

## DAFTAR PUSTAKA

- Aidha, N. N., Agustina, S., Oktarina, E., & Setiawati, I. (2020). Proses Formulasi Emulsi Fikosianin Sebagai Antioksidan Dengan Virgin Coconut Oil (VCO) Sebagai Fase Minyak. *Biopropal Industri*, 11(2), 95.
- Aisy, S. R., Alfira, E. N., Listina, O., Kesehatan, F. I., & Bhamada, U. (2024). FORMULASI SEDIAAN BODY SCRUB KOMBINASI EKSTRAK KULIT JERUK BALI (*Citrus maxima* Merr.) DENGAN CANGKANG TELUR AYAM SEBAGAI AGEN EKSFOLIASI FORMULATION OF BODY SCRUB COMBINATION OF GRAPEFRUIT PEEL EXTRACT (*Citrus maxima* Merr.) AND CHICKEN EGGSHELL dalam . 3(3), 242–252.
- Alburyhi2, M. A. H. A. G. dan M. M. (2024). FORMULASI DAN EVALUASI KRIM ANTI PENUAAN BARU YANG MENGANDUNG EKSTRAK DARAH NAGA. *JURNAL FARMASI EROPA DAN PENELITIAN MEDIS*, Vol 11,.
- Ambari, Y., Nurrosyidah, I. H., & Hardianti, D. M. (2022). Studi Formulasi Body Scrub Ekstrak Etanol Kelopak Bunga Rosela (*Hibiscus Sabdariffa* L.) dan Madu. *Jurnal Ilmiah Kesehatan Rustida*, 9(1), 26–36. [https://doi.org/ 10.55500/jikr.v9i1.85](https://doi.org/10.55500/jikr.v9i1.85)
- Andrew Joewono, Rasional Sitepu, & Peter R Angka. (2017). Jurnal Ilmiah Widya Teknik. *Jurnal Ilmiah widya teknik*, 16(2), 61–66.
- Badan Standardisasi Nasional. 1996. *Sediaan Tabir Surya*. SNI 16-4399 No. 014320-1996.
- Badan Standardisasi Nasional. 1996. *SNI 16-3499-1996 Arang Aktif*. Jakarta
- Badan Standardisasi Nasioanl. 2006. SNI 01-2346-2006: *Petunjuk Pengujian Organoleptik*. Jakarta: Badan Standardisasi Nasional
- BPOM RI. (2019). Peraturan Badan Pengawasan Obat dan Makanan Tahun 2019 Jilid 1. *Badan Pengawas Obat dan Makanan Republik Indonesia*, 2.
- Dhina, M. A., Ratnasari, L., & Maulana, I. (2023). FORMULASI LIP BALM

EKSTRAK RUMPUT LAUT (*Gracilaria* SP.) SEBAGAI. *Jurnal Sabdariffarma*, 11(1), 32–38. <https://doi.org/10.53675/jsfar.v11i1.1097>

dirjet pom, 1995. (1958). Farmakope Indonesia Edisi VI Tahun 2020, kementrian Kesehatan Republik Indonesia. In *British Medical Journal* (Vol. 2, Nomor 5096). <https://doi.org/10.1136/bmj.2.5096.601>

Firmansyah, F., Adriana, A. N. I., & Narni, N. (2023). FORMULASI DAN UJI MUTU FISIK SEDIAAN KRIM BODY SCRUB EKSTRAK KULIT PISANG GOROH (Musa acuminata L.). *Pharmacology And Pharmacy Scientific Journals*, 2(1), 30–38. <https://doi.org/10.51577/papsjournals.v2i1.420>

Flanagan, M. (2013). Wound Healing and Skin Integrity. *USA: John Wiley & Sons Ltd.*, 33–48.

Gracia Belinda. (2021). *Isononyl Isononanoate: Manfaat, Dosis, dan Efek Samping*. 8 januari. <https://www.honestdocs.id/isononyl-isononanoate>

Gupta, D., B, B. B., & A, R. K. G. (2008). Dragon's blood: Botany, chemistry and therapeutic uses. *Journal of Ethnopharmacology*, Volume 115(3), 361–380.

Gupta, D., Bleakley, B., Rajinder, & A, G. (2008). *Darah Naga : Botani , Kimia dan Manfaat Terapi* (R. K. G. Deepika Gupta A, Bruce Bleakley B (ed.); 2007 ed., Vol. 115, hal. 361–380). <https://doi.org/10.1016/j.jep.2007.10.018>

Hairiyah, N., Nuryati, N., & Nordiyah, F. (2022). FORMULASI PEMBUATAN BODYSCRUB BERBAHAN DASAR BERAS KETAN PUTIH (*Oryza sativa* var glutinous) DAN MADU. *Jurnal Teknologi Pertanian Andalas*, 26(1), 53. <https://doi.org/10.25077/jtpa.26.1.53-60.2022>

Hikma, N., Rachmawati, D., & Ratnah, S. (2022). Formulasi dan Uji Mutu Fisik Sediaan Body Scrub Ekstrak Kulit Buah Pepaya (*Carica papaya* L) dengan Variasi Konsentrasi Trietanolamin. *Jurnal Mandala Pharmacon Indonesia*, 8(2), 185–195. <https://doi.org/10.35311/jmpi.v8i2.218>

Iisranu, A. (2021). Uji Aktivitas Ekstrak Etanol Biji Buah Durian (*Durio Zibethinus L .* ) terhadap Penyembuhan Luka Bakar pada Mencit Putih Jantan (*Mus Musculus* ). 4(2), 152–158.

- Irwani, M., Maghfiranda, W., & Sari, A. (2024). *Formulasi body scrub alami berbahan sari labu kuning dan ampas kelapa sebagai eksfolian Formulation of natural body scrub with pumpkin juice and coconut dregs as an exfoliant.*
- Ismanto, H. (2023). –UJI ORGANOLEPTIK KERIPIK UDANG (L. vannamei) HASIL PENGGORENGAN VAKUM. *Jurnal AgroSainTa: Widyaaiswara Mandiri Membangun Bangsa*, 6(2), 53–58. <https://doi.org/10.51589/ags.v6i2.3137>
- Janitra et al., 2024. (2024). Metode Penelitian Eksperimental. *Jurnal Kesehatan STIKES Bethesda Yakkum Yogyakarta*, 11(2), 67–79.
- Jasminarni, Evita, & Novita, T. (2023). Identification of Morphological Characteristics of Local Durian. *Jurnal Ilmiah Ilmu Terapan Universitas Jambi*, 7(1), 60–65.
- Kadam, S., Chavan, R., Chavan, S., & Chinchwade, J. (2024). *Formulation and Evaluation of Cinnamon and Walnut Foot Scrub. September.*
- Kalangi, S. J. R. (2014). Histofisiologi Kulit. *Jurnal Biomedik (Jbm)*, 5(3), 12–20. <https://doi.org/10.35790/jbm.5.3.2013.4344>
- Kasim, M., Lengkey, L., & Ludong, D. (2019). Karakteristik Pengeringan Biji Kenari Menggunakan Experimental Dryer Tipe Rak. *Cocos*, 1(1), 1–8.
- Latifah, S. L., Pudjono, P., & Rosmi, R. F. (2022). Formulasi dan Evaluasi Mutu Fisik Sediaan Body Scrub Cream Varietas Ubi Jalar dalam Fase Air dan Minyak. *Pharmacy Peradaban Journal*, 2(1), 20–32.
- Lestari, et al, 2022. (2022). *Antioxidant Activities of Scrub Body Lotion Extract of Surian Leaves ( Toona sinensis ) with Powder Scrub Date Seeds ( Phoenix dactylifera ) Uji Aktivitas Antioksidan Lulur Krim Ekstrak Daun Surian ( Toona sinensis ) dengan Scrub Serbuk Biji Kurma ( Phoen. 1(1).*
- Lestari, R. (2022). Hubungan Sanitasi Lingkungan Dengan Gejala Penyakit Kulit Di Wilayah Kerja Puskesmas Sukamenanti Kabupaten Pasaman Barat. *Nan Tongga Health And Nursing*, 17(1), 14–23. <https://doi.org/10.59963/nthn.v17i1.98>

- Lotfollahi, Z. (2024). *Anatomi , fisiologi dan fungsi seluruh lapisan kulit serta dampak penuaan pada kulit*. 6–10.
- Maida, A. N., Rosmiaty, & Inestuti. (2020). Masker Bubuk Biji Durian Untuk Menyamarkan Kulit Wajah Berminyak. *Prosiding Seminar Nasional SMIPT 2020Sinergitas Multidisiplin Ilmu Pengetahuan dan Teknologi*, vol. 3, nol. 1, 2020p-ISSN: 2622-0520; e-ISSN: 2622-593X, 3(7), 110–115.
- Maleh, A., Budi, S., Audina, M., Studi, P., Farmasi, S., Kesehatan, F., Mulia, U. S., No, J. P., Tim, K. B., & Banjarmasin, K. (2024). *FORMULASI DAN STABILITAS KRIM KUTU AIR EKSTRAK RIMPANG LENGKUAS ( Alpina galanga L ) DENGAN VARIASI TWEEN 80 DAN SPAN 60 SEBAGAI EMULGATOR*. 121–132. <https://doi.org/10.33859/jpcs.v5i1>
- Mardiana, R., Arisma, R., Lidyawati, & Ceriana, R. (2022). THE UTILIZATION OF OYSTER SHELL WASTE (*Crasosstrea gigas*) AS AN ABRASIVE MATERIAL IN THE FORMULATION OF SCRUB FOR REMOVING DEAD SKIN CELLA. *Serambi Journal of Agricultural Technology*, 4(2), 74–83. <http://ojs.serambimekkah.ac.id/index.php/sjat>
- Minawati, M., Febriani, Y., & Ihsan, E. A. (2022). Formulasi dan Evaluasi Lulur Limbah Kulit Dalam (Albedo) Buah Durian (*Durio zibethinus* Murr.) sebagai Kosmetik Alami. *Sinteza*, 2(1), 1–8. <https://doi.org/10.29408/sinteza.v2i1.2750>
- Mukhlisah et al, 2016. (2016). *DAYA IRTASI DAN SIFAT FISIK SEDIAAN SALEP MINYAK ATSIRI BUNGA CENGKEH ( Syzigium aromaticum ) PADA BASIS HIDROKARBON UNGUENTUM VOLATILE OIL OF Syzygium aromaticum*. 12(1), 372–376.
- Mukhtarini. (2014). Ekstraksi, Pemisahan Senyawa, Dan Identifikasi Senyawa Aktif. *J. Kesehat.*, VII(2), 361. <https://doi.org/10.1007/s11293-018-9601-y>
- Mulyana, C., -, R., & Suryaningsih, S. (2013). PENGARUH PEMBERIAN INFUSA DAUN KATUK (*Sauropus androgynus* (L.) Merr.) TERHADAP KADAR TRIGLISERIDA SERUM DARAH KAMBING KACANG JANTAN LOKAL. *Jurnal Medika Veterinaria*, 7(2), 31–37. <https://doi.org/10.21157/j.med.vet..v7i2.2951>

- Murdiana, H. E., Kristariyanto, Y. A., Kurniawaty, A. Y., Putri, M. K., & Rosita, M. E. (2022). *OPTIMASI FORMULA SEDIAAN KRIM BERAS (Oryza Sativa L.) TIPE M/A DENGAN VARIASI ASAM STEARAT, SETIL ALKOHOL DAN TRIETANOLAMIN*. 7(2), 55–63.
- Nurul Fahmi Ali<sup>1</sup>, Hendra Stevani<sup>2</sup>, D. R. (2019). *FORMULASI DAN STABILITAS SEDIAAN BODY SCRUB BEDDA LOTONG DENGAN VARIASI KONSENTRASI TRIETANOLAMIN*. XV(1).
- Plantamor. (2025). *Plantamor situs dunia tumbuhan : Informasi spesies Tanaman Durian (Durio Zibethinus L.)*. Plantamor. <https://plantamor.com/species/profile/durio/zibethinus>
- Pratimasari, D., Sugihartini, N., & Yuwono, T. (2015). Evaluasi Sifat Fisik Dan Uji Iritasi Sediaan Salep Minyak Atsiri Bunga Cengkeh Dalam Basis Larut Air. *Jurnal Ilmiah Farmasi*, 11(1), 9–15. <https://doi.org/10.20885/jif.vol11.iss1.art2>
- PRATIWI, L. (2024). *MORFOLOGI DAUN DAN BUNGA BERBAGAI GENOTIPE DURIAN (Durio zibethinus Murr.) LOKAL BENGKALIS*.
- Pratiwi, N. (2018). Identifikasi Karakter Morfologis Durian(Durio Zibethinus Murr) di Kecamatan Tigalingga dan Pegagan Hilir Kabupaten Dairi Sumatera Utara. *Jurnal Agroekoteknologi FP USU*, 06.
- Purwandari, V., Silitonga, M., Thaib, C. M., & Sitohang, I. K. (2018). FORMULASI SEDIAAN KRIM LULUR KOPI ARABIKA (Coffea arabica) SEBAGAI ANTI-AGING. *Jurnal Farmanesia*, 5(1), 50–63. <https://doi.org/10.51544/jf.v5i1.2728>
- Rowe et al. (2009). *Handbook of Pharmaceutical Excipient Sixth Edition*. Pharmaceutical Press: London. <https://adiyugatama.wordpress.com/wp-content/uploads/2012/03/handbook-of-pharmaceutical-excipients-6th-ed.pdf>
- Rowe et al, 2003. (n.d.). *Handbook of Pharmaceutical Excipients, Volume 1 Handbook of Pharmaceutical Excipients, Paul J. Sheskey Raymond C. Rowe, Paul J. Sheskey, Paul J. Weller (P. J. W. Raymond C. Rowe, Paul J. Sheskey (ed.); 4, berilus ed.)*. Pharmaceutical Press, 2003.

- Rowe, R. C., Sheskey, P. J., & Owen, S. C. (2006). *Handbook of Pharmaceutical Excipients Fifth Edition*. Pharmaceutical Press: Londok.
- Saifuddin, S. (2019). Peningkatan Produktivitas dan Kualitas Resin Jernang Berdasarkan SNI 1671: 2010 di Desa Geulanggang Teungoh Bireuen Aceh Indonesia. *Prosiding Seminar Nasional Politeknik Negeri Lhokseumawe*, 3(1).
- Sari, A. N. (2015). Antioksidan Alternatif Untuk Menangkal Bahaya Radikal Bebas Pada Kulit. *Elkawanie: Journal of Islamic Science and Technology*, 1(1), 63–68. [www.jurnal.ar-raniry.com/index.php/elkawanie](http://www.jurnal.ar-raniry.com/index.php/elkawanie)
- Sayogo, W. (2017). Potensi +Dalethyne Terhadap Epitelisasi Luka pada Kulit Tikus yang Diinfeksi Bakteri MRSA. *Jurnal Biosains Pascasarjana*, 19(1), 68. <https://doi.org/10.20473/jbp.v19i1.2017.68-84>
- Setiawan, R. A. (2015). MORFOLOGI TANAMAN DURIAN (*Durio zibethinus* Murr.) KULTIVAR BELIMBING. *PROGRAM STUDI AGROTEKNOLOGI FAKULTAS PERTANIAN DAN PETERNAKAN UNIVERSITAS ISLAM NEGERI SULTAN SYARIF KASIM RIAU PEKANBARU 2015*.
- Shank, C., Ph, D., Slaga, T. J., Ph, D., Snyder, P. W., The, P. D., & Executive, C. I. R. (2018). *Amended Safety Assessment of Triglycerides as Used in Cosmetics*.
- Tranggono, R. I., & Latifah, F. (2007). Buku Pegangan Ilmu Pengetahuan Kosmetik. In P. . Joshita Djajadisastra, pharm.,Ms (Ed.), *PT Gramedia Pustaka Utama* (2007 ed., hal. 186). <https://books.google.co.id/books?id=Zg5hDwAAQBAJ&printsec=frontcover&hl=id#v=onepage&q&f=false>
- Ulfa, A. M., Rahmawati, A., Akuba, J., Deswilyaz, H., Asti, G., Tommy, R., Sri, J., Hanina, B., Hanifa, L., Disusun Oleh : Bahan Bahan, R. A., Tambahan, T., Sediaan, S., & Farmasi, F. (2023). *Bahan tambahan sediaan farmasi*.
- Ulfa, M., Khairi, N., & Maryam, F. (2016). Formulasi dan Evaluasi Fisik Krim Body Scrub Dari Ekstrak Teh Hitam (*Camellia sinensis*), Variasi Konsentrasi Emulgator Span-Tween 60. *Jf Fik Uinam*, 4(4), 179–185.
- Ummah, M. S. (2019). FORMULASI SEDIAAN MASKER GEL PEEL OFF DARI SARI BUAH DENGEN (*Dillenia serrata*). *Sustainability (Switzerland)*,

11(1), 1–14. [http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484\\_SISTEM\\_PEMBETUNGAN\\_TERPUSAT\\_STRATEGI\\_MELESTARI](http://scioteca.caf.com/bitstream/handle/123456789/1091/RED2017-Eng-8ene.pdf?sequence=12&isAllowed=y%0Ahttp://dx.doi.org/10.1016/j.regsciurbeco.2008.06.005%0Ahttps://www.researchgate.net/publication/305320484_SISTEM_PEMBETUNGAN_TERPUSAT_STRATEGI_MELESTARI)

Veronica. (2020). *PHARMACON – PROGRAM STUDI FARMASI, FMIPA, UNIVERSITAS SAM RATULANGI, Volume 9 Nomor 3 Agustus 2020*. 9, 372–380.

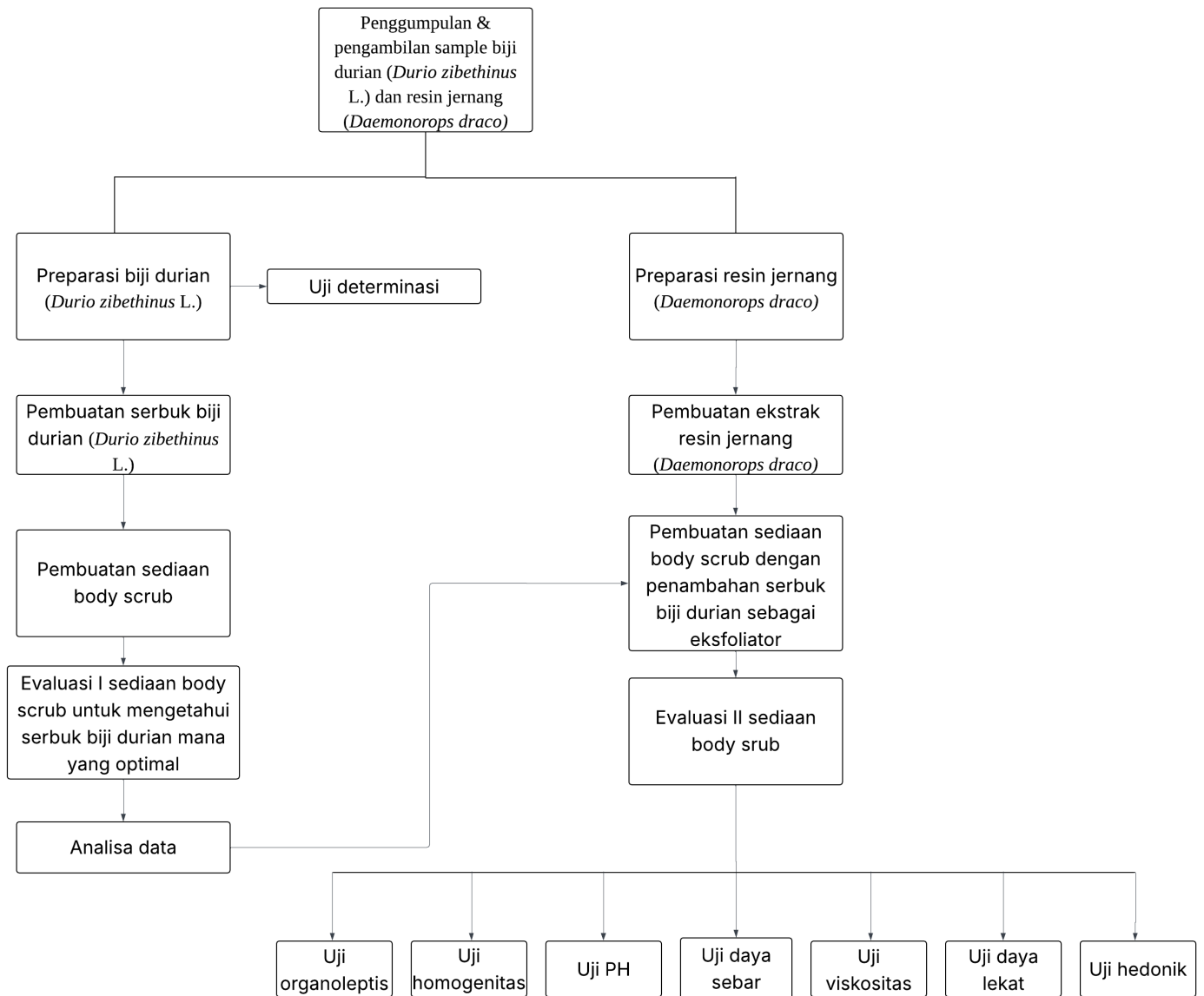
Yuwana, E. S., Pascasarjana, P., Sumberdaya, P., Pertanian, F., Bengkulu, U., Supratman, J. W. R., & Limun, K. (2017). *Pemanfaatan Limbah Biji Durian (Durio zibethinus Murr) sebagai Bahan Penstabil Es Krim Susu Sapi Perah*. 12(1), 9–23.

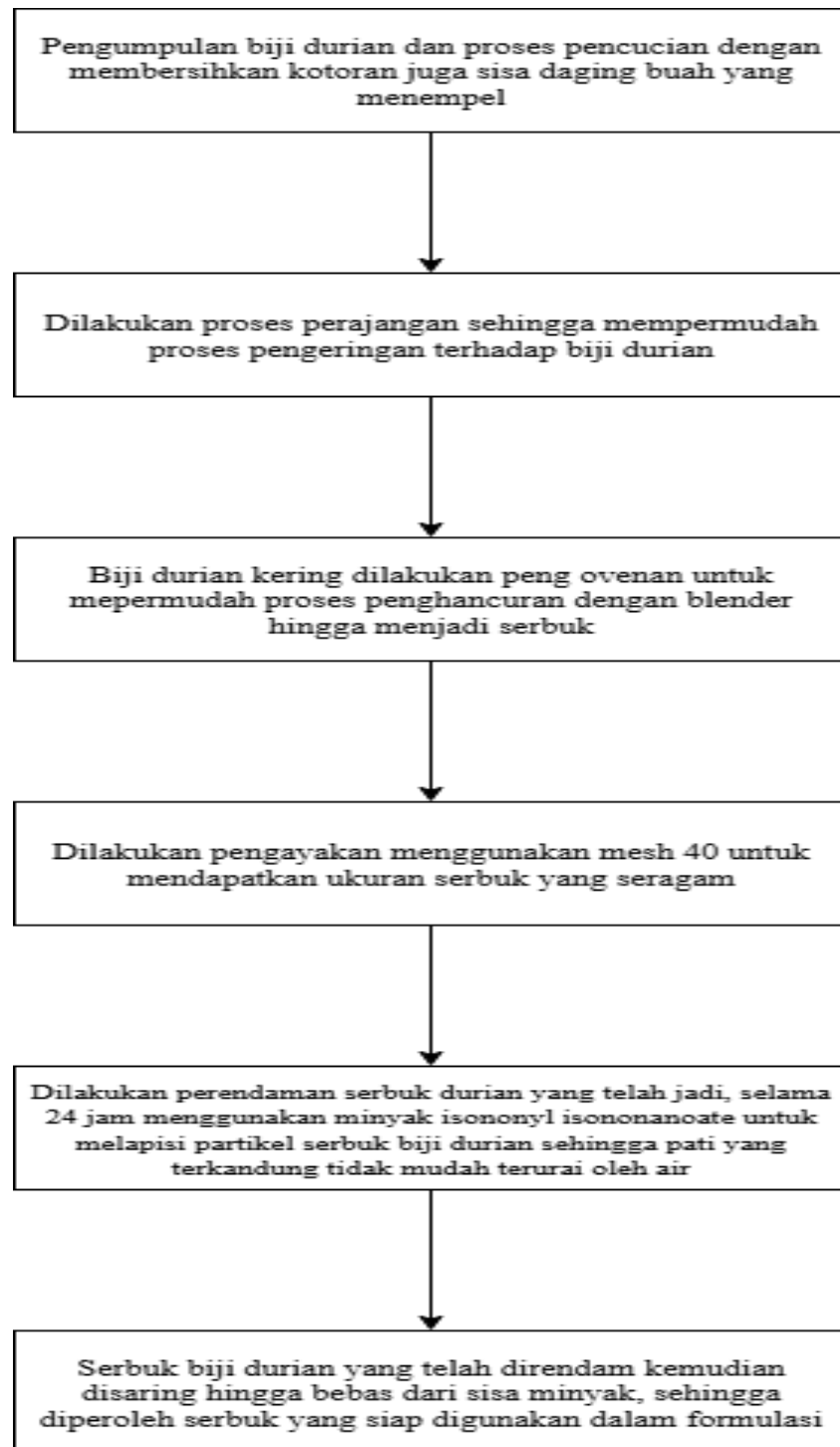
Zafar, U., Farhan, M., Khan, A., & Mustaqim, M. (2021). *Praktik Kosmetik Perawatan Pribadi di Pakistan : Perspektif dan Manajemen Saat Ini*. 9–21.

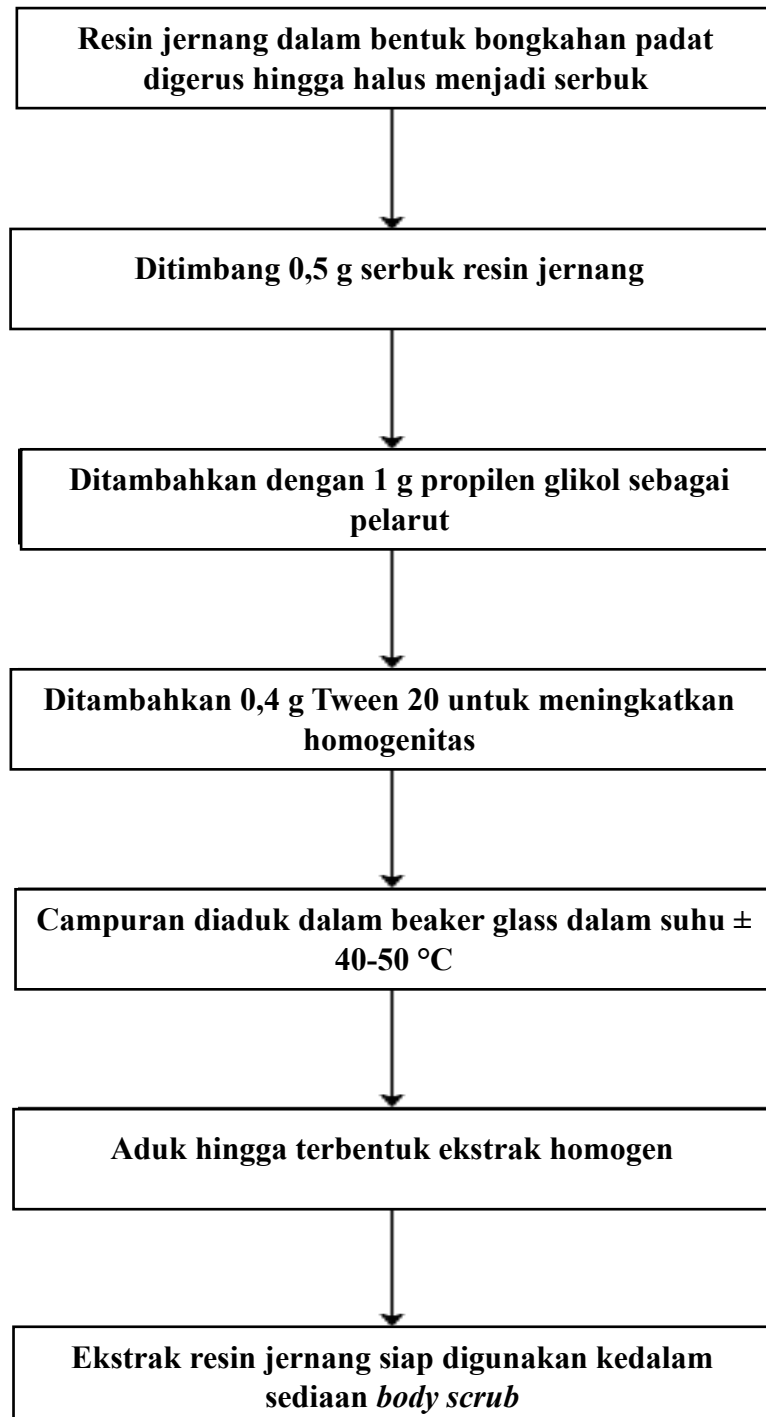
Zendrato, R. sepridayanto. (2022). Kajian Literatur Fungsi Propilen Glikol sebagai Humektan terhadap Stabilitas Fisik Sediaan Semisolid. *Angewandte Chemie International Edition*, 6(11), 951–952., 10(1), 17–32.

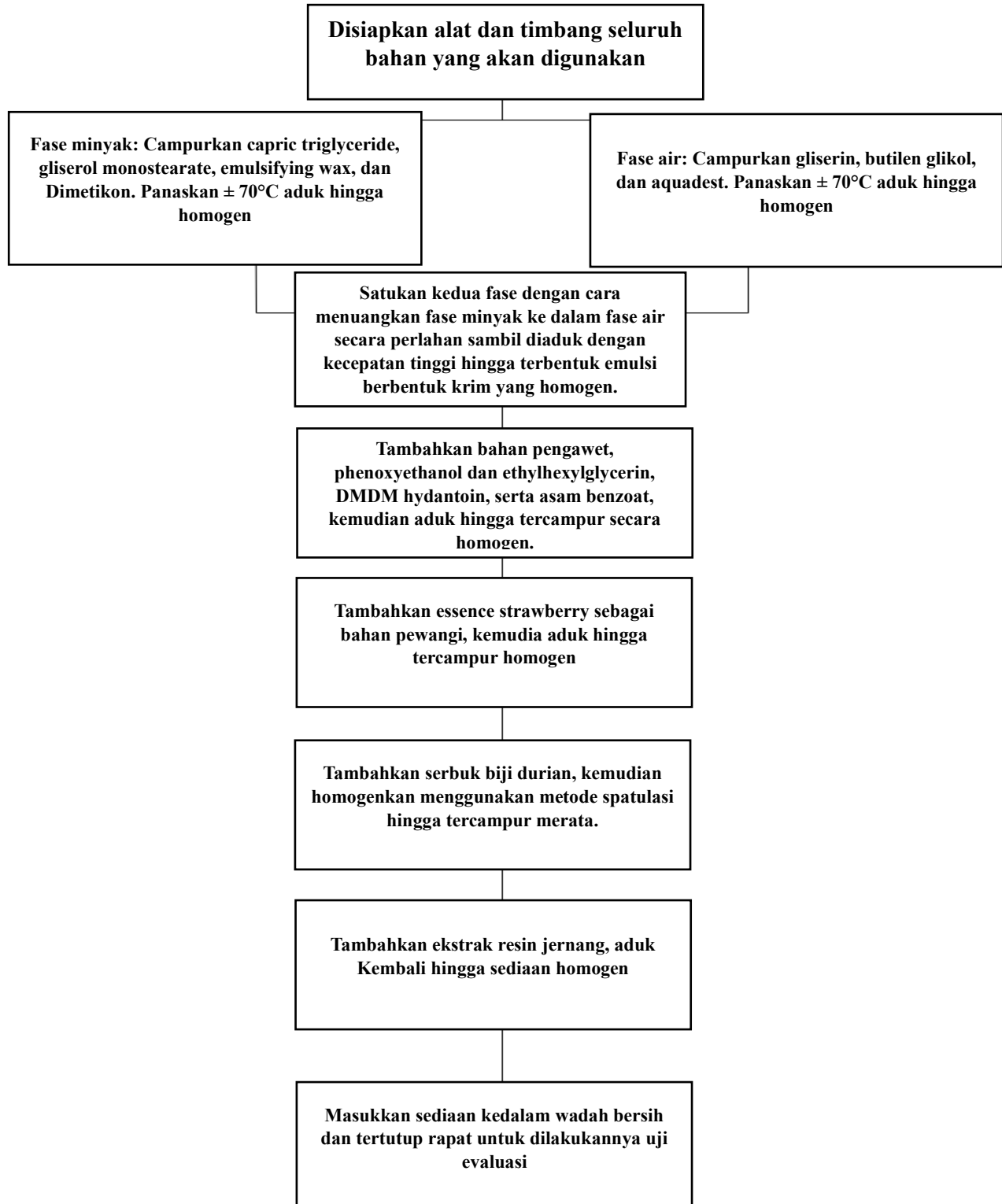
## LAMPIRAN

### Lampiran 1. Alur Penelitian



**Lampiran 2. Skema Pembuatan Serbuk Biji Durian**

**Lampiran 3. Skema Pembuatan Ekstrak Resin Jernang**

**Lampiran 4. Skema Pembuatan *Body Scrub***

## Lampiran 5. Determinasi Tanaman Durian



### HERBARIUM UNIVERSITAS ANDALAS (ANDA)

Departemen Biologi FMIPA Universitas Andalas Kampus Limau Manih Padang  
Sumbar Indonesia 25163 Telp. +62-751-777427 e-mail: herbariumanda@yahoo.com

Nomor : 168/K-ID/ANDA/II/2025  
Lampiran : -  
Perihal : Hasil Identifikasi

Kepada yth,  
apt. Tommy Julianto, SSi., M.Sc., PhD.  
Di  
Tempat

Dengan hormat,  
Sehubungan dengan surat permohonan determinasi sampel dari Institut Kesehatan Mitra Bunda No. 043/K/S1-Farmasi/IKMB/1/2025 tanggal 18 Februari 2025 di Herbarium Universitas Andalas Departemen Biologi FMIPA Universitas Andalas, kami telah membantu mengidentifikasi tumbuhan yang dibawa, dari:

Nama : apt. Tommy Julianto, SSi., M.Sc., PhD.  
Instansi : Institut Kesehatan Mitra Bunda

Berikut ini diberikan hasil identifikasi yang dikeluarkan dari Herbarium Universitas Andalas.

| No | Family    | Spesies                    |
|----|-----------|----------------------------|
| 1. | Malvaceae | <i>Durio zibethinus</i> L. |

Demikian surat ini dibuat untuk dapat digunakan seperlunya.

Padang, 26 Februari 2025

Kepala,

  
Dr. Nurainas

NIP. 196908141995122001

## Lampiran 6. *Ethical Clereance*



**YAYASAN HARAPAN BUNDA BATAM**  
**INSTITUT KESEHATAN MITRA BUNDA**  
**KOMITE ETIK PENELITIAN**

Jl. Seraya No 1 KOTA BATAM Telp/Fax (0778) 429431, website : <http://ikmb.ac.id>  
 SURAT KEPUTUSAN MENTERI PENDIDIKAN DAN KEBUDAYAAN REPUBLIK INDONESIA No. 284/M/2020

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**KOMITE ETIK PENELITIAN**  
**INSTITUT KESEHATAN MITRA BUNDA**  
*THE RESEARCH ETHICAL COMMITTEE INSTITUT KESEHATAN MITRA BUNDA*

**SURAT KETERANGAN**  
*ETHICAL APPROVAL*  
 No. 090/K/KEP/IKMB/VIII/2025

Komite Etik Penelitian Institut Kesehatan Mitra Bunda, menyatakan dengan ini bahwa penelitian dengan judul :

*The Research Ethical Committee of Institut Kesehatan Mitra Bunda states hereby that the following proposal :*

“Optimasi dan Evaluasi Limbah Serbuk Biji Durian (*Durio zibethinus L.*) Sebagai Eksfoliator Dalam Body Scrub Ekstrak Resin Jernang (*Daemonorops draco*)”  
*“Optimization and Evaluation of Durian Seed Powder Waste (*Durio zibethinus L.*) as an Exfoliator in Body Scrub Jernang Resin Extract (*Daemonorops draco*)”*

Peneliti Utama : Safinatun Naja  
*Principal Investigato*

Lokasi Penelitian : Laboratorium Teknologi Farmasi Institut Kesehatan Mitra Bunda  
*Research Location*

Waktu Penelitian : Juni – Agustus 2025  
*Time Schedule*

Responden/Subjek Penelitian : Non Penderita (10 responden)  
*Respondent/Research Subject*

Telah melalui prosedur kaji etik dan dinyatakan layak untuk dilaksanakan  
*Has proceeded the ethical assessment procedure and been approved fot implementation*

Batam, 26 Agustus 2025  
**Ketua / Chairman,**  
  
**dr. Ibnu Rushd, M.K.M**

### Lampiran 7. Proses pembuatan Serbuk Biji durian



Biji Durian Utuh



Hasil Perajangan Biji



Pengovenan biji durian yang telah dirajang



Pengecilan ukuran biji durian dengan



Serbuk biji durian mesh 40



Perendaman serbuk biji durian



Serbuk biji durian siap digunakan

### Lampiran 8. Perhitungan Formulasi Sediaan *Body Scrub* Serbuk Biji Durian

#### 1. Formulasi Serbuk Biji Durian 0%

|                                   |                                                                                                          |
|-----------------------------------|----------------------------------------------------------------------------------------------------------|
| Bubuk biji durian                 | $= \left( \frac{0}{100} \times 100 \right) + 10\% = 0 \text{ gr}$                                        |
| Capric Triglycerid                | $= \left( \frac{10}{100} \times 100 \right) + 10\% = 11 \text{ gr}$                                      |
| Gliserin                          | $= \left( \frac{3}{100} \times 100 \right) + 10\% = 3,3 \text{ gr}$                                      |
| Butilen Glikol                    | $= \left( \frac{3}{100} \times 100 \right) + 10\% = 3,3 \text{ gr}$                                      |
| Gliserol Monostearat              | $= \left( \frac{2}{100} \times 100 \right) + 10\% = 2,2 \text{ gr}$                                      |
| Emulsyifing Wax                   | $= \left( \frac{6}{100} \times 100 \right) + 10\% = 6,6 \text{ gr}$                                      |
| DMDM Hydantoin                    | $= \left( \frac{1}{100} \times 100 \right) + 10\% = 1,1 \text{ gr}$                                      |
| Phenoxyethanol-ethylhexylglycerin | $= \left( \frac{1}{100} \times 100 \right) + 10\% = 1,1 \text{ gr}$                                      |
| Asam Benzoat                      | $= \left( \frac{0,5}{100} \times 100 \right) + 10\% = 0,55 \text{ gr}$                                   |
| Dimetikon                         | $= \left( \frac{10}{100} \times 100 \right) + 10\% = 11 \text{ gr}$                                      |
| Essence Strawberry                | = qs                                                                                                     |
| Aquadest                          | $= 110 - (0 + 11 + 3,3 + 3,3 + 2,2 + 6,6 + 1,1 + 1,1 + 0,55 + 11)$<br>$= 110 - 40,15 = 69,85 \text{ gr}$ |

#### 2. Formulasi Serbuk Biji Durian 5%

|                    |                                                                     |
|--------------------|---------------------------------------------------------------------|
| Bubuk biji durian  | $= \left( \frac{5}{100} \times 100 \right) + 10\% = 5,5 \text{ gr}$ |
| Capric Triglycerid | $= \left( \frac{10}{100} \times 100 \right) + 10\% = 11 \text{ gr}$ |
| Gliserin           | $= \left( \frac{3}{100} \times 100 \right) + 10\% = 3,3 \text{ gr}$ |
| Butilen Glikol     | $= \left( \frac{3}{100} \times 100 \right) + 10\% = 3,3 \text{ gr}$ |

$$\text{Gliserol Monostearat} = \left(\frac{2}{100} \times 100\right) + 10\% = 2,2 \text{ gr}$$

$$\text{Emulsyifing Wax} = \left(\frac{6}{100} \times 100\right) + 10\% = 6,6 \text{ gr}$$

$$\text{DMDM Hydantoin} = \left(\frac{1}{100} \times 100\right) + 10\% = 1,1 \text{ gr}$$

$$\text{Phenoxyethanol-ethylhexylglycerin} = \left(\frac{1}{100} \times 100\right) + 10\% = 1,1 \text{ gr}$$

$$\text{Asam Benzoat} = \left(\frac{0,5}{100} \times 100\right) + 10\% = 0,55 \text{ gr}$$

$$\text{Dimetikon} = \left(\frac{10}{100} \times 100\right) + 10\% = 11 \text{ gr}$$

$$\text{Essence Strawberry} = \text{qs}$$

$$\begin{aligned} \text{Aquadest} &= 110 - (5,5 + 11 + 3,3 + 3,3 + 2,2 + 6,6 + 1,1 + 1,1 + 0,55 + 11) \\ &= 110 - 45,65 = 64,35 \text{ gr} \end{aligned}$$

### 3. Formulasi Serbuk Biji Durian 10%

$$\text{Bubuk biji durian} = \left(\frac{10}{100} \times 100\right) + 10\% = 11 \text{ gr}$$

$$\text{Capric Triglycerid} = \left(\frac{10}{100} \times 100\right) + 10\% = 11 \text{ gr}$$

$$\text{Gliserin} = \left(\frac{3}{100} \times 100\right) + 10\% = 3,3 \text{ gr}$$

$$\text{Butilen Glikol} = \left(\frac{3}{100} \times 100\right) + 10\% = 3,3 \text{ gr}$$

$$\text{Gliserol Monostearat} = \left(\frac{2}{100} \times 100\right) + 10\% = 2,2 \text{ gr}$$

$$\text{Emulsyifing Wax} = \left(\frac{6}{100} \times 100\right) + 10\% = 6,6 \text{ gr}$$

$$\text{DMDM Hydantoin} = \left(\frac{1}{100} \times 100\right) + 10\% = 1,1 \text{ gr}$$

$$\text{Phenoxyethanol-ethylhexylglycerin} = \left(\frac{1}{100} \times 100\right) + 10\% = 1,1 \text{ gr}$$

$$\text{Asam Benzoat} = \left(\frac{0,5}{100} \times 100\right) + 10\% = 0,55 \text{ gr}$$

$$\text{Dimetikon} = \left( \frac{10}{100} \times 100 \right) + 10\% = 11 \text{ gr}$$

$$\text{Essence Strawberry} = \text{qs}$$

$$\begin{aligned} \text{Aquadest} &= 110 - (11 + 11 + 3,3 + 3,3 + 2,2 + 6,6 + 1,1 + 1,1 + 0,55 + 11) \\ &= 110 - 51,15 = 58,85 \text{ gr} \end{aligned}$$

#### 4. Formulasi Serbuk Biji Durian 15%

$$\text{Bubuk biji durian} = \left( \frac{15}{100} \times 100 \right) + 10\% = 16,5 \text{ gr}$$

$$\text{Capric Triglycerid} = \left( \frac{10}{100} \times 100 \right) + 10\% = 11 \text{ gr}$$

$$\text{Gliserin} = \left( \frac{3}{100} \times 100 \right) + 10\% = 3,3 \text{ gr}$$

$$\text{Butilen Glikol} = \left( \frac{3}{100} \times 100 \right) + 10\% = 3,3 \text{ gr}$$

$$\text{Gliserol Monostearat} = \left( \frac{2}{100} \times 100 \right) + 10\% = 2,2 \text{ gr}$$

$$\text{Emulsyifing Wax} = \left( \frac{6}{100} \times 100 \right) + 10\% = 6,6 \text{ gr}$$

$$\text{DMDM Hydantoin} = \left( \frac{1}{100} \times 100 \right) + 10\% = 1,1 \text{ gr}$$

$$\text{Phenoxyethanol-ethylhexylglycerin} = \left( \frac{1}{100} \times 100 \right) + 10\% = 1,1 \text{ gr}$$

$$\text{Asam Benzoat} = \left( \frac{0,5}{100} \times 100 \right) + 10\% = 0,55 \text{ gr}$$

$$\text{Dimetikon} = \left( \frac{10}{100} \times 100 \right) + 10\% = 11 \text{ gr}$$

$$\text{Essence Strawberry} = \text{qs}$$

$$\begin{aligned} \text{Aquadest} &= 110 - (16,5 + 11 + 3,3 + 3,3 + 2,2 + 6,6 + 1,1 + 1,1 + 0,55 \\ &\quad + 11) \\ &= 110 - 56,65 = 53,35 \text{ gr} \end{aligned}$$

### Lampiran 9. Hasil Uji Evaluasi Formulasi Awal

#### Uji Organoleptik

| Uji Organoleptik | Minggu | Formulasi          |                                   |                                                      |                                                  |
|------------------|--------|--------------------|-----------------------------------|------------------------------------------------------|--------------------------------------------------|
|                  |        | F0                 | F1                                | F2                                                   | F3                                               |
| Bau              | 0      | Essence Strawberry | Essence Strawberry                | Khas biji-bijian                                     | Khas biji-bijian                                 |
|                  | 3      | Essence Strawberry | Essence Strawberry                | Khas biji sedikit masam seperti tapai                | Khas biji dan masam seperti tapai                |
| Warna            | 0      | Putih terang       | Putih gading sedikit bintik halus | Krem bintik lebih banyak                             | Coklat muda bintik jelas                         |
|                  | 3      | Putih terang       | Putih gading sedikit bintik halus | Krem kecoklatan adanya pemisahan bintik lebih banyak | Coklat muda kehitaman dan pemisahan bintik jelas |
| Bentuk           | 0      | Semi padat         | Semi padat                        | Semi padat                                           | Semi Padat                                       |
|                  | 3      | Semi Padat         | Semi padat                        | Semi padat sedikit lengket                           | Semi Padat lengket                               |

#### Uji Homogenitas

| Formulasi | Minggu | Uji Homogenitas |
|-----------|--------|-----------------|
| F0        | 0      | Homogen         |
|           | 3      | Homogen         |
| F1        | 0      | Homogen         |
|           | 3      | Tidak Homogen   |
| F2        | 0      | Homogen         |
|           | 3      | Tidak Homogen   |
| F3        | 0      | Homogen         |
|           | 3      | Tidak Homogen   |

#### Uji pH

| Formulasi | Uji pH sediaan Awal |       |       |           |      |        |
|-----------|---------------------|-------|-------|-----------|------|--------|
|           | Rep 1               | Rep 2 | Rep 3 | Rata-Rata | SD   | %RSD   |
| F0        | 6,48                | 6,46  | 6,54  | 6,49      | 0,04 | 0,6415 |
| F1        | 6,44                | 5,68  | 6,46  | 6,19      | 0,44 | 7,1837 |
| F2        | 6,41                | 6,42  | 5,58  | 6,13      | 0,48 | 7,8648 |
| F3        | 6,42                | 5,43  | 5,60  | 5,81      | 0,53 | 9,1114 |

## Uji Daya Sebar

| Formulasi | Uji Sediaan Daya Sebar (cm) Awal |       |       |           |      |        |
|-----------|----------------------------------|-------|-------|-----------|------|--------|
|           | Rep 1                            | Rep 2 | Rep 3 | Rata-Rata | SD   | %RSD   |
| F0        | 6,37                             | 6,27  | 6,25  | 6,29 cm   | 0,06 | 1,0221 |
| F1        | 5,90                             | 5,90  | 5,80  | 5,86 cm   | 0,06 | 0,9852 |
| F2        | 5,60                             | 5,65  | 5,65  | 5,63 cm   | 0,03 | 0,5127 |
| F3        | 5,35                             | 5,27  | 5,50  | 5,37 cm   | 0,12 | 2,1743 |

## Uji Daya Lekat

| Formulasi | Uji Sediaan Daya Lekat (s) Awal |       |       |           |      |        |
|-----------|---------------------------------|-------|-------|-----------|------|--------|
|           | Rep 1                           | Rep 2 | Rep 3 | Rata-Rata | SD   | %RSD   |
| F0        | 4,07                            | 4,13  | 4,66  | 4,28 s    | 0,32 | 7,5866 |
| F1        | 5,45                            | 5,30  | 5,39  | 5,38 s    | 0,08 | 1,4033 |
| F2        | 5,30                            | 5,56  | 5,81  | 5,55 s    | 0,26 | 4,5949 |
| F3        | 6,15                            | 6,21  | 6,20  | 6,18 s    | 0,03 | 0,5202 |

## Uji Viskositas

| Formulasi | Uji Sediaan Viskositas (cP) Awal |       |       |           |         |         |
|-----------|----------------------------------|-------|-------|-----------|---------|---------|
|           | Rep 1                            | Rep 2 | Rep 3 | Rata-Rata | SD      | %RSD    |
| F0        | 7100                             | 8400  | 8700  | 8066 cP   | 850,49  | 10,5441 |
| F1        | 10400                            | 10800 | 11400 | 11600 cP  | 503,32  | 4,3390  |
| F2        | 12200                            | 13400 | 14200 | 13266 cP  | 1006,64 | 7,5882  |
| F3        | 15400                            | 16400 | 16000 | 15933 cP  | 503,32  | 3,1590  |

**Lampiran 10.** Sediaan *Body Scrub* Formulasi Awal (F0, F1, F2, dan F3)



Formulasi Awal Sedian *Body Scrub* Minggu 0



Formulasi Awal Sedian *Body Scrub* Minggu 3



Formulasi 0



Formulasi 1



Formulasi 2



Formulasi 3

### Lampiran 11. Reformulasi Sediaan *Body Scrub* (F0, F1, F2, dan F3)

Reformulasi Sediaan *Body Scrub* Minggu 0Reformulasi Sediaan *Body Scrub* Minggu 3



Formulasi 0



Formulasi 1

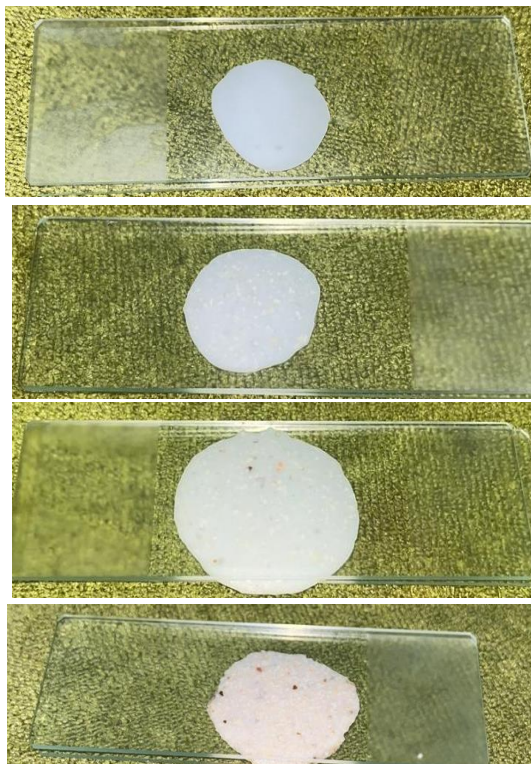


Formulasi 2

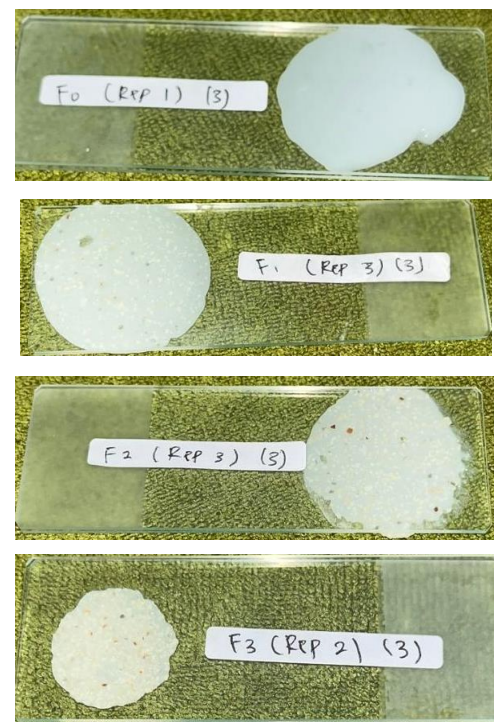


Formulasi 3

### Lampiran 12. Uji Homogenitas



Formulasi Minggu 0



Formulasi Minggu 3

### Lampiran 13. Uji pH dan Analisis Statistik Sediaan *Body Scrub*



#### → Oneway

##### Descriptives

pH

|       | N | Mean   | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |        | Minimum | Maximum |
|-------|---|--------|----------------|------------|----------------------------------|--------|---------|---------|
| F0    | 2 | 4.6300 | .02828         | .02000     | 4.3759                           | 4.8841 | 4.61    | 4.65    |
| F1    | 2 | 4.8950 | .06364         | .04500     | 4.3232                           | 5.4668 | 4.85    | 4.94    |
| F2    | 2 | 5.0300 | .01414         | .01000     | 4.9029                           | 5.1571 | 5.02    | 5.04    |
| F3    | 2 | 5.2900 | .01414         | .01000     | 5.1629                           | 5.4171 | 5.28    | 5.30    |
| Total | 8 | 4.9613 | .25609         | .09054     | 4.7472                           | 5.1753 | 4.61    | 5.30    |

##### Test of Homogeneity of Variances

|    |                                      | Levene Statistic | df1 | df2   | Sig. |
|----|--------------------------------------|------------------|-----|-------|------|
| pH | Based on Mean                        | 1.845E+27        | 3   | 4     | .000 |
|    | Based on Median                      | 1.845E+27        | 3   | 4     | .000 |
|    | Based on Median and with adjusted df | 1.845E+27        | 3   | 3.000 | .000 |
|    | Based on trimmed mean                | 1.845E+27        | 3   | 4     | .000 |

##### ANOVA

pH

|                | Sum of Squares | df | Mean Square | F       | Sig. |
|----------------|----------------|----|-------------|---------|------|
| Between Groups | .454           | 3  | .151        | 115.260 | .000 |
| Within Groups  | .005           | 4  | .001        |         |      |
| Total          | .459           | 7  |             |         |      |

## Post Hoc Tests

### Multiple Comparisons

Dependent Variable: pH

Tukey HSD

| (I) FormulaSerbuk | (J) FormulaSerbuk | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-------------------|-------------------|-----------------------|------------|------|-------------------------|-------------|
|                   |                   |                       |            |      | Lower Bound             | Upper Bound |
| F0                | F1                | -.26500*              | .03623     | .006 | -.4125                  | -.1175      |
|                   | F2                | -.40000*              | .03623     | .001 | -.5475                  | -.2525      |
|                   | F3                | -.66000*              | .03623     | .000 | -.8075                  | -.5125      |
| F1                | F0                | .26500*               | .03623     | .006 | .1175                   | .4125       |
|                   | F2                | -.13500               | .03623     | .066 | -.2825                  | .0125       |
|                   | F3                | -.39500*              | .03623     | .001 | -.5425                  | -.2475      |
| F2                | F0                | .40000*               | .03623     | .001 | .2525                   | .5475       |
|                   | F1                | .13500                | .03623     | .066 | -.0125                  | .2825       |
|                   | F3                | -.26000*              | .03623     | .007 | -.4075                  | -.1125      |
| F3                | F0                | .66000*               | .03623     | .000 | .5125                   | .8075       |
|                   | F1                | .39500*               | .03623     | .001 | .2475                   | .5425       |
|                   | F2                | .26000*               | .03623     | .007 | .1125                   | .4075       |

\*. The mean difference is significant at the 0.05 level.

### Homogeneous Subsets

pH

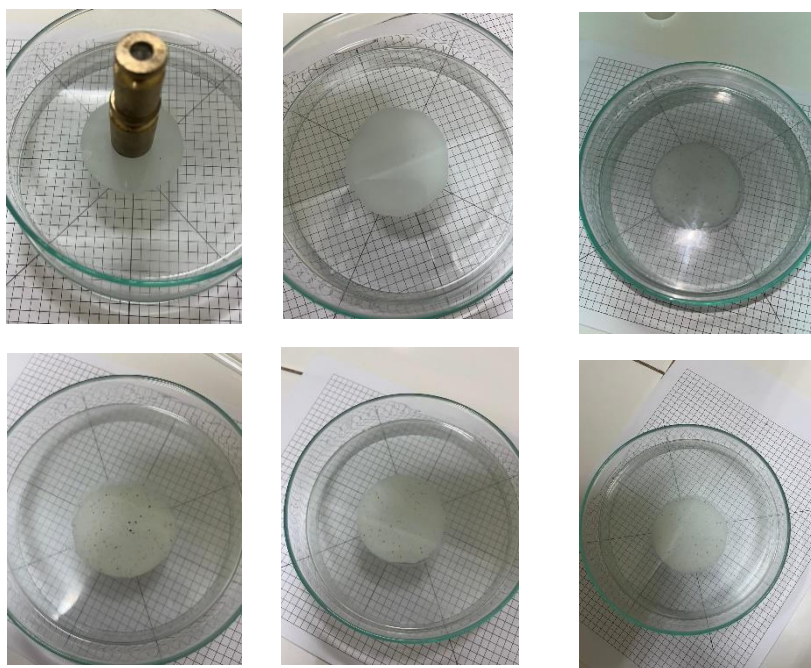
Tukey HSD<sup>a</sup>

| FormulaSerbuk | N | Subset for alpha = 0.05 |        |        |
|---------------|---|-------------------------|--------|--------|
|               |   | 1                       | 2      | 3      |
| F0            | 2 | 4.6300                  |        |        |
| F1            | 2 |                         | 4.8950 |        |
| F2            | 2 |                         | 5.0300 |        |
| F3            | 2 |                         |        | 5.2900 |
| Sig.          |   | 1.000                   | .066   | 1.000  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

## Lampiran 14. Uji Daya Sebar dan Analisis Statistik Sediaan *Body Scrub*



→ **Oneway**

**Descriptives**

| DayaSebar |   |        |                |            |                                  |        |         |         |
|-----------|---|--------|----------------|------------|----------------------------------|--------|---------|---------|
|           | N | Mean   | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |        | Minimum | Maximum |
| F0        | 2 | 6.2400 | .04243         | .03000     | 5.8588                           | 6.6212 | 6.21    | 6.27    |
| F1        | 2 | 5.8000 | .01414         | .01000     | 5.6729                           | 5.9271 | 5.79    | 5.81    |
| F2        | 2 | 5.6300 | .02828         | .02000     | 5.3759                           | 5.8841 | 5.61    | 5.65    |
| F3        | 2 | 5.5250 | .02121         | .01500     | 5.3344                           | 5.7156 | 5.51    | 5.54    |
| Total     | 8 | 5.7988 | .29264         | .10347     | 5.5541                           | 6.0434 | 5.51    | 6.27    |

**Test of Homogeneity of Variances**

|           |                                      | Levene Statistic | df1 | df2   | Sig. |
|-----------|--------------------------------------|------------------|-----|-------|------|
| DayaSebar | Based on Mean                        | 4.930E+26        | 3   | 4     | .000 |
|           | Based on Median                      | 4.930E+26        | 3   | 4     | .000 |
|           | Based on Median and with adjusted df | 4.930E+26        | 3   | 3.000 | .000 |
|           | Based on trimmed mean                | 4.930E+26        | 3   | 4     | .000 |

**ANOVA**

DayaSebar

|                | Sum of Squares | df | Mean Square | F       | Sig. |
|----------------|----------------|----|-------------|---------|------|
| Between Groups | .596           | 3  | .199        | 244.610 | .000 |
| Within Groups  | .003           | 4  | .001        |         |      |
| Total          | .599           | 7  |             |         |      |

**Post Hoc Tests**

**Multiple Comparisons**

Dependent Variable: DayaSebar

Tukey HSD

| (I) FormulaSerbuk | (J) FormulaSerbuk | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |        |
|-------------------|-------------------|-----------------------|------------|------|-------------------------|--------|
| F0                | F1                | .4400*                | .02850     | .000 | .3240                   | .5560  |
|                   | F2                | .6100*                | .02850     | .000 | .4940                   | .7260  |
|                   | F3                | .7150*                | .02850     | .000 | .5990                   | .8310  |
| F1                | F0                | -.4400*               | .02850     | .000 | -.5560                  | -.3240 |
|                   | F2                | .1700*                | .02850     | .014 | .0540                   | .2860  |
|                   | F3                | .2750*                | .02850     | .002 | .1590                   | .3910  |
| F2                | F0                | -.6100*               | .02850     | .000 | -.7260                  | -.4940 |
|                   | F1                | -.1700*               | .02850     | .014 | -.2860                  | -.0540 |
|                   | F3                | .10500                | .02850     | .068 | -.0110                  | .2210  |
| F3                | F0                | -.7150*               | .02850     | .000 | -.8310                  | -.5990 |
|                   | F1                | -.2750*               | .02850     | .002 | -.3910                  | -.1590 |
|                   | F2                | -.10500               | .02850     | .068 | -.2210                  | .0110  |

\*. The mean difference is significant at the 0.05 level.

**Homogeneous Subsets**

**DayaSebar**

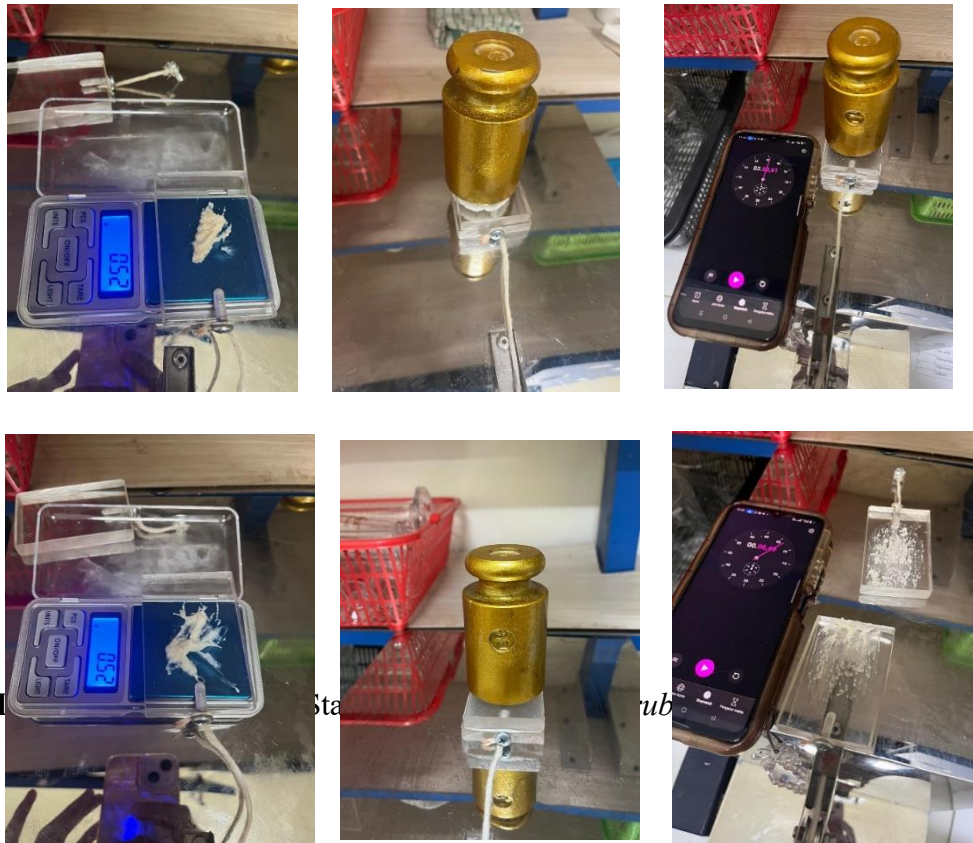
Tukey HSD<sup>a</sup>

|               |   | Subset for alpha = 0.05 |        |        |
|---------------|---|-------------------------|--------|--------|
| FormulaSerbuk | N | 1                       | 2      | 3      |
| F3            | 2 | 5.5250                  |        |        |
| F2            | 2 | 5.6300                  |        |        |
| F1            | 2 |                         | 5.8000 |        |
| F0            | 2 |                         |        | 6.2400 |
| Sig.          |   | .068                    | 1.000  | 1.000  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

### Lampiran 15. Uji Daya Lekat dan Analisis Statistik Sediaan *Body Scrub*



→ Oneway

#### Descriptives

| DayaLekat |   | 95% Confidence Interval for Mean |                |            |             |             |         |         |
|-----------|---|----------------------------------|----------------|------------|-------------|-------------|---------|---------|
|           | N | Mean                             | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
| F0        | 2 | 4.5500                           | .24042         | .17000     | 2.3899      | 6.7101      | 4.38    | 4.72    |
| F1        | 2 | 5.0950                           | .21920         | .15500     | 3.1255      | 7.0645      | 4.94    | 5.25    |
| F2        | 2 | 5.2900                           | .12728         | .09000     | 4.1464      | 6.4336      | 5.20    | 5.38    |
| F3        | 2 | 6.1750                           | .19092         | .13500     | 4.4597      | 7.8903      | 6.04    | 6.31    |
| Total     | 8 | 5.2775                           | .64309         | .22737     | 4.7399      | 5.8151      | 4.38    | 6.31    |

#### Test of Homogeneity of Variances

| DayaLekat |                                      | Levene Statistic | df1 | df2   | Sig. |
|-----------|--------------------------------------|------------------|-----|-------|------|
| DayaLekat | Based on Mean                        | 2.451E+28        | 3   | 4     | .000 |
|           | Based on Median                      | 2.451E+28        | 3   | 4     | .000 |
|           | Based on Median and with adjusted df | 2.451E+28        | 3   | 1.000 | .000 |
|           | Based on trimmed mean                | 4.902E+27        | 3   | 4     | .000 |

#### ANOVA

| DayaLekat      |  | Sum of Squares | df | Mean Square | F      | Sig. |
|----------------|--|----------------|----|-------------|--------|------|
| Between Groups |  | 2.736          | 3  | .912        | 23.020 | .006 |
| Within Groups  |  | .158           | 4  | .040        |        |      |
| Total          |  | 2.895          | 7  |             |        |      |

### Multiple Comparisons

Dependent Variable: DayaLekat  
Tukey HSD

| (I) FormulaSerbuk | (J) FormulaSerbuk | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-------------------|-------------------|-----------------------|------------|------|-------------------------|-------------|
|                   |                   |                       |            |      | Lower Bound             | Upper Bound |
| F0                | F1                | -.54500               | .19906     | .159 | -1.3553                 | .2653       |
|                   | F2                | -.74000               | .19906     | .067 | -1.5503                 | .0703       |
|                   | F3                | -1.62500*             | .19906     | .004 | -2.4353                 | -.8147      |
| F1                | F0                | .54500                | .19906     | .159 | -.2653                  | 1.3553      |
|                   | F2                | -.19500               | .19906     | .769 | -1.0053                 | .6153       |
|                   | F3                | -1.08000*             | .19906     | .019 | -1.8903                 | -.2697      |
| F2                | F0                | .74000                | .19906     | .067 | -.0703                  | 1.5503      |
|                   | F1                | .19500                | .19906     | .769 | -.6153                  | 1.0053      |
|                   | F3                | -.88500*              | .19906     | .037 | -1.6953                 | -.0747      |
| F3                | F0                | 1.62500*              | .19906     | .004 | .8147                   | 2.4353      |
|                   | F1                | 1.08000*              | .19906     | .019 | .2697                   | 1.8903      |
|                   | F2                | .88500*               | .19906     | .037 | .0747                   | 1.6953      |

\*. The mean difference is significant at the 0.05 level.

### Homogeneous Subsets

#### DayaLekat

Tukey HSD<sup>a</sup>

| FormulaSerbuk | N | Subset for alpha = 0.05 |        |
|---------------|---|-------------------------|--------|
|               |   | 1                       | 2      |
| F0            | 2 | 4.5500                  |        |
| F1            | 2 | 5.0950                  |        |
| F2            | 2 | 5.2900                  |        |
| F3            | 2 |                         | 6.1750 |
| Sig.          |   | .067                    | 1.000  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

### Lampiran 16. Uji Viskositas dan Analisis Statistik Sediaan *Body Scrub*



→ **Oneway****Descriptives**

Viscositas

|       | N | Mean     | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             | Minimum | Maximum |
|-------|---|----------|----------------|------------|----------------------------------|-------------|---------|---------|
|       |   |          |                |            | Lower Bound                      | Upper Bound |         |         |
| F0    | 2 | 8433.00  | 141.421        | 100.000    | 7162.38                          | 9703.62     | 8333    | 8533    |
| F1    | 2 | 12349.50 | 400.930        | 283.500    | 8747.29                          | 15951.71    | 12066   | 12633   |
| F2    | 2 | 13866.50 | 895.904        | 633.500    | 5817.12                          | 21915.88    | 13233   | 14500   |
| F3    | 2 | 14883.00 | 494.975        | 350.000    | 10435.83                         | 19330.17    | 14533   | 15233   |
| Total | 8 | 12383.00 | 2654.839       | 938.627    | 10163.50                         | 14602.50    | 8333    | 15233   |

**ANOVA**

Viscositas

|                | Sum of Squares | df | Mean Square | F      | Sig. |
|----------------|----------------|----|-------------|--------|------|
| Between Groups | 48108789.00    | 3  | 16036263.00 | 52.219 | .001 |
| Within Groups  | 1228389.000    | 4  | 307097.250  |        |      |
| Total          | 49337178.00    | 7  |             |        |      |

**Post Hoc Tests****Multiple Comparisons**

Dependent Variable: Viscositas

Tukey HSD

| (I) FormulaSerbuk | (J) FormulaSerbuk | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-------------------|-------------------|-----------------------|------------|------|-------------------------|-------------|
|                   |                   |                       |            |      | Lower Bound             | Upper Bound |
| F0                | F1                | -3916.500*            | 554.164    | .007 | -6172.42                | -1660.58    |
|                   | F2                | -5433.500*            | 554.164    | .002 | -7689.42                | -3177.58    |
|                   | F3                | -6450.000*            | 554.164    | .001 | -8705.92                | -4194.08    |
| F1                | F0                | 3916.500*             | 554.164    | .007 | 1660.58                 | 6172.42     |
|                   | F2                | -1517.000             | 554.164    | .159 | -3772.92                | 738.92      |
|                   | F3                | -2533.500*            | 554.164    | .034 | -4789.42                | -277.58     |
| F2                | F0                | 5433.500*             | 554.164    | .002 | 3177.58                 | 7689.42     |
|                   | F1                | 1517.000              | 554.164    | .159 | -738.92                 | 3772.92     |
|                   | F3                | -1016.500             | 554.164    | .377 | -3272.42                | 1239.42     |
| F3                | F0                | 6450.000*             | 554.164    | .001 | 4194.08                 | 8705.92     |
|                   | F1                | 2533.500*             | 554.164    | .034 | 277.58                  | 4789.42     |
|                   | F2                | 1016.500              | 554.164    | .377 | -1239.42                | 3272.42     |

\*. The mean difference is significant at the 0.05 level.

**Homogeneous Subsets****Viscositas**Tukey HSD<sup>a</sup>

| FormulaSerbuk | N | Subset for alpha = 0.05 |          |          |
|---------------|---|-------------------------|----------|----------|
|               |   | 1                       | 2        | 3        |
| F0            | 2 | 8433.00                 |          |          |
| F1            | 2 |                         | 12349.50 |          |
| F2            | 2 |                         | 13866.50 | 13866.50 |
| F3            | 2 |                         |          | 14883.00 |
| Sig.          |   | 1.000                   | .159     | .377     |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

**Lampiran 17. Uji Hedonik *Body Scrub* Serbuk Biji Durian (*Durio zibethinus* L.)**

## Lampiran 18. Hasil Statistik Hedonik Sediaan *Body Scrub* Serbuk Biji Durian

### 18.1 Aroma

#### Friedman Test

##### Ranks

Mean Rank

|         |      |
|---------|------|
| AromaF0 | 2.05 |
| AromaF1 | 3.40 |
| AromaF2 | 2.45 |
| AromaF3 | 2.10 |

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

|             |       |
|-------------|-------|
| N           | 10    |
| Chi-Square  | 7.121 |
| df          | 3     |
| Asymp. Sig. | .068  |

a. Friedman Test

### 18.2 Warna

#### Friedman Test

##### Ranks

Mean Rank

|         |      |
|---------|------|
| WarnaF0 | 2.60 |
| WarnaF1 | 3.80 |
| WarnaF2 | 2.15 |
| WarnaF3 | 1.45 |

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

|             |        |
|-------------|--------|
| N           | 10     |
| Chi-Square  | 17.727 |
| df          | 3      |
| Asymp. Sig. | .001   |

a. Friedman Test

#### Wilcoxon Signed Ranks Test

##### Ranks

|                   |                | N               | Mean Rank | Sum of Ranks |
|-------------------|----------------|-----------------|-----------|--------------|
| WarnaF1 - WarnaF0 | Negative Ranks | 0 <sup>a</sup>  | .00       | .00          |
|                   | Positive Ranks | 10 <sup>b</sup> | 5.50      | 55.00        |
|                   | Ties           | 0 <sup>c</sup>  |           |              |
|                   | Total          | 10              |           |              |
| WarnaF2 - WarnaF0 | Negative Ranks | 8 <sup>d</sup>  | 5.25      | 42.00        |
|                   | Positive Ranks | 2 <sup>e</sup>  | 6.50      | 13.00        |
|                   | Ties           | 0 <sup>f</sup>  |           |              |
|                   | Total          | 10              |           |              |
| WarnaF3 - WarnaF0 | Negative Ranks | 8 <sup>g</sup>  | 5.63      | 45.00        |
|                   | Positive Ranks | 2 <sup>h</sup>  | 5.00      | 10.00        |
|                   | Ties           | 0 <sup>i</sup>  |           |              |
|                   | Total          | 10              |           |              |
| WarnaF2 - WarnaF1 | Negative Ranks | 9 <sup>j</sup>  | 5.94      | 53.50        |
|                   | Positive Ranks | 1 <sup>k</sup>  | 1.50      | 1.50         |
|                   | Ties           | 0 <sup>l</sup>  |           |              |
|                   | Total          | 10              |           |              |
| WarnaF3 - WarnaF1 | Negative Ranks | 9 <sup>m</sup>  | 5.89      | 53.00        |
|                   | Positive Ranks | 1 <sup>n</sup>  | 2.00      | 2.00         |
|                   | Ties           | 0 <sup>o</sup>  |           |              |
|                   | Total          | 10              |           |              |
| WarnaF3 - WarnaF2 | Negative Ranks | 8 <sup>p</sup>  | 5.00      | 40.00        |
|                   | Positive Ranks | 1 <sup>q</sup>  | 5.00      | 5.00         |
|                   | Ties           | 1 <sup>r</sup>  |           |              |
|                   | Total          | 10              |           |              |

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

|                        | WarnaF1 -<br>WarnaF0 | WarnaF2 -<br>WarnaF0 | WarnaF3 -<br>WarnaF0 | WarnaF2 -<br>WarnaF1 | WarnaF3 -<br>WarnaF1 | WarnaF3 -<br>WarnaF2 |
|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Z                      | -2.972 <sup>b</sup>  | -1.539 <sup>c</sup>  | -1.831 <sup>c</sup>  | -2.694 <sup>c</sup>  | -2.641 <sup>c</sup>  | -2.333 <sup>c</sup>  |
| Asymp. Sig. (2-tailed) | .003                 | .124                 | .067                 | .007                 | .008                 | .020                 |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.

## 18.3 Tekstur

**Friedman Test****Ranks**

|           | Mean Rank |
|-----------|-----------|
| TeksturF0 | 1.20      |
| TeksturF1 | 2.25      |
| TeksturF2 | 3.20      |
| TeksturF3 | 3.35      |

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

|             |        |
|-------------|--------|
| N           | 10     |
| Chi-Square  | 18.531 |
| df          | 3      |
| Asymp. Sig. | .000   |

a. Friedman Test

**Wilcoxon Signed Ranks Test****Ranks**

|                       |                | N               | Mean Rank | Sum of Ranks |
|-----------------------|----------------|-----------------|-----------|--------------|
| TeksturF1 - TeksturF0 | Negative Ranks | 1 <sup>a</sup>  | 3.00      | 3.00         |
|                       | Positive Ranks | 8 <sup>b</sup>  | 5.25      | 42.00        |
|                       | Ties           | 1 <sup>c</sup>  |           |              |
|                       | Total          | 10              |           |              |
| TeksturF2 - TeksturF0 | Negative Ranks | 0 <sup>d</sup>  | .00       | .00          |
|                       | Positive Ranks | 10 <sup>e</sup> | 5.50      | 55.00        |
|                       | Ties           | 0 <sup>f</sup>  |           |              |
|                       | Total          | 10              |           |              |
| TeksturF3 - TeksturF0 | Negative Ranks | 0 <sup>g</sup>  | .00       | .00          |
|                       | Positive Ranks | 9 <sup>h</sup>  | 5.00      | 45.00        |
|                       | Ties           | 1 <sup>i</sup>  |           |              |
|                       | Total          | 10              |           |              |
| TeksturF2 - TeksturF1 | Negative Ranks | 1 <sup>j</sup>  | 6.00      | 6.00         |
|                       | Positive Ranks | 9 <sup>k</sup>  | 5.44      | 49.00        |
|                       | Ties           | 0 <sup>l</sup>  |           |              |
|                       | Total          | 10              |           |              |
| TeksturF3 - TeksturF1 | Negative Ranks | 2 <sup>m</sup>  | 1.50      | 3.00         |
|                       | Positive Ranks | 6 <sup>n</sup>  | 5.50      | 33.00        |
|                       | Ties           | 2 <sup>o</sup>  |           |              |
|                       | Total          | 10              |           |              |
| TeksturF3 - TeksturF2 | Negative Ranks | 3 <sup>p</sup>  | 7.17      | 21.50        |
|                       | Positive Ranks | 7 <sup>q</sup>  | 4.79      | 33.50        |
|                       | Ties           | 0 <sup>r</sup>  |           |              |
|                       | Total          | 10              |           |              |

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

|                        | TeksturF1 -<br>TeksturF0 | TeksturF2 -<br>TeksturF0 | TeksturF3 -<br>TeksturF0 | TeksturF2 -<br>TeksturF1 | TeksturF3 -<br>TeksturF1 | TeksturF3 -<br>TeksturF2 |
|------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Z                      | -2.360 <sup>b</sup>      | -2.825 <sup>b</sup>      | -2.684 <sup>b</sup>      | -2.228 <sup>b</sup>      | -2.116 <sup>b</sup>      | -.628 <sup>b</sup>       |
| Asymp. Sig. (2-tailed) | .018                     | .005                     | .007                     | .026                     | .034                     | .530                     |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## 18.4 Pengaplikasian

**Friedman Test****Ranks**

|                  | Mean Rank |
|------------------|-----------|
| PengaplikasianF0 | 1.05      |
| PengaplikasianF1 | 2.30      |
| PengaplikasianF2 | 3.15      |
| PengaplikasianF3 | 3.50      |

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

|             |        |
|-------------|--------|
| N           | 10     |
| Chi-Square  | 22.755 |
| df          | 3      |
| Asymp. Sig. | .000   |

## a. Friedman Test

**Wilcoxon Signed Ranks Test****Ranks**

|                                     |                | N               | Mean Rank | Sum of Ranks |
|-------------------------------------|----------------|-----------------|-----------|--------------|
| PengaplikasianF1 - PengaplikasianF0 | Negative Ranks | 0 <sup>a</sup>  | .00       | .00          |
|                                     | Positive Ranks | 9 <sup>b</sup>  | 5.00      | 45.00        |
|                                     | Ties           | 1 <sup>c</sup>  |           |              |
|                                     | Total          | 10              |           |              |
| PengaplikasianF2 - PengaplikasianF0 | Negative Ranks | 0 <sup>d</sup>  | .00       | .00          |
|                                     | Positive Ranks | 10 <sup>e</sup> | 5.50      | 55.00        |
|                                     | Ties           | 0 <sup>f</sup>  |           |              |
|                                     | Total          | 10              |           |              |
| PengaplikasianF3 - PengaplikasianF0 | Negative Ranks | 0 <sup>g</sup>  | .00       | .00          |
|                                     | Positive Ranks | 10 <sup>h</sup> | 5.50      | 55.00        |
|                                     | Ties           | 0 <sup>i</sup>  |           |              |
|                                     | Total          | 10              |           |              |
| PengaplikasianF2 - PengaplikasianF1 | Negative Ranks | 2 <sup>j</sup>  | 5.75      | 11.50        |
|                                     | Positive Ranks | 7 <sup>k</sup>  | 4.79      | 33.50        |
|                                     | Ties           | 1 <sup>l</sup>  |           |              |
|                                     | Total          | 10              |           |              |
| PengaplikasianF3 - PengaplikasianF1 | Negative Ranks | 1 <sup>m</sup>  | 5.00      | 5.00         |
|                                     | Positive Ranks | 9 <sup>n</sup>  | 5.56      | 50.00        |
|                                     | Ties           | 0 <sup>o</sup>  |           |              |
|                                     | Total          | 10              |           |              |
| PengaplikasianF3 - PengaplikasianF2 | Negative Ranks | 2 <sup>p</sup>  | 3.00      | 6.00         |
|                                     | Positive Ranks | 4 <sup>q</sup>  | 3.75      | 15.00        |
|                                     | Ties           | 4 <sup>r</sup>  |           |              |
|                                     | Total          | 10              |           |              |

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

|                        | Pengaplikasi<br>anF1 -<br>Pengaplikasi<br>anF0 | Pengaplikasi<br>anF2 -<br>Pengaplikasi<br>anF0 | Pengaplikasi<br>anF3 -<br>Pengaplikasi<br>anF0 | Pengaplikasi<br>anF2 -<br>Pengaplikasi<br>anF1 | Pengaplikasi<br>anF3 -<br>Pengaplikasi<br>anF1 | Pengaplikasi<br>anF3 -<br>Pengaplikasi<br>anF2 |
|------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
| Z                      | -2.754 <sup>b</sup>                            | -2.850 <sup>b</sup>                            | -2.877 <sup>b</sup>                            | -1.350 <sup>b</sup>                            | -2.496 <sup>b</sup>                            | -1.000 <sup>b</sup>                            |
| Asymp. Sig. (2-tailed) | .006                                           | .004                                           | .004                                           | .177                                           | .013                                           | .317                                           |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## 18.5 Abrasif

**Friedman Test****Ranks**

|           | Mean Rank |
|-----------|-----------|
| AbrasifF0 | 1.00      |
| AbrasifF1 | 2.20      |
| AbrasifF2 | 3.10      |
| AbrasifF3 | 3.70      |

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

|             |        |
|-------------|--------|
| N           | 10     |
| Chi-Square  | 24.840 |
| df          | 3      |
| Asymp. Sig. | .000   |

a. Friedman Test

**Wilcoxon Signed Ranks Test****Ranks**

|                     |                | N               | Mean Rank | Sum of Ranks |
|---------------------|----------------|-----------------|-----------|--------------|
| AbrasiF1 - AbrasiF0 | Negative Ranks | 0 <sup>a</sup>  | .00       | .00          |
|                     | Positive Ranks | 10 <sup>b</sup> | 5.50      | 55.00        |
|                     | Ties           | 0 <sup>c</sup>  |           |              |
|                     | Total          | 10              |           |              |
| AbrasiF2 - AbrasiF0 | Negative Ranks | 0 <sup>d</sup>  | .00       | .00          |
|                     | Positive Ranks | 10 <sup>e</sup> | 5.50      | 55.00        |
|                     | Ties           | 0 <sup>f</sup>  |           |              |
|                     | Total          | 10              |           |              |
| AbrasiF3 - AbrasiF0 | Negative Ranks | 0 <sup>g</sup>  | .00       | .00          |
|                     | Positive Ranks | 10 <sup>h</sup> | 5.50      | 55.00        |
|                     | Ties           | 0 <sup>i</sup>  |           |              |
|                     | Total          | 10              |           |              |
| AbrasiF2 - AbrasiF1 | Negative Ranks | 1 <sup>j</sup>  | 3.00      | 3.00         |
|                     | Positive Ranks | 9 <sup>k</sup>  | 5.78      | 52.00        |
|                     | Ties           | 0 <sup>l</sup>  |           |              |
|                     | Total          | 10              |           |              |
| AbrasiF3 - AbrasiF1 | Negative Ranks | 1 <sup>m</sup>  | 4.00      | 4.00         |
|                     | Positive Ranks | 9 <sup>n</sup>  | 5.67      | 51.00        |
|                     | Ties           | 0 <sup>o</sup>  |           |              |
|                     | Total          | 10              |           |              |
| AbrasiF3 - AbrasiF2 | Negative Ranks | 2 <sup>p</sup>  | 5.50      | 11.00        |
|                     | Positive Ranks | 8 <sup>q</sup>  | 5.50      | 44.00        |
|                     | Ties           | 0 <sup>r</sup>  |           |              |
|                     | Total          | 10              |           |              |

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

|                        | AbrasiF1 -<br>AbrasiF0 | AbrasiF2 -<br>AbrasiF0 | AbrasiF3 -<br>AbrasiF0 | AbrasiF2 -<br>AbrasiF1 | AbrasiF3 -<br>AbrasiF1 | AbrasiF3 -<br>AbrasiF2 |
|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Z                      | -2.871 <sup>b</sup>    | -2.842 <sup>b</sup>    | -2.827 <sup>b</sup>    | -2.547 <sup>b</sup>    | -2.434 <sup>b</sup>    | -1.897 <sup>b</sup>    |
| Asymp. Sig. (2-tailed) | .004                   | .004                   | .005                   | .011                   | .015                   | .058                   |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## 18.6 Kenyamanan Penggunaan

**Friedman Test****Ranks**

|              | Mean Rank |
|--------------|-----------|
| KenyamananF0 | 1.30      |
| KenyamananF1 | 2.20      |
| KenyamananF2 | 3.40      |
| KenyamananF3 | 3.10      |

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

|             |        |
|-------------|--------|
| N           | 10     |
| Chi-Square  | 16.200 |
| df          | 3      |
| Asymp. Sig. | .001   |

a. Friedman Test

**Wilcoxon Signed Ranks Test****Ranks**

|                             |                | N              | Mean Rank | Sum of Ranks |
|-----------------------------|----------------|----------------|-----------|--------------|
| KenyamananF1 - KenyamananF0 | Negative Ranks | 1 <sup>a</sup> | 5.00      | 5.00         |
|                             | Positive Ranks | 9 <sup>b</sup> | 5.56      | 50.00        |
|                             | Ties           | 0 <sup>c</sup> |           |              |
|                             | Total          | 10             |           |              |
| KenyamananF2 - KenyamananF0 | Negative Ranks | 1 <sup>d</sup> | 1.00      | 1.00         |
|                             | Positive Ranks | 9 <sup>e</sup> | 6.00      | 54.00        |
|                             | Ties           | 0 <sup>f</sup> |           |              |
|                             | Total          | 10             |           |              |
| KenyamananF3 - KenyamananF0 | Negative Ranks | 1 <sup>g</sup> | 4.50      | 4.50         |
|                             | Positive Ranks | 9 <sup>h</sup> | 5.61      | 50.50        |
|                             | Ties           | 0 <sup>i</sup> |           |              |
|                             | Total          | 10             |           |              |
| KenyamananF2 - KenyamananF1 | Negative Ranks | 1 <sup>j</sup> | 7.50      | 7.50         |
|                             | Positive Ranks | 9 <sup>k</sup> | 5.28      | 47.50        |
|                             | Ties           | 0 <sup>l</sup> |           |              |
|                             | Total          | 10             |           |              |
| KenyamananF3 - KenyamananF1 | Negative Ranks | 2 <sup>m</sup> | 6.25      | 12.50        |
|                             | Positive Ranks | 8 <sup>n</sup> | 5.31      | 42.50        |
|                             | Ties           | 0 <sup>o</sup> |           |              |
|                             | Total          | 10             |           |              |
| KenyamananF3 - KenyamananF2 | Negative Ranks | 6 <sup>p</sup> | 5.83      | 35.00        |
|                             | Positive Ranks | 4 <sup>q</sup> | 5.00      | 20.00        |
|                             | Ties           | 0 <sup>r</sup> |           |              |
|                             | Total          | 10             |           |              |

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

|                        | Kenyamanan F1 - Kenyamanan F0 | Kenyamanan F2 - Kenyamanan F0 | Kenyamanan F3 - Kenyamanan F0 | Kenyamanan F2 - Kenyamanan F1 | Kenyamanan F3 - Kenyamanan F1 | Kenyamanan F3 - Kenyamanan F2 |
|------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Z                      | -2.496 <sup>b</sup>           | -2.755 <sup>b</sup>           | -2.377 <sup>b</sup>           | -2.080 <sup>b</sup>           | -1.560 <sup>b</sup>           | -.832 <sup>c</sup>            |
| Asymp. Sig. (2-tailed) | .013                          | .006                          | .017                          | .038                          | .119                          | .405                          |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

c. Based on positive ranks.

## 18.7 Kesan Pemakaian

**Friedman Test****Ranks**

|                  | Mean Rank |
|------------------|-----------|
| KesanPemakaianF0 | 1.80      |
| KesanPemakaianF1 | 2.25      |
| KesanPemakaianF2 | 2.65      |
| KesanPemakaianF3 | 3.30      |

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

|             |       |
|-------------|-------|
| N           | 10    |
| Chi-Square  | 9.000 |
| df          | 3     |
| Asymp. Sig. | .029  |

a. Friedman Test

**Wilcoxon Signed Ranks Test****Ranks**

|                                     |                | N              | Mean Rank | Sum of Ranks |
|-------------------------------------|----------------|----------------|-----------|--------------|
| KesanPemakaianF1 - KesanPemakaianF0 | Negative Ranks | 1 <sup>a</sup> | 5.00      | 5.00         |
|                                     | Positive Ranks | 6 <sup>b</sup> | 3.83      | 23.00        |
|                                     | Ties           | 3 <sup>c</sup> |           |              |
|                                     | Total          | 10             |           |              |
| KesanPemakaianF2 - KesanPemakaianF0 | Negative Ranks | 2 <sup>d</sup> | 2.25      | 4.50         |
|                                     | Positive Ranks | 6 <sup>e</sup> | 5.25      | 31.50        |
|                                     | Ties           | 2 <sup>f</sup> |           |              |
|                                     | Total          | 10             |           |              |
| KesanPemakaianF3 - KesanPemakaianF0 | Negative Ranks | 1 <sup>g</sup> | 1.50      | 1.50         |
|                                     | Positive Ranks | 6 <sup>h</sup> | 4.42      | 26.50        |
|                                     | Ties           | 3 <sup>i</sup> |           |              |
|                                     | Total          | 10             |           |              |
| KesanPemakaianF2 - KesanPemakaianF1 | Negative Ranks | 1 <sup>j</sup> | 5.50      | 5.50         |
|                                     | Positive Ranks | 6 <sup>k</sup> | 3.75      | 22.50        |
|                                     | Ties           | 3 <sup>l</sup> |           |              |
|                                     | Total          | 10             |           |              |
| KesanPemakaianF3 - KesanPemakaianF1 | Negative Ranks | 2 <sup>m</sup> | 2.00      | 4.00         |
|                                     | Positive Ranks | 7 <sup>n</sup> | 5.86      | 41.00        |
|                                     | Ties           | 1 <sup>o</sup> |           |              |
|                                     | Total          | 10             |           |              |
| KesanPemakaianF3 - KesanPemakaianF2 | Negative Ranks | 1 <sup>p</sup> | 7.00      | 7.00         |
|                                     | Positive Ranks | 7 <sup>q</sup> | 4.14      | 29.00        |
|                                     | Ties           | 2 <sup>r</sup> |           |              |
|                                     | Total          | 10             |           |              |

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

|                        | KesanPemakaianF1 - KesanPemakaianF0 | KesanPemakaianF2 - KesanPemakaianF0 | KesanPemakaianF3 - KesanPemakaianF0 | KesanPemakaianF2 - KesanPemakaianF1 | KesanPemakaianF3 - KesanPemakaianF1 | KesanPemakaianF3 - KesanPemakaianF2 |
|------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Z                      | -1.543 <sup>b</sup>                 | -1.914 <sup>b</sup>                 | -2.120 <sup>b</sup>                 | -1.474 <sup>b</sup>                 | -2.219 <sup>b</sup>                 | -1.588 <sup>b</sup>                 |
| Asymp. Sig. (2-tailed) | .123                                | .056                                | .034                                | .140                                | .026                                | .112                                |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## 18.8 Kesan Sediaan

**Friedman Test****Ranks**

|                | Mean Rank |
|----------------|-----------|
| KesanSediaanF0 | 1.00      |
| KesanSediaanF1 | 2.10      |
| KesanSediaanF2 | 3.30      |
| KesanSediaanF3 | 3.60      |

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

|             |        |
|-------------|--------|
| N           | 10     |
| Chi-Square  | 25.560 |
| df          | 3      |
| Asymp. Sig. | .000   |

a. Friedman Test

**Wilcoxon Signed Ranks Test****Ranks**

|                                 |                | N               | Mean Rank | Sum of Ranks |
|---------------------------------|----------------|-----------------|-----------|--------------|
| KesanSediaanF1 - KesanSediaanF0 | Negative Ranks | 0 <sup>a</sup>  | .00       | .00          |
|                                 | Positive Ranks | 10 <sup>b</sup> | 5.50      | 55.00        |
|                                 | Ties           | 0 <sup>c</sup>  |           |              |
|                                 | Total          | 10              |           |              |
| KesanSediaanF2 - KesanSediaanF0 | Negative Ranks | 0 <sup>d</sup>  | .00       | .00          |
|                                 | Positive Ranks | 10 <sup>e</sup> | 5.50      | 55.00        |
|                                 | Ties           | 0 <sup>f</sup>  |           |              |
|                                 | Total          | 10              |           |              |
| KesanSediaanF3 - KesanSediaanF0 | Negative Ranks | 0 <sup>g</sup>  | .00       | .00          |
|                                 | Positive Ranks | 10 <sup>h</sup> | 5.50      | 55.00        |
|                                 | Ties           | 0 <sup>i</sup>  |           |              |
|                                 | Total          | 10              |           |              |
| KesanSediaanF2 - KesanSediaanF1 | Negative Ranks | 0 <sup>j</sup>  | .00       | .00          |
|                                 | Positive Ranks | 10 <sup>k</sup> | 5.50      | 55.00        |
|                                 | Ties           | 0 <sup>l</sup>  |           |              |
|                                 | Total          | 10              |           |              |
| KesanSediaanF3 - KesanSediaanF1 | Negative Ranks | 1 <sup>m</sup>  | 2.00      | 2.00         |
|                                 | Positive Ranks | 9 <sup>n</sup>  | 5.89      | 53.00        |
|                                 | Ties           | 0 <sup>o</sup>  |           |              |
|                                 | Total          | 10              |           |              |
| KesanSediaanF3 - KesanSediaanF2 | Negative Ranks | 3 <sup>p</sup>  | 6.67      | 20.00        |
|                                 | Positive Ranks | 7 <sup>q</sup>  | 5.00      | 35.00        |
|                                 | Ties           | 0 <sup>r</sup>  |           |              |
|                                 | Total          | 10              |           |              |

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

|                        | KesanSediaa<br>nF1 -<br>KesanSediaa<br>nF0 | KesanSediaa<br>nF2 -<br>KesanSediaa<br>nF0 | KesanSediaa<br>nF3 -<br>KesanSediaa<br>nF0 | KesanSediaa<br>nF2 -<br>KesanSediaa<br>nF1 | KesanSediaa<br>nF3 -<br>KesanSediaa<br>nF1 | KesanSediaa<br>nF3 -<br>KesanSediaa<br>nF2 |
|------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|
| Z                      | -2.972 <sup>b</sup>                        | -2.879 <sup>b</sup>                        | -2.844 <sup>b</sup>                        | -2.919 <sup>b</sup>                        | -2.668 <sup>b</sup>                        | -.832 <sup>b</sup>                         |
| Asymp. Sig. (2-tailed) | .003                                       | .004                                       | .004                                       | .004                                       | .008                                       | .405                                       |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

### Lampiran 19. Uji Perbandingan Tekstur Sediaan *Body Scrub*



### Lampiran 20. Hasil Uji Statistik Perbandingan Tekstur Sediaan *Body Scrub*

#### 20.1 Abrasif

#### Wilcoxon Signed Ranks Test

|                       |                | Ranks          |           |              |
|-----------------------|----------------|----------------|-----------|--------------|
|                       |                | N              | Mean Rank | Sum of Ranks |
| AbrasiF3B - AbrasiF3A | Negative Ranks | 4 <sup>a</sup> | 5.25      | 21.00        |
|                       | Positive Ranks | 6 <sup>b</sup> | 5.67      | 34.00        |
|                       | Ties           | 0 <sup>c</sup> |           |              |
|                       | Total          | 10             |           |              |

a. AbrasiF3B < AbrasiF3A

b. AbrasiF3B > AbrasiF3A

c. AbrasiF3B = AbrasiF3A

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

|                        |  | AbrasiF3B -<br>AbrasiF3A |
|------------------------|--|--------------------------|
| Z                      |  | -.690 <sup>b</sup>       |
| Asymp. Sig. (2-tailed) |  | .490                     |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## 20.2 Pengaplikasian

### Wilcoxon Signed Ranks Test

|                                       |                | Ranks          |           |              |
|---------------------------------------|----------------|----------------|-----------|--------------|
|                                       |                | N              | Mean Rank | Sum of Ranks |
| PengaplikasianF3B - PengaplikasianF3A | Negative Ranks | 5 <sup>a</sup> | 5.50      | 27.50        |
|                                       | Positive Ranks | 5 <sup>b</sup> | 5.50      | 27.50        |
|                                       | Ties           | 0 <sup>c</sup> |           |              |
|                                       | Total          | 10             |           |              |

a. PengaplikasianF3B < PengaplikasianF3A

b. PengaplikasianF3B > PengaplikasianF3A

c. PengaplikasianF3B = PengaplikasianF3A

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

|                                       |                   |
|---------------------------------------|-------------------|
| PengaplikasianF3B - PengaplikasianF3A |                   |
| Z                                     | .000 <sup>b</sup> |
| Asymp. Sig. (2-tailed)                | 1.000             |

a. Wilcoxon Signed Ranks Test

b. The sum of negative ranks equals the sum of positive ranks.

## 20.3 Kesan Pemakaian

### Wilcoxon Signed Ranks Test

|                                       |                | Ranks          |           |              |
|---------------------------------------|----------------|----------------|-----------|--------------|
|                                       |                | N              | Mean Rank | Sum of Ranks |
| KesanPemakaianF3B - KesanPemakaianF3A | Negative Ranks | 8 <sup>a</sup> | 5.75      | 46.00        |
|                                       | Positive Ranks | 2 <sup>b</sup> | 4.50      | 9.00         |
|                                       | Ties           | 0 <sup>c</sup> |           |              |
|                                       | Total          | 10             |           |              |

a. KesanPemakaianF3B < KesanPemakaianF3A

b. KesanPemakaianF3B > KesanPemakaianF3A

c. KesanPemakaianF3B = KesanPemakaianF3A

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

|                                       |                     |
|---------------------------------------|---------------------|
| KesanPemakaianF3B - KesanPemakaianF3A |                     |
| Z                                     | -1.999 <sup>b</sup> |
| Asymp. Sig. (2-tailed)                | .046                |

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

## 20.4 Kelembapan Kulit

### Wilcoxon Signed Ranks Test

|                               |                | Ranks          |           |              |
|-------------------------------|----------------|----------------|-----------|--------------|
|                               |                | N              | Mean Rank | Sum of Ranks |
| KelembapanF3B - KelembapanF3A | Negative Ranks | 8 <sup>a</sup> | 5.63      | 45.00        |
|                               | Positive Ranks | 2 <sup>b</sup> | 5.00      | 10.00        |
|                               | Ties           | 0 <sup>c</sup> |           |              |
|                               | Total          | 10             |           |              |

a. KelembapanF3B < KelembapanF3A

b. KelembapanF3B > KelembapanF3A

c. KelembapanF3B = KelembapanF3A

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

|                        |                                          |
|------------------------|------------------------------------------|
|                        | Kelembapan<br>F3B -<br>Kelembapan<br>F3A |
| Z                      | -1.941 <sup>b</sup>                      |
| Asymp. Sig. (2-tailed) | .052                                     |

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

## 20.5 Kenyamanan Penggunaan

### Wilcoxon Signed Ranks Test

|                               |                | Ranks          |           |              |
|-------------------------------|----------------|----------------|-----------|--------------|
|                               |                | N              | Mean Rank | Sum of Ranks |
| KenyamananF3B - KenyamananF3A | Negative Ranks | 3 <sup>a</sup> | 7.17      | 21.50        |
|                               | Positive Ranks | 7 <sup>b</sup> | 4.79      | 33.50        |
|                               | Ties           | 0 <sup>c</sup> |           |              |
|                               | Total          | 10             |           |              |

a. KenyamananF3B < KenyamananF3A

b. KenyamananF3B > KenyamananF3A

c. KenyamananF3B = KenyamananF3A

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

|                        |                                          |
|------------------------|------------------------------------------|
|                        | Kenyamanan<br>F3B -<br>Kenyamanan<br>F3A |
| Z                      | -.636 <sup>b</sup>                       |
| Asymp. Sig. (2-tailed) | .525                                     |

a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

## 20.6 Kesan Sediaan

### Wilcoxon Signed Ranks Test

|                                   |                | Ranks          |           |              |
|-----------------------------------|----------------|----------------|-----------|--------------|
|                                   |                | N              | Mean Rank | Sum of Ranks |
| KesanSediaanF3B - KesanSediaanF3A | Negative Ranks | 5 <sup>a</sup> | 6.50      | 32.50        |
|                                   | Positive Ranks | 5 <sup>b</sup> | 4.50      | 22.50        |
|                                   | Ties           | 0 <sup>c</sup> |           |              |
|                                   | Total          | 10             |           |              |

a. KesanSediaanF3B < KesanSediaanF3A

b. KesanSediaanF3B > KesanSediaanF3A

c. KesanSediaanF3B = KesanSediaanF3A

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

|                                   |                    |
|-----------------------------------|--------------------|
| KesanSediaanF3B - KesanSediaanF3A |                    |
| Z                                 | -.540 <sup>b</sup> |
| Asymp. Sig. (2-tailed)            | .589               |

a. Wilcoxon Signed Ranks Test

b. Based on positive ranks.

## Lampiran 21. Hasil Ekstrak Resin Jernang dengan Etil Asetat



Penimbangan Resin



Penghalusan Resin



Perendaman dengan Etil Asetat



Proses Maserasi



Penyaringan



Rotary Evaporator



Ekstrak Kental

**Lampiran 22.** Perhitungan Formulasi Sediaan *Body Scrub* Ekstrak Resin Jernang

## 1. Formulasi Resin Jernang 1%

|                                                                                      |                                                           |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------|
| Resin Jernang                                                                        | $= \frac{1}{100} \times 100) + 10\% = 1,1 \text{ gr}$     |
| Bubuk biji durian                                                                    | $= (\frac{15}{100} \times 100) + 10\% = 16,5 \text{ gr}$  |
| Capric Triglycerid                                                                   | $= (\frac{10}{100} \times 100) + 10\% = 11 \text{ gr}$    |
| Gliserin                                                                             | $= (\frac{3}{100} \times 100) + 10\% = 3,3 \text{ gr}$    |
| Butilen Glikol                                                                       | $= (\frac{3}{100} \times 100) + 10\% = 3,3 \text{ gr}$    |
| Gliserol Monostearat                                                                 | $= (\frac{2}{100} \times 100) + 10\% = 2,2 \text{ gr}$    |
| Emulsyifing Wax                                                                      | $= (\frac{6}{100} \times 100) + 10\% = 6,6 \text{ gr}$    |
| DMDM Hydantoin                                                                       | $= (\frac{1}{100} \times 100) + 10\% = 1,1 \text{ gr}$    |
| Phenoxyethanol-ethylhexylglycerin                                                    | $= (\frac{1}{100} \times 100) + 10\% = 1,1 \text{ gr}$    |
| Asam Benzoat                                                                         | $= (\frac{0,5}{100} \times 100) + 10\% = 0,55 \text{ gr}$ |
| Dimetikon                                                                            | $= (\frac{10}{100} \times 100) + 10\% = 11 \text{ gr}$    |
| Essence Strawberry                                                                   | = qs                                                      |
| Aquadest = $110 - (1,1 + 16,5 + 11 + 3,3 + 3,3 + 2,2 + 6,6 + 1,1 + 1,1 + 0,55 + 11)$ |                                                           |
|                                                                                      | $= 110 - 57,75 = 52,25 \text{ gr}$                        |

## 2. Formulasi Resin Jernang 2%

|                   |                                                          |
|-------------------|----------------------------------------------------------|
| Resin Jernang     | $= \frac{2}{100} \times 100) + 10\% = 2,2 \text{ gr}$    |
| Bubuk biji durian | $= (\frac{15}{100} \times 100) + 10\% = 16,5 \text{ gr}$ |

$$\text{Capric Triglycerid} = \left(\frac{10}{100} \times 100\right) + 10\% = 11 \text{ gr}$$

$$\text{Gliserin} = \left(\frac{3}{100} \times 100\right) + 10\% = 3,3 \text{ gr}$$

$$\text{Butilen Glikol} = \left(\frac{3}{100} \times 100\right) + 10\% = 3,3 \text{ gr}$$

$$\text{Gliserol Monostearat} = \left(\frac{2}{100} \times 100\right) + 10\% = 2,2 \text{ gr}$$

$$\text{Emulsyifing Wax} = \left(\frac{6}{100} \times 100\right) + 10\% = 6,6 \text{ gr}$$

$$\text{DMDM Hydantoin} = \left(\frac{1}{100} \times 100\right) + 10\% = 1,1 \text{ gr}$$

$$\text{Phenoxyethanol-ethylhexylglycerin} = \left(\frac{1}{100} \times 100\right) + 10\% = 1,1 \text{ gr}$$

$$\text{Asam Benzoat} = \left(\frac{0,5}{100} \times 100\right) + 10\% = 0,55 \text{ gr}$$

$$\text{Dimetikon} = \left(\frac{10}{100} \times 100\right) + 10\% = 11 \text{ gr}$$

$$\text{Essence Strawberry} = \text{qs}$$

$$\text{Aquadest} = 110 - (2,2 + 16,5 + 11 + 3,3 + 3,3 + 2,2 + 6,6 + 1,1 + 1,1 + 0,55 + 11)$$

$$= 110 - 58,85 = 51,15 \text{ gr}$$

### 3. Formulasi Resin Jernang 3%

$$\text{Resin Jernang} = \left(\frac{3}{100} \times 100\right) + 10\% = 3,3 \text{ gr}$$

$$\text{Bubuk biji durian} = \left(\frac{15}{100} \times 100\right) + 10\% = 16,5 \text{ gr}$$

$$\text{Capric Triglycerid} = \left(\frac{10}{100} \times 100\right) + 10\% = 11 \text{ gr}$$

$$\text{Gliserin} = \left(\frac{3}{100} \times 100\right) + 10\% = 3,3 \text{ gr}$$

$$\text{Butilen Glikol} = \left(\frac{3}{100} \times 100\right) + 10\% = 3,3 \text{ gr}$$

|                                   |                                                                             |
|-----------------------------------|-----------------------------------------------------------------------------|
| Gliserol Monostearat              | $= (\frac{2}{100} \times 100) + 10\% = 2,2 \text{ gr}$                      |
| Emulsyifing Wax                   | $= (\frac{6}{100} \times 100) + 10\% = 6,6 \text{ gr}$                      |
| DMDM Hydantoin                    | $= (\frac{1}{100} \times 100) + 10\% = 1,1 \text{ gr}$                      |
| Phenoxyethanol-ethylhexylglycerin | $= (\frac{1}{100} \times 100) + 10\% = 1,1 \text{ gr}$                      |
| Asam Benzoat                      | $= (\frac{0,5}{100} \times 100) + 10\% = 0,55 \text{ gr}$                   |
| Dimetikon                         | $= (\frac{10}{100} \times 100) + 10\% = 11 \text{ gr}$                      |
| Essence Strawberry                | = qs                                                                        |
| Aquadest                          | $= 110 - (3,3 + 16,5 + 11 + 3,3 + 3,3 + 2,2 + 6,6 + 1,1 + 1,1 + 0,55 + 11)$ |
|                                   | $= 110 - 59,95 = 50,05 \text{ gr}$                                          |

**Lampiran 23.** Hasil Sediaan *Body Scrub* Ekstrak Resin Jernang Etil Asetat



**Lampiran 24.** Hasil Sediaan *Body Scrub* Ekstrak Resin Jernang Propilen Glikol

*Body Scrub* Ekstrak Resin Jernang Minggu 0



### *Body Scrub* Ekstrak Resin Jernang Minggu 3



**Lampiran 25.** Uji Homogenitas *Body Scrub* Ekstrak Resin Jernang



Minggu 0



Minggu 3

**Lampiran 26.** Uji pH dan Analisis Statistik *Body Scrub* Estrak Resin Jernang



→ **Oneway**

**Descriptives**

| pH    |   |        |                |            |                                  |        |         |         |
|-------|---|--------|----------------|------------|----------------------------------|--------|---------|---------|
|       | N | Mean   | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |        | Minimum | Maximum |
| F1    | 2 | 5.1300 | .01414         | .01000     | 5.0029                           | 5.2571 | 5.12    | 5.14    |
| F2    | 2 | 5.1700 | .01414         | .01000     | 5.0429                           | 5.2971 | 5.16    | 5.18    |
| F3    | 2 | 5.0650 | .00707         | .00500     | 5.0015                           | 5.1285 | 5.06    | 5.07    |
| Total | 6 | 5.1217 | .04834         | .01973     | 5.0709                           | 5.1724 | 5.06    | 5.18    |

**Test of Homogeneity of Variances**

| pH |                                      | Levene Statistic | df1 | df2   | Sig. |
|----|--------------------------------------|------------------|-----|-------|------|
| pH | Based on Mean                        | 1.268E+26        | 2   | 3     | .000 |
|    | Based on Median                      | 1.268E+26        | 2   | 3     | .000 |
|    | Based on Median and with adjusted df | 1.268E+26        | 2   | 1.000 | .000 |
|    | Based on trimmed mean                | 2.535E+25        | 2   | 3     | .000 |

**ANOVA**

| pH             |  | Sum of Squares | df | Mean Square | F      | Sig. |
|----------------|--|----------------|----|-------------|--------|------|
| Between Groups |  | .011           | 2  | .006        | 37.444 | .008 |
| Within Groups  |  | .000           | 3  | .000        |        |      |
| Total          |  | .012           | 5  |             |        |      |

**Post Hoc Tests**

**Multiple Comparisons**

Dependent Variable: pH  
Tukey HSD

| (I) FormulaEkstrakResin | (J) FormulaEkstrakResin | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |        |
|-------------------------|-------------------------|-----------------------|------------|------|-------------------------|--------|
| F1                      | F2                      | -.04000               | .01225     | .092 | -.0912                  | .0112  |
|                         | F3                      | .06500*               | .01225     | .026 | .0138                   | .1162  |
| F2                      | F1                      | .04000                | .01225     | .092 | -.0112                  | .0912  |
|                         | F3                      | .10500*               | .01225     | .007 | .0538                   | .1562  |
| F3                      | F1                      | -.06500*              | .01225     | .026 | -.1162                  | -.0138 |
|                         | F2                      | -.10500*              | .01225     | .007 | -.1562                  | -.0538 |

\*. The mean difference is significant at the 0.05 level.

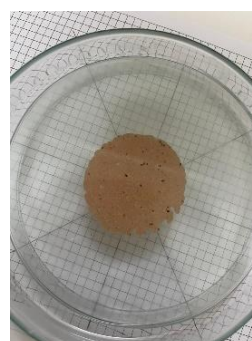
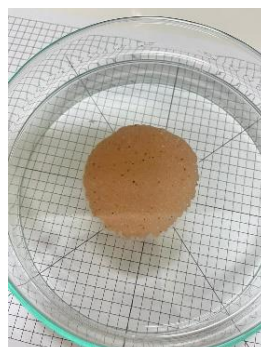
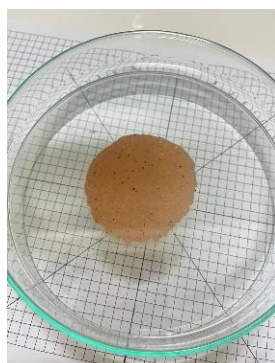
**Homogeneous Subsets**

**pH**

Tukey HSD<sup>a</sup>

| FormulaEkstrakResin |   | Subset for alpha = 0.05 |        |
|---------------------|---|-------------------------|--------|
|                     | N | 1                       | 2      |
| F3                  | 2 | 5.0650                  |        |
| F1                  | 2 |                         | 5.1300 |
| F2                  | 2 |                         | 5.1700 |
| Sig.                |   | 1.000                   | .092   |

**Lampiran 27. Uji Daya Sebar dan Analisis Statistik *Body Scrub* Estrak Resin**



→ **Oneway**

**Descriptives**

| DayaSebar |   |        |                |            |                                  |             |           |
|-----------|---|--------|----------------|------------|----------------------------------|-------------|-----------|
|           | N | Mean   | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |             |           |
|           |   |        |                |            | Lower Bound                      | Upper Bound |           |
| F1        | 2 | 5.5650 | .10607         | .07500     | 4.6120                           | 6.5180      | 5.49 5.64 |
| F2        | 2 | 5.5350 | .03536         | .02500     | 5.2173                           | 5.8527      | 5.51 5.56 |
| F3        | 2 | 5.6050 | .00707         | .00500     | 5.5415                           | 5.6685      | 5.60 5.61 |
| Total     | 6 | 5.5683 | .05913         | .02414     | 5.5063                           | 5.6304      | 5.49 5.64 |

**Test of Homogeneity of Variances**

|           |                                      | Levene Statistic | df1 | df2   | Sig. |
|-----------|--------------------------------------|------------------|-----|-------|------|
| DayaSebar | Based on Mean                        | 6.592E+27        | 2   | 3     | .000 |
|           | Based on Median                      | 6.592E+27        | 2   | 3     | .000 |
|           | Based on Median and with adjusted df | 6.592E+27        | 2   | 3.000 | .000 |
|           | Based on trimmed mean                | 6.592E+27        | 2   | 3     | .000 |

**ANOVA**

| DayaSebar      |                |    |             |      |      |
|----------------|----------------|----|-------------|------|------|
|                | Sum of Squares | df | Mean Square | F    | Sig. |
| Between Groups | .005           | 2  | .002        | .590 | .608 |
| Within Groups  | .013           | 3  | .004        |      |      |
| Total          | .017           | 5  |             |      |      |

**Post Hoc Tests**

**Multiple Comparisons**

Dependent Variable: DayaSebar  
Tukey HSD

|                         |    | Mean Difference (I-J)   | Std. Error | Sig. | 95% Confidence Interval |             |
|-------------------------|----|-------------------------|------------|------|-------------------------|-------------|
| (I) FormulaEkstrakResin |    | (J) FormulaEkstrakResin |            |      | Lower Bound             | Upper Bound |
| F1                      | F2 | .03000                  | .06468     | .892 | -.2403                  | .3003       |
|                         | F3 | -.04000                 | .06468     | .821 | -.3103                  | .2303       |
| F2                      | F1 | -.03000                 | .06468     | .892 | -.3003                  | .2403       |
|                         | F3 | -.07000                 | .06468     | .585 | -.3403                  | .2003       |
| F3                      | F1 | .04000                  | .06468     | .821 | -.2303                  | .3103       |
|                         | F2 | .07000                  | .06468     | .585 | -.2003                  | .3403       |

**Homogeneous Subsets**

**DayaSebar**

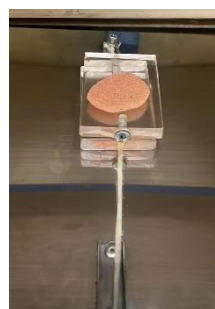
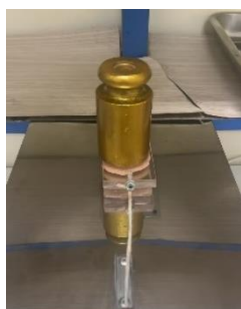
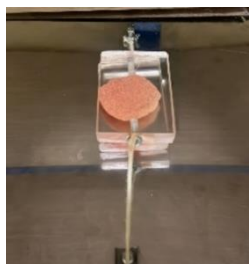
Tukey HSD<sup>a</sup>

| FormulaEkstrakResin | N | Subset for alpha = 0.05 |
|---------------------|---|-------------------------|
| F2                  | 2 | 1                       |
| F1                  | 2 | 5.5350                  |
| F3                  | 2 | 5.5650                  |
| Sig.                |   | 5.6050                  |
|                     |   | .585                    |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

**Lampiran 28. Uji Daya Lekat dan Analisis Statistik *Body Scrub* Estrak Resin**



## ➔ Oneway

## Descriptives

| DayaLekat |   |        |                |            |                                  |        |         |         |
|-----------|---|--------|----------------|------------|----------------------------------|--------|---------|---------|
|           | N | Mean   | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |        | Minimum | Maximum |
| F1        | 2 | 5.6000 | .07071         | .05000     | 4.9647                           | 6.2353 | 5.55    | 5.65    |
| F2        | 2 | 5.1950 | .12021         | .08500     | 4.1150                           | 6.2750 | 5.11    | 5.28    |
| F3        | 2 | 5.0900 | .01414         | .01000     | 4.9629                           | 5.2171 | 5.08    | 5.10    |
| Total     | 6 | 5.2950 | .24890         | .10161     | 5.0338                           | 5.5562 | 5.08    | 5.65    |

## Test of Homogeneity of Variances

|           |                                      | Levene Statistic | df1 | df2   | Sig. |
|-----------|--------------------------------------|------------------|-----|-------|------|
| DayaLekat | Based on Mean                        | 2.142E+28        | 2   | 3     | .000 |
|           | Based on Median                      | 2.142E+28        | 2   | 3     | .000 |
|           | Based on Median and with adjusted df | 2.142E+28        | 2   | 1.000 | .000 |
|           | Based on trimmed mean                | 2.380E+27        | 2   | 3     | .000 |

## ANOVA

| DayaLekat      |                |    |             |        |      |
|----------------|----------------|----|-------------|--------|------|
|                | Sum of Squares | df | Mean Square | F      | Sig. |
| Between Groups | .290           | 2  | .145        | 22.145 | .016 |
| Within Groups  | .020           | 3  | .007        |        |      |
| Total          | .310           | 5  |             |        |      |

## Post Hoc Tests

## Multiple Comparisons

Dependent Variable: DayaLekat  
Tukey HSD

|                         |                         | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |             |
|-------------------------|-------------------------|-----------------------|------------|------|-------------------------|-------------|
| (I) FormulaEkstrakResin | (J) FormulaEkstrakResin |                       |            |      | Lower Bound             | Upper Bound |
| F1                      | F2                      | .40500 <sup>*</sup>   | .08093     | .031 | .0668                   | .7432       |
|                         | F3                      | .51000 <sup>*</sup>   | .08093     | .016 | .1718                   | .8482       |
| F2                      | F1                      | -.40500 <sup>*</sup>  | .08093     | .031 | -.7432                  | -.0668      |
|                         | F3                      | .10500                | .08093     | .487 | -.2332                  | .4432       |
| F3                      | F1                      | -.51000 <sup>*</sup>  | .08093     | .016 | -.8482                  | -.1718      |
|                         | F2                      | -.10500               | .08093     | .487 | -.4432                  | .2332       |

\*. The mean difference is significant at the 0.05 level.

## Homogeneous Subsets

## DayaLekat

Tukey HSD<sup>a</sup>

|                     |   | Subset for alpha = 0.05 |        |
|---------------------|---|-------------------------|--------|
| FormulaEkstrakResin | N | 1                       | 2      |
| F3                  | 2 | 5.0900                  |        |
| F2                  | 2 | 5.1950                  |        |
| F1                  | 2 |                         | 5.6000 |
| Sig.                |   | .487                    | 1.000  |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

Lampiran 29. Uji Viskositas dan Analisis Statistik *Body Scrub* Estrak Resin



### ➔ Oneway

#### Descriptives

| Viscositas |   |          |                |            |                                  |          |         |         |
|------------|---|----------|----------------|------------|----------------------------------|----------|---------|---------|
|            | N | Mean     | Std. Deviation | Std. Error | 95% Confidence Interval for Mean |          | Minimum | Maximum |
| F1         | 2 | 14300.00 | 141.421        | 100.000    | 13029.38                         | 15570.62 | 14200   | 14400   |
| F2         | 2 | 14633.00 | 141.421        | 100.000    | 13362.38                         | 15903.62 | 14533   | 14733   |
| F3         | 2 | 13700.00 | 424.264        | 300.000    | 9888.14                          | 17511.86 | 13400   | 14000   |
| Total      | 6 | 14211.00 | 472.070        | 192.722    | 13715.59                         | 14706.41 | 13400   | 14733   |

#### ANOVA

| Viscositas     |                |    |             |       |      |
|----------------|----------------|----|-------------|-------|------|
|                | Sum of Squares | df | Mean Square | F     | Sig. |
| Between Groups | 894252.000     | 2  | 447126.000  | 6.097 | .088 |
| Within Groups  | 220000.000     | 3  | 73333.333   |       |      |
| Total          | 1114252.000    | 5  |             |       |      |

#### Post Hoc Tests

##### Multiple Comparisons

Dependent Variable: Viscositas  
Tukey HSD

| (I) FormulaEkstrakResin |  | (J) FormulaEkstrakResin | Mean Difference (I-J) | Std. Error | Sig. | 95% Confidence Interval |         |
|-------------------------|--|-------------------------|-----------------------|------------|------|-------------------------|---------|
| F1                      |  | F2                      | -333.000              | 270.801    | .516 | -1464.60                | 798.60  |
|                         |  | F3                      | 600.000               | 270.801    | .214 | -531.60                 | 1731.60 |
| F2                      |  | F1                      | 333.000               | 270.801    | .516 | -798.60                 | 1464.60 |
|                         |  | F3                      | 933.000               | 270.801    | .081 | -198.60                 | 2064.60 |
| F3                      |  | F1                      | -600.000              | 270.801    | .214 | -1731.60                | 531.60  |
|                         |  | F2                      | -933.000              | 270.801    | .081 | -2064.60                | 198.60  |

#### Homogeneous Subsets

##### Viscositas

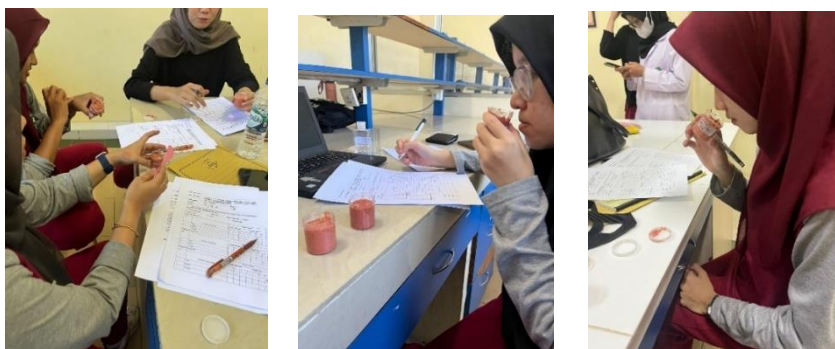
Tukey HSD<sup>a</sup>

| FormulaEkstrakResin |  | N | Subset for alpha = 0.05 |
|---------------------|--|---|-------------------------|
|                     |  |   | 1                       |
| F3                  |  | 2 | 13700.00                |
| F1                  |  | 2 | 14300.00                |
| F2                  |  | 2 | 14633.00                |
| Sig.                |  |   | .081                    |

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 2.000.

### Lampiran 30. Uji Hedonik *Body Scrub* Ekstrak Resin Jernang



### Lampiran 31. Hasil Uji Statistik Hedonik *Body Scrub* Ekstrak Resin Jernang

#### 31.1 Aroma

##### Friedman Test

| Ranks   |           |
|---------|-----------|
|         | Mean Rank |
| AromaF1 | 1.85      |
| AromaF2 | 2.10      |
| AromaF3 | 2.05      |

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

|             |      |
|-------------|------|
| N           | 10   |
| Chi-Square  | .412 |
| df          | 2    |
| Asymp. Sig. | .814 |

a. Friedman Test

#### 31.2 Warna

##### Friedman Test

| Ranks   |           |
|---------|-----------|
|         | Mean Rank |
| WarnaF1 | 1.60      |
| WarnaF2 | 2.60      |
| WarnaF3 | 1.80      |

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

##### Friedman Test

| Ranks     |           |
|-----------|-----------|
|           | Mean Rank |
| TeksturF1 | 2.35      |
| TeksturF2 | 2.20      |
| TeksturF3 | 1.45      |

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

|             |       |
|-------------|-------|
| N           | 10    |
| Chi-Square  | 4.769 |
| df          | 2     |
| Asymp. Sig. | .092  |

a. Friedman Test

**Lampiran 32.** Lembar *Inforurmed Cousent* Penelitian Kesehatan

## **SURAT PERNYATAAN PERSETUJUAN IKUT SERTA DALAM PENELITIAN**

---

Saya yang bertanda tangan di bawah ini:

Nama lengkap :

Umur :

Alamat :

Telah mendapat penjelasan secukupnya, bahwa punggung tangan saya akan digunakan sebagai area untuk menguji dan menilai secara subjektif (hedonik). Sediaan body scrub terhadap kulit dalam penelitian yang dilakukan oleh **Safinatun Naja** dengan judul “**OPTIMASI DAN EVALUASI LIMBAH SERBUK BIJI DURIAN (*Durio zibethinus* L.) SEABAGAI EKSFOLIATOR DALAM BODY SCRUB EKSTRAK RESIN JERNANG (*Daemonorops draco*)**”. Saya menyatakan bersedia dan tidak keberatan menjadi naracoba dalam penelitian tersebut.

Surat pernyataan persetujuan ini saya buat dengan penuh kesadaran dan tanpa tekanan mana pun paksaan dari pihak manapun. Demikian surat pernyataan ini dibuat untuk dapat dipergunakan sebagaimana mestinya.

Batam, 2025

Peneliti

Naracoba

(Safinatun Naja)

(.....)

**Lampiran 33.** Kuesioner Uji Hedonik *Body Scrub* Serbuk Biji Durian

**KUESIONER UJI HEDONIK SEDIAAN *BODY SCRUB***

Menurut SNI 01-2346-2006 Tentang Lembar Penilaian Uji Hedonik

Dilakukan dengan persetujuan etik dengan nomor etik:

090/K/KEP/IKMB/VIII/2025.

**Judul Penelitian** : Optimasi dan Evaluasi Limbah Serbuk Biji Durian  
(*Durio zibethinus* L.) Sebagai Eksfoliator Dalam *Body Scrub* Ekstrak Resin Jernang (*Daemonorops draco*)

**Nama panelis** : **Usia** :

**Tanggal** : **No HP** :

**Petunjuk**

Beri penilaian terhadap masing-masing aspek dari formulasi *body scrub* yang telah anda coba, dengan skala berikut :

1 = Sangat tidak suka      4 = Netral      7 = Sangat suka  
2 = Tidak suka      5 = Agak suka  
3 = Agak tidak suka      6 = suka

| No. | Parameter yang dinilai                                                             | Skala Hedonik                      |   |   |   |   |   |   |
|-----|------------------------------------------------------------------------------------|------------------------------------|---|---|---|---|---|---|
|     |                                                                                    | Sangat tidak suka      Sangat suka |   |   |   |   |   |   |
|     |                                                                                    | 1                                  | 2 | 3 | 4 | 5 | 6 | 7 |
| 1   | Aroma <i>body scrub</i>                                                            |                                    |   |   |   |   |   |   |
| 2   | Warna <i>body scrub</i>                                                            |                                    |   |   |   |   |   |   |
| 3   | Tekstur saat disentuh (terasa kasar, terlalu lengket, menggumpal, nyaman ditangan) |                                    |   |   |   |   |   |   |
| 4   | Pengaplikasian <i>body scrub</i> di kulit                                          |                                    |   |   |   |   |   |   |
| 5   | Tekstur butiran pada kulit (Abrasif)                                               |                                    |   |   |   |   |   |   |
| 6   | Kenyamanan penggunaan (dingin, licin, kasar, berminyak)                            |                                    |   |   |   |   |   |   |
| 7   | Kesan pemakaian (kulit terasa bersih, lembut, kesat, lembab)                       |                                    |   |   |   |   |   |   |
| 8   | Kesan keseluruhan sediaan                                                          |                                    |   |   |   |   |   |   |

### Lampiran 3.4 Nilai Rata-rata Uji Hedonik *Body Scrub* Serbuk Biji Durian

| Hedonik Aroma |     |     |     |     |
|---------------|-----|-----|-----|-----|
| Panelis       | F0  | F1  | F2  | F3  |
| 1             | 5   | 7   | 5   | 4   |
| 2             | 7   | 6   | 4   | 5   |
| 3             | 4   | 7   | 6   | 5   |
| 4             | 7   | 6   | 5   | 4   |
| 5             | 5   | 7   | 6   | 4   |
| 6             | 4   | 7   | 5   | 6   |
| 7             | 5   | 7   | 6   | 4   |
| 8             | 5   | 6   | 4   | 7   |
| 9             | 4   | 5   | 6   | 7   |
| 10            | 4   | 6   | 7   | 5   |
| Rata-rata     | 5,0 | 6,4 | 5,4 | 5,1 |

| Hedonik Warna |     |     |     |     |
|---------------|-----|-----|-----|-----|
| Panelis       | F0  | F1  | F2  | F3  |
| 1             | 5   | 6   | 4   | 3   |
| 2             | 6   | 7   | 5   | 4   |
| 3             | 4   | 5   | 6   | 7   |
| 4             | 5   | 6   | 4   | 3   |
| 5             | 5   | 7   | 4   | 3   |
| 6             | 5   | 6   | 4   | 3   |
| 7             | 5   | 6   | 3   | 2   |
| 8             | 6   | 7   | 4   | 3   |
| 9             | 6   | 7   | 5   | 4   |
| 10            | 4   | 6   | 5   | 5   |
| Rata-rata     | 5,1 | 6,3 | 4,4 | 3,7 |

| Hedonik Tekstur |     |     |     |     |
|-----------------|-----|-----|-----|-----|
| Panelis         | F0  | F1  | F2  | F3  |
| 1               | 4   | 3   | 5   | 6   |
| 2               | 2   | 3   | 6   | 7   |
| 3               | 1   | 3   | 6   | 7   |
| 4               | 1   | 2   | 4   | 5   |
| 5               | 2   | 3   | 5   | 7   |
| 6               | 2   | 4   | 5   | 4   |
| 7               | 1   | 6   | 4   | 6   |
| 8               | 3   | 5   | 7   | 4   |
| 9               | 4   | 5   | 6   | 4   |
| 10              | 4   | 4   | 5   | 6   |
| Rata-rata       | 2,4 | 3,8 | 5,3 | 5,6 |

| Hedonik Pengaplikasian |     |     |     |     |
|------------------------|-----|-----|-----|-----|
| Panelis                | F0  | F1  | F2  | F3  |
| 1                      | 3   | 4   | 6   | 5   |
| 2                      | 4   | 5   | 7   | 6   |
| 3                      | 4   | 5   | 6   | 7   |
| 4                      | 5   | 5   | 6   | 6   |
| 5                      | 4   | 7   | 5   | 6   |
| 6                      | 3   | 4   | 5   | 5   |
| 7                      | 4   | 5   | 6   | 6   |
| 8                      | 4   | 6   | 5   | 7   |
| 9                      | 3   | 4   | 5   | 5   |
| 10                     | 4   | 6   | 6   | 7   |
| Rata-rata              | 3,8 | 5,1 | 5,7 | 6,0 |

| Hedonik Abrasif |     |     |     |     |
|-----------------|-----|-----|-----|-----|
| Panelis         | F0  | F1  | F2  | F3  |
| 1               | 1   | 6   | 5   | 4   |
| 2               | 1   | 3   | 5   | 6   |
| 3               | 1   | 3   | 6   | 7   |
| 4               | 1   | 4   | 6   | 7   |
| 5               | 1   | 5   | 6   | 7   |
| 6               | 1   | 3   | 5   | 6   |
| 7               | 1   | 5   | 6   | 7   |
| 8               | 2   | 4   | 5   | 6   |
| 9               | 2   | 4   | 6   | 5   |
| 10              | 1   | 3   | 4   | 5   |
| Rata-rata       | 1,2 | 4,0 | 5,4 | 6,0 |

| Hedonik Kenyamanan Penggunaan |     |     |     |     |
|-------------------------------|-----|-----|-----|-----|
| Panelis                       | F0  | F1  | F2  | F3  |
| 1                             | 3   | 5   | 6   | 4   |
| 2                             | 4   | 5   | 6   | 7   |
| 3                             | 3   | 4   | 5   | 6   |
| 4                             | 5   | 4   | 7   | 6   |
| 5                             | 4   | 5   | 7   | 6   |
| 6                             | 3   | 4   | 5   | 6   |
| 7                             | 5   | 6   | 4   | 3   |
| 8                             | 4   | 5   | 7   | 6   |
| 9                             | 3   | 4   | 5   | 6   |
| 10                            | 3   | 4   | 6   | 5   |
| Rata-rata                     | 3,7 | 4,6 | 5,8 | 5,5 |

| Hedonik Kesan Pemakaian |     |     |     |     |
|-------------------------|-----|-----|-----|-----|
| Panelis                 | F0  | F1  | F2  | F3  |
| 1                       | 6   | 6   | 4   | 5   |
| 2                       | 4   | 5   | 6   | 7   |
| 3                       | 1   | 4   | 6   | 7   |
| 4                       | 6   | 4   | 5   | 6   |
| 5                       | 2   | 3   | 5   | 7   |
| 6                       | 3   | 5   | 5   | 7   |
| 7                       | 6   | 6   | 6   | 6   |
| 8                       | 3   | 4   | 5   | 3   |
| 9                       | 3   | 5   | 7   | 7   |
| 10                      | 6   | 6   | 6   | 7   |
| Rata-rata               | 4,0 | 4,8 | 5,5 | 6,2 |

| Hedonik Kesan Sediaan |     |     |     |     |
|-----------------------|-----|-----|-----|-----|
| Panelis               | F0  | F1  | F2  | F3  |
| 1                     | 3   | 4   | 5   | 6   |
| 2                     | 4   | 5   | 6   | 7   |
| 3                     | 3   | 4   | 6   | 7   |
| 4                     | 4   | 5   | 7   | 6   |
| 5                     | 3   | 4   | 6   | 5   |
| 6                     | 3   | 4   | 5   | 6   |
| 7                     | 4   | 6   | 7   | 5   |
| 8                     | 4   | 5   | 6   | 7   |
| 9                     | 3   | 5   | 6   | 7   |
| 10                    | 4   | 5   | 6   | 7   |
| Rata-rata             | 3,5 | 4,7 | 6,0 | 6,3 |

### Lampiran 35. Kuesioner Uji Perbandingan Tekstur Sediaan *Body Scrub*

#### KUESIONER UJI PERBANDINGAN TEKSTUR SEDIAAN *BODY SCRUB*

Menurut SNI 01-2346-2006 Tentang Lembar Penilaian Uji Hedonik

Dilakukan dengan persetujuan etik dengan nomor etik:

090/K/KEP/IKMB/VIII/2025.

**Judul Penelitian** : Optimasi dan Evaluasi Limbah Serbuk Biji Durian (*Durio zibethinus* L.) Sebagai Eksfoliator Dalam *Body Scrub* Ekstrak Resin Jernang (*Daemonorops draco*)

**Nama panelis** :

**Tanggal** :

**Umur** :

**No HP** :

#### Petunjuk

Beri penilaian terhadap masing-masing aspek dari formulasi *body scrub* yang telah anda coba, dengan skala berikut :

1 = Sangat tidak nyaman

5 = Nyaman

2 = Tidak nyaman

6 = Sangat nyaman

3 = Kurang Nyaman

7 = Paling Nyaman

4 = Netral

| No. | Parameter yang dinilai    | Skala Hedonik       |   |   |               |   |   |   |
|-----|---------------------------|---------------------|---|---|---------------|---|---|---|
|     |                           | Sangat tidak nyaman |   |   | Paling nyaman |   |   |   |
|     |                           | 1                   | 2 | 3 | 4             | 5 | 6 | 7 |
| 1.  | Kekerasan/abrasif         |                     |   |   |               |   |   |   |
| 2.  | Pengaplikasian            |                     |   |   |               |   |   |   |
| 3.  | Kesan pemakaian           |                     |   |   |               |   |   |   |
| 4.  | Kelembapan kulit          |                     |   |   |               |   |   |   |
| 5.  | Kenyamanan penggunaan     |                     |   |   |               |   |   |   |
| 6.  | Kesan keseluruhan sediaan |                     |   |   |               |   |   |   |

**Lampiran 3.6** Nilai Rata-rata Uji Perbandingan Tekstur Sediaan *Body Scrub*

| Hedonik Abrasif |     |     |
|-----------------|-----|-----|
| Panelis         | F3A | F3B |
| 1               | 5   | 6   |
| 2               | 6   | 5   |
| 3               | 3   | 5   |
| 4               | 6   | 5   |
| 5               | 5   | 7   |
| 6               | 6   | 4   |
| 7               | 4   | 5   |
| 8               | 5   | 6   |
| 9               | 5   | 6   |
| 10              | 6   | 5   |
| Rata-rata       | 5,1 | 5,4 |

| Hedonik Pengaplikasian |     |     |
|------------------------|-----|-----|
| Panelis                | F3A | F3B |
| 1                      | 5   | 4   |
| 2                      | 6   | 4   |
| 3                      | 5   | 6   |
| 4                      | 4   | 5   |
| 5                      | 5   | 4   |
| 6                      | 5   | 6   |
| 7                      | 5   | 6   |
| 8                      | 6   | 5   |
| 9                      | 4   | 5   |
| 10                     | 6   | 5   |
| Rata-rata              | 5,1 | 5,0 |

| Hedonik Kesan Pemakaian |     |     |
|-------------------------|-----|-----|
| Panelis                 | F3A | F3B |
| 1                       | 7   | 6   |
| 2                       | 6   | 5   |
| 3                       | 5   | 4   |
| 4                       | 6   | 5   |
| 5                       | 6   | 5   |
| 6                       | 6   | 5   |
| 7                       | 7   | 5   |
| 8                       | 6   | 4   |
| 9                       | 5   | 6   |
| 10                      | 5   | 6   |
| Rata-rata               | 5,9 | 5,1 |

| Hedonik Kelembapan Kulit |     |     |
|--------------------------|-----|-----|
| Panelis                  | F3A | F3B |
| 1                        | 6   | 5   |
| 2                        | 5   | 6   |
| 3                        | 6   | 5   |
| 4                        | 6   | 5   |
| 5                        | 6   | 4   |
| 6                        | 5   | 6   |
| 7                        | 6   | 5   |
| 8                        | 7   | 6   |
| 9                        | 7   | 6   |
| 10                       | 7   | 6   |
| Rata-rata                | 6,1 | 5,4 |

| Hedonik Kenyamanan Penggunaan |     |     |
|-------------------------------|-----|-----|
| Panelis                       | F3A | F3B |
| 1                             | 4   | 5   |
| 2                             | 5   | 6   |
| 3                             | 4   | 5   |
| 4                             | 7   | 4   |
| 5                             | 5   | 6   |
| 6                             | 4   | 7   |
| 7                             | 6   | 5   |
| 8                             | 6   | 4   |
| 9                             | 5   | 6   |
| 10                            | 4   | 5   |
| Rata-rata                     | 5,0 | 5,3 |

| Hedonik Kesan Sediaan |     |     |
|-----------------------|-----|-----|
| Panelis               | F3A | F3B |
| 1                     | 5   | 6   |
| 2                     | 5   | 6   |
| 3                     | 4   | 5   |
| 4                     | 6   | 4   |
| 5                     | 5   | 6   |
| 6                     | 4   | 5   |
| 7                     | 6   | 5   |
| 8                     | 6   | 5   |
| 9                     | 7   | 4   |
| 10                    | 5   | 6   |
| Rata-rata             | 5,3 | 5,2 |

### Lampiran 37. Kuesioner Uji Hedonik *Body Scrub* Ekstrak Resin Jernang

#### KUESIONER UJI HEDONIK *BODY SCRUB* EKSTRAK RESIN JERNANG

Menurut SNI 01-2346-2006 Tentang Lembar Penilaian Uji Hedonik

Dilakukan dengan persetujuan etik dengan nomor etik:

090/K/KEP/IKMB/VIII/2025.

**Judul Penelitian** : Optimasi dan Evaluasi Limbah Serbuk Biji Durian (*Durio zibethinus* L.) Sebagai Eksfoliator Dalam *Body Scrub* Ekstrak Resin Jernang (*Daemonorops draco*)

**Nama panelis** :

**Tanggal** :

**Umur** :

**No HP** :

#### Petunjuk

Beri penilaian terhadap masing-masing aspek dari formulasi *body scrub* yang telah anda coba, dengan skala berikut :

- 1 = Sangat tidak suka
- 2 = Tidak suka
- 3 = Agak tidak suka
- 4 = Netral
- 5 = Agak suka
- 6 = Suka
- 7 = Sangat suka

| No. | Parameter yang dinilai | Skala Hedonik     |   |   |             |   |   |   |
|-----|------------------------|-------------------|---|---|-------------|---|---|---|
|     |                        | Sangat tidak suka |   |   | Sangat suka |   |   |   |
|     |                        | 1                 | 2 | 3 | 4           | 5 | 6 | 7 |
| 1.  | Bau                    |                   |   |   |             |   |   |   |
| 2.  | Warna                  |                   |   |   |             |   |   |   |
| 3.  | Tekstur                |                   |   |   |             |   |   |   |

**Lampiran 3.8** Nilai Rata-rata Uji Hedonik *Body Scrub* Ekstrak Resin Jernang

| Hedonik Aroma |     |     |     |
|---------------|-----|-----|-----|
| Panelis       | F1  | F2  | F3  |
| 1             | 4   | 5   | 6   |
| 2             | 5   | 6   | 4   |
| 3             | 5   | 6   | 4   |
| 4             | 6   | 5   | 4   |
| 5             | 3   | 5   | 6   |
| 6             | 6   | 5   | 5   |
| 7             | 4   | 4   | 5   |
| 8             | 5   | 4   | 6   |
| 9             | 4   | 6   | 5   |
| 10            | 5   | 5   | 5   |
| Rata-rata     | 4,7 | 5,1 | 5,0 |

| Hedonik Warna |     |     |     |
|---------------|-----|-----|-----|
| Panelis       | F1  | F2  | F3  |
| 1             | 3   | 6   | 5   |
| 2             | 4   | 5   | 6   |
| 3             | 4   | 6   | 5   |
| 4             | 6   | 5   | 4   |
| 5             | 5   | 6   | 4   |
| 6             | 4   | 5   | 6   |
| 7             | 5   | 7   | 6   |
| 8             | 5   | 6   | 4   |
| 9             | 6   | 5   | 4   |
| 10            | 4   | 6   | 5   |
| Rata-rata     | 4,6 | 5,7 | 4,9 |

| Hedonik Tekstur |     |     |     |
|-----------------|-----|-----|-----|
| Panelis         | F1  | F2  | F3  |
| 1               | 5   | 6   | 3   |
| 2               | 4   | 5   | 6   |
| 3               | 6   | 5   | 4   |
| 4               | 6   | 7   | 5   |
| 5               | 4   | 5   | 6   |
| 6               | 7   | 6   | 5   |
| 7               | 5   | 4   | 3   |
| 8               | 6   | 4   | 3   |
| 9               | 7   | 6   | 5   |
| 10              | 6   | 5   | 4   |
| Rata-rata       | 5,6 | 5,3 | 4,4 |