalitas

### Tests of Normality

| Sampel       | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|--------------|---------------------------------|----|------|--------------|----|------|
|              | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| Kadar Air B0 | .176                            | 3  | .    | 1.000        | 3  | .986 |
| B1           | .237                            | 3  | .    | .976         | 3  | .706 |
| B2           | .178                            | 3  | .    | .999         | 3  | .953 |
| B3           | .340                            | 3  | .    | .848         | 3  | .236 |

a. Lilliefors Significance Correction

## Uji Homogenitas

### Test of Homogeneity of Variances

Kadar Air

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| .721             | 3   | 8   | .567 |

## Uji Anova

### ANOVA

Kadar Air

|                | Sum of Squares | df | Mean Square | F    | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | .313           | 3  | .104        | .201 | .893 |
| Within Groups  | 4.155          | 8  | .519        |      |      |
| Total          | 4.468          | 11 |             |      |      |

Output Analisis Statistik Kadar Abu  
Uji Deskriptif

| Descriptives |                                  |             |         |            |  |
|--------------|----------------------------------|-------------|---------|------------|--|
| Sampel       |                                  | Statistic   |         | Std. Error |  |
| Kadar Abu    | B0                               | Mean        | 2.3867  | .10729     |  |
|              | 95% Confidence Interval for Mean | Lower Bound | 1.9250  |            |  |
|              |                                  | Upper Bound | 2.8483  |            |  |
|              | 5% Trimmed Mean                  |             | .       |            |  |
|              | Median                           |             | 2.4400  |            |  |
|              | Variance                         |             | .035    |            |  |
|              | Std. Deviation                   |             | .18583  |            |  |
|              | Minimum                          |             | 2.18    |            |  |
|              | Maximum                          |             | 2.54    |            |  |
|              | Range                            |             | .36     |            |  |
|              | Interquartile Range              |             | .       |            |  |
|              | Skewness                         |             | -1.185  | 1.225      |  |
|              | Kurtosis                         |             | .       |            |  |
|              | B1                               | Mean        | 2.5333  | .71602     |  |
|              | 95% Confidence Interval for Mean | Lower Bound | -.5474  |            |  |
|              |                                  | Upper Bound | 5.6141  |            |  |
|              | 5% Trimmed Mean                  |             | .       |            |  |
|              | Median                           |             | 2.3100  |            |  |
|              | Variance                         |             | 1.538   |            |  |
|              | Std. Deviation                   |             | 1.24017 |            |  |
|              | Minimum                          |             | 1.42    |            |  |
|              | Maximum                          |             | 3.87    |            |  |
|              | Range                            |             | 2.45    |            |  |
|              | Interquartile Range              |             | .       |            |  |
|              | Skewness                         |             | .784    | 1.225      |  |
|              | Kurtosis                         |             | .       |            |  |
|              | B2                               | Mean        | 1.9300  | .32532     |  |
|              | 95% Confidence Interval for Mean | Lower Bound | .5303   |            |  |
|              |                                  | Upper Bound | 3.3297  |            |  |
|              | 5% Trimmed Mean                  |             | .       |            |  |
|              | Median                           |             | 1.6300  |            |  |
|              | Variance                         |             | .318    |            |  |
|              | Std. Deviation                   |             | .56347  |            |  |
|              | Minimum                          |             | 1.58    |            |  |
|              | Maximum                          |             | 2.58    |            |  |
|              | Range                            |             | 1.00    |            |  |
|              | Interquartile Range              |             | .       |            |  |
|              | Skewness                         |             | 1.717   | 1.225      |  |
|              | Kurtosis                         |             | .       |            |  |
|              | B3                               | Mean        | 2.4100  | .11676     |  |
|              | 95% Confidence Interval for Mean | Lower Bound | 1.9076  |            |  |
|              |                                  | Upper Bound | 2.9124  |            |  |
|              | 5% Trimmed Mean                  |             | .       |            |  |
|              | Median                           |             | 2.3300  |            |  |
|              | Variance                         |             | .041    |            |  |
|              | Std. Deviation                   |             | .20224  |            |  |
|              | Minimum                          |             | 2.26    |            |  |
|              | Maximum                          |             | 2.64    |            |  |
|              | Range                            |             | .38     |            |  |
|              | Interquartile Range              |             | .       |            |  |
|              | Skewness                         |             | 1.502   | 1.225      |  |
|              | Kurtosis                         |             | .       |            |  |

Uji Normalitas

| Tests of Normality |    |                                 |    |      |              |    |      |
|--------------------|----|---------------------------------|----|------|--------------|----|------|
| Sampel             |    | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|                    |    | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| Kadar Abu          | B0 | .280                            | 3  | .    | .938         | 3  | .520 |
|                    | B1 | .238                            | 3  | .    | .976         | 3  | .701 |
|                    | B2 | .369                            | 3  | .    | .787         | 3  | .085 |
|                    | B3 | .320                            | 3  | .    | .883         | 3  | .332 |

a. Lilliefors Significance Correction

## Uji Homogenitas

### Test of Homogeneity of Variances

Kadar Abu

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| 3.771            | 3   | 8   | .059 |

## Uji Anova

### ANOVA

Kadar Abu

|                | Sum of Squares | df | Mean Square | F    | Sig. |
|----------------|----------------|----|-------------|------|------|
| Between Groups | .630           | 3  | .210        | .435 | .734 |
| Within Groups  | 3.862          | 8  | .483        |      |      |
| Total          | 4.492          | 11 |             |      |      |

Output Uji SPSS Uji Kadar Lemak  
Uji Deskriptif

| Descriptives |        |                                  |                       |            |
|--------------|--------|----------------------------------|-----------------------|------------|
|              | Sampel |                                  | Statistic             | Std. Error |
| Kadar Lemak  | B0     | Mean                             | 6.1300                | .45081     |
|              |        | 95% Confidence Interval for Mean | Lower Bound<br>4.1903 |            |
|              |        |                                  | Upper Bound<br>8.0697 |            |
|              |        | 5% Trimmed Mean                  | .                     |            |
|              |        | Median                           | 6.2400                |            |
|              |        | Variance                         | .610                  |            |
|              |        | Std. Deviation                   | .78083                |            |
|              |        | Minimum                          | 5.30                  |            |
|              |        | Maximum                          | 6.85                  |            |
|              |        | Range                            | 1.55                  |            |
|              |        | Interquartile Range              | .                     |            |
|              |        | Skewness                         | -.621                 | 1.225      |
|              |        | Kurtosis                         | .                     |            |
|              | B1     | Mean                             | 6.1500                | .56003     |
|              |        | 95% Confidence Interval for Mean | Lower Bound<br>3.7404 |            |
|              |        |                                  | Upper Bound<br>8.5596 |            |
|              |        | 5% Trimmed Mean                  | .                     |            |
|              |        | Median                           | 6.1500                |            |
|              |        | Variance                         | .941                  |            |
|              |        | Std. Deviation                   | .97000                |            |
|              |        | Minimum                          | 5.18                  |            |
|              |        | Maximum                          | 7.12                  |            |
|              |        | Range                            | 1.94                  |            |
|              |        | Interquartile Range              | .                     |            |
|              |        | Skewness                         | .000                  | 1.225      |
|              |        | Kurtosis                         | .                     |            |
|              | B2     | Mean                             | 7.4367                | .17266     |
|              |        | 95% Confidence Interval for Mean | Lower Bound<br>6.6938 |            |
|              |        |                                  | Upper Bound<br>8.1796 |            |
|              |        | 5% Trimmed Mean                  | .                     |            |
|              |        | Median                           | 7.3800                |            |
|              |        | Variance                         | .089                  |            |
|              |        | Std. Deviation                   | .29905                |            |
|              |        | Minimum                          | 7.17                  |            |
|              |        | Maximum                          | 7.76                  |            |
|              |        | Range                            | .59                   |            |
|              |        | Interquartile Range              | .                     |            |
|              |        | Skewness                         | .822                  | 1.225      |
|              |        | Kurtosis                         | .                     |            |
|              | B3     | Mean                             | 6.1133                | .54177     |
|              |        | 95% Confidence Interval for Mean | Lower Bound<br>3.7823 |            |
|              |        |                                  | Upper Bound<br>8.4444 |            |
|              |        | 5% Trimmed Mean                  | .                     |            |
|              |        | Median                           | 5.9000                |            |
|              |        | Variance                         | .881                  |            |
|              |        | Std. Deviation                   | .93837                |            |
|              |        | Minimum                          | 5.30                  |            |
|              |        | Maximum                          | 7.14                  |            |
|              |        | Range                            | 1.84                  |            |
|              |        | Interquartile Range              | .                     |            |
|              |        | Skewness                         | .970                  | 1.225      |
|              |        | Kurtosis                         | .                     |            |

Uji Normalitas

| Tests of Normality |    |                                 |    |      |              |    |       |
|--------------------|----|---------------------------------|----|------|--------------|----|-------|
| Sampel             |    | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |       |
|                    |    | Statistic                       | df | Sig. | Statistic    | df | Sig.  |
| Kadar Lemak        | B0 | .223                            | 3  | .    | .985         | 3  | .766  |
|                    | B1 | .175                            | 3  | .    | 1.000        | 3  | 1.000 |
|                    | B2 | .242                            | 3  | .    | .973         | 3  | .685  |
|                    | B3 | .257                            | 3  | .    | .961         | 3  | .622  |

a. Lilliefors Significance Correction

### Uji Homogenitas

#### Test of Homogeneity of Variances

Kadar Lemak

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| .827             | 3   | 8   | .515 |

### Uji Anova

#### ANOVA

Kadar Lemak

|                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 3.837          | 3  | 1.279       | 2.030 | .188 |
| Within Groups  | 5.041          | 8  | .630        |       |      |
| Total          | 8.878          | 11 |             |       |      |

## Output Uji SPSS Kadar Protein

### Uji Deskriptif

| Descriptives  |                                  |             |            |        |
|---------------|----------------------------------|-------------|------------|--------|
| Sampel        |                                  | Statistic   | Std. Error |        |
| Kadar Protein | B0                               | Mean        | 5.2600     | .11790 |
|               | 95% Confidence Interval for Mean | Lower Bound | 4.7527     |        |
|               |                                  | Upper Bound | 5.7673     |        |
|               | 5% Trimmed Mean                  |             | .          |        |
|               | Median                           |             | 5.1900     |        |
|               | Variance                         |             | .042       |        |
|               | Std. Deviation                   |             | .20421     |        |
|               | Minimum                          |             | 5.10       |        |
|               | Maximum                          |             | 5.49       |        |
|               | Range                            |             | .39        |        |
|               | Interquartile Range              |             | .          |        |
|               | Skewness                         |             | 1.361      | 1.225  |
|               | Kurtosis                         |             | .          |        |
|               | B1                               | Mean        | 5.2933     | .14449 |
|               | 95% Confidence Interval for Mean | Lower Bound | 4.6716     |        |
|               |                                  | Upper Bound | 5.9150     |        |
|               | 5% Trimmed Mean                  |             | .          |        |
|               | Median                           |             | 5.2800     |        |
|               | Variance                         |             | .063       |        |
|               | Std. Deviation                   |             | .25027     |        |
|               | Minimum                          |             | 5.05       |        |
|               | Maximum                          |             | 5.55       |        |
|               | Range                            |             | .50        |        |
|               | Interquartile Range              |             | .          |        |
|               | Skewness                         |             | .239       | 1.225  |
|               | Kurtosis                         |             | .          |        |
|               | B2                               | Mean        | 5.1900     | .03606 |
|               | 95% Confidence Interval for Mean | Lower Bound | 5.0349     |        |
|               |                                  | Upper Bound | 5.3451     |        |
|               | 5% Trimmed Mean                  |             | .          |        |
|               | Median                           |             | 5.1700     |        |
|               | Variance                         |             | .004       |        |
|               | Std. Deviation                   |             | .06245     |        |
|               | Minimum                          |             | 5.14       |        |
|               | Maximum                          |             | 5.26       |        |
|               | Range                            |             | .12        |        |
|               | Interquartile Range              |             | .          |        |
|               | Skewness                         |             | 1.293      | 1.225  |
|               | Kurtosis                         |             | .          |        |
|               | B3                               | Mean        | 5.5100     | .04163 |
|               | 95% Confidence Interval for Mean | Lower Bound | 5.3309     |        |
|               |                                  | Upper Bound | 5.6891     |        |
|               | 5% Trimmed Mean                  |             | .          |        |
|               | Median                           |             | 5.4900     |        |
|               | Variance                         |             | .005       |        |
|               | Std. Deviation                   |             | .07211     |        |
|               | Minimum                          |             | 5.45       |        |
|               | Maximum                          |             | 5.59       |        |
|               | Range                            |             | .14        |        |
|               | Interquartile Range              |             | .          |        |
|               | Skewness                         |             | 1.152      | 1.225  |
|               | Kurtosis                         |             | .          |        |

### Uji Normalitas

| Tests of Normality |    |                                 |    |      |              |      |
|--------------------|----|---------------------------------|----|------|--------------|------|
| Sampel             |    | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |      |
|                    |    | Statistic                       | df | Sig. | Statistic    | Sig. |
| Kadar Protein      | B0 | .301                            | 3  | .    | .912         | .424 |
|                    | B1 | .188                            | 3  | .    | .998         | .912 |
|                    | B2 | .292                            | 3  | .    | .923         | .463 |
|                    | B3 | .276                            | 3  | .    | .942         | .537 |

a. Lilliefors Significance Correction

## Uji Homogenitas

### Test of Homogeneity of Variances

Kadar Protein

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| 1.913            | 3   | 8   | .206 |

## Uji Anova

### ANOVA

Kadar Protein

|                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | .171           | 3  | .057        | 2.015 | .191 |
| Within Groups  | .227           | 8  | .028        |       |      |
| Total          | .398           | 11 |             |       |      |

Output Uji SPSS Kadar Karbohidrat

Uji Deskriptif

| Descriptives      |                                  |             |         |            |  |
|-------------------|----------------------------------|-------------|---------|------------|--|
| Sampel            |                                  | Statistic   |         | Std. Error |  |
| Kadar Karbohidrat | B0                               | Mean        | 77.2200 | .49963     |  |
|                   | 95% Confidence Interval for Mean | Lower Bound | 75.0703 |            |  |
|                   |                                  | Upper Bound | 79.3697 |            |  |
|                   | 5% Trimmed Mean                  |             | .       |            |  |
|                   | Median                           |             | 77.2500 |            |  |
|                   | Variance                         |             | .749    |            |  |
|                   | Std. Deviation                   |             | .86539  |            |  |
|                   | Minimum                          |             | 76.34   |            |  |
|                   | Maximum                          |             | 78.07   |            |  |
|                   | Range                            |             | 1.73    |            |  |
|                   | Interquartile Range              |             | .       |            |  |
|                   | Skewness                         |             | -.156   | 1.225      |  |
|                   | Kurtosis                         |             | .       |            |  |
|                   | B1                               | Mean        | 76.8600 | .22143     |  |
|                   | 95% Confidence Interval for Mean | Lower Bound | 75.9072 |            |  |
|                   |                                  | Upper Bound | 77.8128 |            |  |
|                   | 5% Trimmed Mean                  |             | .       |            |  |
|                   | Median                           |             | 76.8000 |            |  |
|                   | Variance                         |             | .147    |            |  |
|                   | Std. Deviation                   |             | .38354  |            |  |
|                   | Minimum                          |             | 76.51   |            |  |
|                   | Maximum                          |             | 77.27   |            |  |
|                   | Range                            |             | .76     |            |  |
|                   | Interquartile Range              |             | .       |            |  |
|                   | Skewness                         |             | .687    | 1.225      |  |
|                   | Kurtosis                         |             | .       |            |  |
|                   | B2                               | Mean        | 76.8433 | .16746     |  |
|                   | 95% Confidence Interval for Mean | Lower Bound | 76.1228 |            |  |
|                   |                                  | Upper Bound | 77.5639 |            |  |
|                   | 5% Trimmed Mean                  |             | .       |            |  |
|                   | Median                           |             | 76.8500 |            |  |
|                   | Variance                         |             | .084    |            |  |
|                   | Std. Deviation                   |             | .29006  |            |  |
|                   | Minimum                          |             | 76.55   |            |  |
|                   | Maximum                          |             | 77.13   |            |  |
|                   | Range                            |             | .58     |            |  |
|                   | Interquartile Range              |             | .       |            |  |
|                   | Skewness                         |             | -.103   | 1.225      |  |
|                   | Kurtosis                         |             | .       |            |  |
|                   | B3                               | Mean        | 76.1633 | .59246     |  |
|                   | 95% Confidence Interval for Mean | Lower Bound | 73.6142 |            |  |
|                   |                                  | Upper Bound | 78.7125 |            |  |
|                   | 5% Trimmed Mean                  |             | .       |            |  |
|                   | Median                           |             | 76.5500 |            |  |
|                   | Variance                         |             | 1.053   |            |  |
|                   | Std. Deviation                   |             | 1.02617 |            |  |
|                   | Minimum                          |             | 75.00   |            |  |
|                   | Maximum                          |             | 76.94   |            |  |
|                   | Range                            |             | 1.94    |            |  |
|                   | Interquartile Range              |             | .       |            |  |
|                   | Skewness                         |             | -1.455  | 1.225      |  |
|                   | Kurtosis                         |             | .       |            |  |

Uji Normalitas

| Tests of Normality |    |                                 |    |      |              |    |      |
|--------------------|----|---------------------------------|----|------|--------------|----|------|
| Sampel             |    | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|                    |    | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| Kadar Karbohidrat  | B0 | .180                            | 3  | .    | .999         | 3  | .943 |
|                    | B1 | .229                            | 3  | .    | .982         | 3  | .740 |
|                    | B2 | .177                            | 3  | .    | 1.000        | 3  | .962 |
|                    | B3 | .314                            | 3  | .    | .894         | 3  | .365 |

a. Lilliefors Significance Correction

## Uji Homogenitas

### Test of Homogeneity of Variances

Kadar Karbohidrat

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| 1.980            | 3   | 8   | .196 |

## Uji Anova

### ANOVA

Kadar Karbohidrat

|                | Sum of Squares | df | Mean Square | F     | Sig. |
|----------------|----------------|----|-------------|-------|------|
| Between Groups | 1.752          | 3  | .584        | 1.149 | .387 |
| Within Groups  | 4.066          | 8  | .508        |       |      |
| Total          | 5.818          | 11 |             |       |      |

Output Uji SPSS Kadar Serat Pangan Total  
Uji Deskriptif

| Descriptives       |        |                                  |           |            |
|--------------------|--------|----------------------------------|-----------|------------|
|                    | Sampel |                                  | Statistic | Std. Error |
| Serat Pangan Total | B0     | Mean                             | 7.8467    | .19055     |
|                    |        | 95% Confidence Interval for Mean |           |            |
|                    |        | Lower Bound                      | 7.0268    |            |
|                    |        | Upper Bound                      | 8.6666    |            |
|                    |        | 5% Trimmed Mean                  | .         |            |
|                    |        | Median                           | 7.9400    |            |
|                    |        | Variance                         | .109      |            |
|                    |        | Std. Deviation                   | .33005    |            |
|                    |        | Minimum                          | 7.48      |            |
|                    |        | Maximum                          | 8.12      |            |
|                    |        | Range                            | .64       |            |
|                    |        | Interquartile Range              | .         |            |
|                    |        | Skewness                         | -1.171    | 1.225      |
|                    |        | Kurtosis                         | .         |            |
|                    | B1     | Mean                             | 8.8200    | .20599     |
|                    |        | 95% Confidence Interval for Mean |           |            |
|                    |        | Lower Bound                      | 7.9337    |            |
|                    |        | Upper Bound                      | 9.7063    |            |
|                    |        | 5% Trimmed Mean                  | .         |            |
|                    |        | Median                           | 8.9900    |            |
|                    |        | Variance                         | .127      |            |
|                    |        | Std. Deviation                   | .35679    |            |
|                    |        | Minimum                          | 8.41      |            |
|                    |        | Maximum                          | 9.06      |            |
|                    |        | Range                            | .65       |            |
|                    |        | Interquartile Range              | .         |            |
|                    |        | Skewness                         | -1.657    | 1.225      |
|                    |        | Kurtosis                         | .         |            |
|                    | B2     | Mean                             | 9.4967    | .26359     |
|                    |        | 95% Confidence Interval for Mean |           |            |
|                    |        | Lower Bound                      | 8.3625    |            |
|                    |        | Upper Bound                      | 10.6308   |            |
|                    |        | 5% Trimmed Mean                  | .         |            |
|                    |        | Median                           | 9.2900    |            |
|                    |        | Variance                         | .208      |            |
|                    |        | Std. Deviation                   | .45654    |            |
|                    |        | Minimum                          | 9.18      |            |
|                    |        | Maximum                          | 10.02     |            |
|                    |        | Range                            | .84       |            |
|                    |        | Interquartile Range              | .         |            |
|                    |        | Skewness                         | 1.620     | 1.225      |
|                    |        | Kurtosis                         | .         |            |
|                    | B3     | Mean                             | 10.6267   | .23561     |
|                    |        | 95% Confidence Interval for Mean |           |            |
|                    |        | Lower Bound                      | 9.6129    |            |
|                    |        | Upper Bound                      | 11.6404   |            |
|                    |        | 5% Trimmed Mean                  | .         |            |
|                    |        | Median                           | 10.7200   |            |
|                    |        | Variance                         | .167      |            |
|                    |        | Std. Deviation                   | .40808    |            |
|                    |        | Minimum                          | 10.18     |            |
|                    |        | Maximum                          | 10.98     |            |
|                    |        | Range                            | .80       |            |
|                    |        | Interquartile Range              | .         |            |
|                    |        | Skewness                         | -.975     | 1.225      |
|                    |        | Kurtosis                         | .         |            |

Uji Normalitas

| Tests of Normality |    |                                 |    |      |              |    |      |
|--------------------|----|---------------------------------|----|------|--------------|----|------|
| Sampel             |    | Kolmogorov-Smirnov <sup>a</sup> |    |      | Shapiro-Wilk |    |      |
|                    |    | Statistic                       | df | Sig. | Statistic    | df | Sig. |
| Serat Pangan Total | B0 | .278                            | 3  | .    | .940         | 3  | .527 |
|                    | B1 | .350                            | 3  | .    | .830         | 3  | .188 |
|                    | B2 | .341                            | 3  | .    | .846         | 3  | .231 |
|                    | B3 | .257                            | 3  | .    | .961         | 3  | .619 |

a. Lilliefors Significance Correction

## Uji Homogenitas

### Test of Homogeneity of Variances

Serat Pangan Total

| Levene Statistic | df1 | df2 | Sig. |
|------------------|-----|-----|------|
| .250             | 3   | 8   | .859 |

## Uji Anova

### ANOVA

Serat Pangan Total

|                | Sum of Squares | df | Mean Square | F      | Sig. |
|----------------|----------------|----|-------------|--------|------|
| Between Groups | 12.298         | 3  | 4.099       | 26.828 | .000 |
| Within Groups  | 1.222          | 8  | .153        |        |      |
| Total          | 13.520         | 11 |             |        |      |

## Uji DMRT

### Serat Pangan Total

Duncan<sup>a</sup>

| Sampel | N | Subset for alpha = 0.05 |        |         |
|--------|---|-------------------------|--------|---------|
|        |   | 1                       | 2      | 3       |
| B0     | 3 | 7.8467                  |        |         |
| B1     | 3 |                         | 8.8200 |         |
| B2     | 3 |                         | 9.4967 |         |
| B3     | 3 |                         |        | 10.6267 |
| Sig.   |   | 1.000                   | .067   | 1.000   |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lampiran 11. *Output* Analisis Statistik Uji Organoleptik

**Kenampakan**

Uji Deskriptif

**Descriptive Statistics**

|                    | N  | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|------|----------------|
| B0_255             | 30 | 1       | 4       | 2.73 | .691           |
| B1_309             | 30 | 1       | 3       | 2.17 | .531           |
| B2_400             | 30 | 1       | 4       | 2.60 | .724           |
| B3_186             | 30 | 1       | 4       | 2.47 | .819           |
| Valid N (listwise) | 30 |         |         |      |                |

Uji *Friedman*

**Test Statistics<sup>a</sup>**

|             |        |
|-------------|--------|
| N           | 30     |
| Chi-Square  | 14.484 |
| df          | 3      |
| Asymp. Sig. | .002   |

a. Friedman Test

Uji *Wilcoxon*

**Test Statistics<sup>a</sup>**

|                        | B1_309 -<br>B0_255  | B2_400 -<br>B0_255 | B3_186 -<br>B0_255  | B2_400 -<br>B1_309  | B3_186 -<br>B1_309  | B3_186 -<br>B2_400 |
|------------------------|---------------------|--------------------|---------------------|---------------------|---------------------|--------------------|
| Z                      | -3.105 <sup>b</sup> | -.786 <sup>b</sup> | -1.890 <sup>b</sup> | -2.595 <sup>c</sup> | -1.968 <sup>c</sup> | -.832 <sup>b</sup> |
| Asymp. Sig. (2-tailed) | .002                | .432               | .059                | .009                | .049                | .405               |

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.

**Aroma**

Uji Deskriptif

**Descriptive Statistics**

|                    | N  | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|------|----------------|
| B0_255             | 30 | 1       | 4       | 2.47 | .730           |
| B1_309             | 30 | 1       | 4       | 2.50 | .974           |
| B2_400             | 30 | 1       | 4       | 2.63 | .765           |
| B3_186             | 30 | 1       | 4       | 2.30 | .877           |
| Valid N (listwise) | 30 |         |         |      |                |

### Uji Friedman

**Test Statistics<sup>a</sup>**

|             |       |
|-------------|-------|
| N           | 30    |
| Chi-Square  | 6.442 |
| df          | 3     |
| Asymp. Sig. | .092  |

a. Friedman Test

### Tekstur

#### Uji Deskriptif

**Descriptive Statistics**

|                    | N  | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|------|----------------|
| B0_255             | 30 | 1       | 4       | 2.77 | .679           |
| B1_309             | 30 | 1       | 3       | 2.10 | .712           |
| B2_400             | 30 | 2       | 4       | 2.67 | .606           |
| B3_186             | 30 | 1       | 4       | 1.67 | .758           |
| Valid N (listwise) | 30 |         |         |      |                |

### Uji Friedman

**Test Statistics<sup>a</sup>**

|             |        |
|-------------|--------|
| N           | 30     |
| Chi-Square  | 38.388 |
| df          | 3      |
| Asymp. Sig. | .000   |

a. Friedman Test

### Uji Wilcoxon

**Test Statistics<sup>a</sup>**

|                        | B1_309 -<br>B0_255  | B2_400 -<br>B0_255 | B3_186 -<br>B0_255  | B2_400 -<br>B1_309  | B3_186 -<br>B1_309  | B3_186 -<br>B2_400  |
|------------------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| Z                      | -3.632 <sup>b</sup> | -.626 <sup>b</sup> | -4.119 <sup>b</sup> | -3.133 <sup>c</sup> | -2.399 <sup>b</sup> | -4.322 <sup>b</sup> |
| Asymp. Sig. (2-tailed) | .000                | .532               | .000                | .002                | .016                | .000                |

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.

## Citarasa

### Uji Deskriptif

**Descriptive Statistics**

|                    | N  | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|------|----------------|
| B0_255             | 30 | 1       | 4       | 2.70 | .794           |
| B1_309             | 30 | 1       | 4       | 2.23 | .774           |
| B2_400             | 30 | 2       | 4       | 2.73 | .640           |
| B3_186             | 30 | 1       | 4       | 1.97 | .809           |
| Valid N (listwise) | 30 |         |         |      |                |

### Uji Friedman

**Test Statistics<sup>a</sup>**

|             |        |
|-------------|--------|
| N           | 30     |
| Chi-Square  | 22.634 |
| df          | 3      |
| Asymp. Sig. | .000   |

a. Friedman Test

### Uji Wilcoxon

**Test Statistics<sup>a</sup>**

|                        | B1_309 -<br>B0_255  | B2_400 -<br>B0_255 | B3_186 -<br>B0_255  | B2_400 -<br>B1_309  | B3_186 -<br>B1_309  | B3_186 -<br>B2_400  |
|------------------------|---------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| Z                      | -2.559 <sup>b</sup> | -.270 <sup>c</sup> | -2.998 <sup>b</sup> | -2.212 <sup>c</sup> | -1.358 <sup>b</sup> | -3.694 <sup>b</sup> |
| Asymp. Sig. (2-tailed) | .010                | .787               | .003                | .027                | .174                | .000                |

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.

## Kesukaan Keseluruhan

### Uji Deskriptif

**Descriptive Statistics**

|                    | N  | Minimum | Maximum | Mean | Std. Deviation |
|--------------------|----|---------|---------|------|----------------|
| B0_255             | 30 | 1       | 4       | 2.53 | .681           |
| B1_309             | 30 | 1       | 4       | 2.43 | .728           |
| B2_400             | 30 | 1       | 4       | 2.63 | .615           |
| B3_186             | 30 | 1       | 4       | 1.97 | .850           |
| Valid N (listwise) | 30 |         |         |      |                |

### Uji Friedman

#### Test Statistics<sup>a</sup>

|             |        |
|-------------|--------|
| N           | 30     |
| Chi-Square  | 16.405 |
| df          | 3      |
| Asymp. Sig. | .001   |

a. Friedman Test

### Uji Wilcoxon

#### Test Statistics<sup>a</sup>

|                        | B1_309 -<br>B0_255 | B2_400 -<br>B0_255 | B3_186 -<br>B0_255  | B2_400 -<br>B1_309  | B3_186 -<br>B1_309  | B3_186 -<br>B2_400  |
|------------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| Z                      | -.655 <sup>b</sup> | -.538 <sup>c</sup> | -2.660 <sup>b</sup> | -1.166 <sup>c</sup> | -2.288 <sup>b</sup> | -3.057 <sup>b</sup> |
| Asymp. Sig. (2-tailed) | .513               | .591               | .008                | .243                | .022                | .002                |

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

c. Based on negative ranks.



## LEMBAR KONSULTASI PROPOSAL PENELITIAN

Judul Penelitian : PENGARUH PENYADARAN TERHADAP RUMPUT LAUT *Ecklonia  
cottonii* TERHADAP KARAKTERISTIK KIMIA DAN ORGANOLEPTIK  
BERAS ANALOG TERDARIPADA BERAS DAN UBI JALAR PUTIH

Pembimbing : Ir. Maria Amengah Lubis, M.P. & Arwanto Endrianteng, S.Gz., M.Gz.

| No | Hari/<br>Tanggal | Materi Konsultasi                            | Saran Pembimbing                                                          | Tanda<br>Tangan<br>Pembimbing |
|----|------------------|----------------------------------------------|---------------------------------------------------------------------------|-------------------------------|
| 1  | 25/3/25          | Bimbingan Bab 1-3                            | - Program pendahuluan dan tinjauan<br>tuntas point & sket<br>- lengkap DO | <i>[Signature]</i>            |
| 2  | 8/4/2025         | Revisi Proposal &<br>Pematangan Proposal     | - Perbaiki hipotesis, organoleptik<br>- Pemb. I sdh ACC                   | <i>[Signature]</i>            |
| 3  | 10/4/2025        | - Tata tulis<br>- Bab 1, bab 2               | - lengkap tinjauan<br>- Perbaiki tata tulis                               | <i>[Signature]</i>            |
| 4  | 14/4/2025        | - Tata tulis<br>- Revisi bab 1, bab 2, bab 3 | - lengkap ke labr belatano, DO, bab 3<br>- Perbaiki tata tulis            | <i>[Signature]</i>            |
| 5  | 16/4/2025        | Pematangan proposal, tata<br>tulis           | - perbaiki tata tulis<br>- Pemb. II sdh ACC                               | <i>[Signature]</i>            |
| 6  | 6/5/2025         | Revisi proposal                              | - lanjut pembuatan EC                                                     | <i>[Signature]</i>            |
| 7  | 8/5/2025         | Revisi proposal                              | - tuntas literatur tinjauan<br>- perbaikan tata tulis                     | <i>[Signature]</i>            |
|    |                  |                                              |                                                                           |                               |



## LEMBAR KONSULTASI LAPORAN HASIL PENELITIAN

Judul Penelitian: PENGARUH PENAMBAHAN TERPUNG *Eucheuma corallinum* TERHADAP  
KARAKTERISTIK KIMIA DAN ORGANOLEPTIK BERAS APALOG  
TERPUNG BERAS DAN UBI JALAR PUTIH UNTUK OBESITAS

Pembimbing: Ir. Maria Amiyati, Lukman, M.P. & Ariana Endriyapada, S.Gz, M.Gz.

| No | Hari/<br>Tanggal        | Materi Konsultasi         | Saran Pembimbing                                                                                      | Tanda Tangan<br>Pembimbing |
|----|-------------------------|---------------------------|-------------------------------------------------------------------------------------------------------|----------------------------|
| 1  | 27 Agustus              | Uji Coba produk           | Kaktu Pengukuran + 5 menit (10<br>+ menit)                                                            |                            |
| 2  | Rabu,<br>2 Juli 2015    | Bab 4.                    | - lanjut pembahasan<br>- univariat orlop orlop web                                                    |                            |
| 3  | Jumat,<br>11 Juli 2015  | Revisi Bab 4              | - lanjutkan pembahasan dan<br>Penutup                                                                 |                            |
| 4  | Senin,<br>21 Juli 2015  | - Revisi bab 4<br>- Bab 5 | - tambahkan % kadar air<br>- lanjutkan ACC pemb. I                                                    |                            |
| 5  | Selasa,<br>22 Juli 2015 | Bab 4.                    | - lengkap pembahasan<br>- Perbaiki tabel & foto tulis                                                 |                            |
| 6  | Jumat,<br>31 Juli 2015  | Revisi Bab 4              | - lengkap pembahasan<br>- masukkan lampiran<br>- Perbaiki tata letak & foto tulis<br>- perbaiki saran |                            |

|   |                          |                              |                                                                                           |             |
|---|--------------------------|------------------------------|-------------------------------------------------------------------------------------------|-------------|
| 7 | Rabu,<br>30 Juli<br>2015 | Revisi Tabel &<br>Pembahasan | "Berkas Pembahasan"<br>- Perbaiki tabel.<br>- Perbaiki tata bahasa<br>- lengkapi lampiran | <i>Jark</i> |
| 8 | Jumat,<br>1 Agt 2015     | Revisi                       | - rapikan lampiran<br>- Perbaiki tata bahasa<br>- ACC Pemb. II                            | <i>Jark</i> |
|   |                          |                              |                                                                                           |             |
|   |                          |                              |                                                                                           |             |
|   |                          |                              |                                                                                           |             |
|   |                          |                              |                                                                                           |             |
|   |                          |                              |                                                                                           |             |
|   |                          |                              |                                                                                           |             |

### Lampiran 13. Bukti Pengecekan Plagiarisme

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|                    |                  |              |                |
|--------------------|------------------|--------------|----------------|
| ORIGINALITY REPORT |                  |              |                |
| 21 %               | 21 %             | 14 %         | 7 %            |
| SIMILARITY INDEX   | INTERNET SOURCES | PUBLICATIONS | STUDENT PAPERS |

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