

DAFTAR PUSTAKA

1. Hochstein AO, Animesh (Andy) Bhatia. Collagen: Its Role in Wound Healing. *Wound Manag.* 2014;(August).
2. Widayanti A, Fauziah DA, R NS, Farmasi LT, Farmasi F. Formulasi Sediaan Gel Kolagen Ikan Tuna (*Thunnus albacares*) Dengan Hidroksilpropil Metilselulosa (HPMC) Sebagai Gelling Agent. *Farmasains.* 2016;3(1):1–6.
3. Bose S, Li S, Mele E, Silberschmidt V V. Dry vs. wet: Properties and performance of collagen films. Part I. Mechanical behaviour and strain-rate effect. *J. Mech Behav Biomed Mater* [Internet]. 2020;111(August):103983. Available from: <https://doi.org/10.1016/j.jmbbm.2020.103983>
4. Rosmawati, Abustam E, Tawali AB, Said MI, Sari DK. Chemical Composition, Amino Acid and Collagen Content of Snakehead (*Channa striata*) Fish Skin and Bone. *Sci Res J.* 2018;6(1):1–4.
5. N ARK, Sriwidodo. Review Artikel : Efikasi Polimer Alami dan Polimer Sintetik Sebagai Dressing Untuk Pengobatan Ulkus Diabetikum. *J. Fak Farm Univ Padjadjaran.* 2019;17(2):167–79.
6. Babu RJ, Sagayam S, Asirvatham C. Collagen aids in expediting the healing framework of diabetic ulcers. *Wound Med* [Internet]. 2018;23:38–46. Available from: <https://doi.org/10.1016/j.wndm.2018.09.003>
7. Nofikasari I, Rufaida A, Aqmarina CD, Failasofia, Fauzia AR, Handajani J. Efek aplikasi topikal gel ekstrak pandan wangi terhadap penyembuhan luka gingiva. *Maj Kedokt Gigi Indones.* 2016;2(2):53–9.
8. Rahayu P, Marcelline F, Sulistyaningrum E, Suhartono MT, Tjandrawinata RR. Potential effect of striatin (DLBS0333), a bioactive protein fraction isolated from *Channa striata* for wound treatment. *Asian Pac J. Trop Biomed* [Internet]. 2016;6(12):1001–7.
9. Candra S, Susilawati E, Adnyana IK. Pengaruh Gel Ekstrak Daun Kerehau (*Callicarpa longifolia* Lam.) Terhadap Penyembuhan Luka Pada Model Tikus Diabetes. *Kartika J. Ilm Farm.* 2019;6(2):70.
10. Spampinato SF, Caruso GI, De Pasquale R, Sortino MA, Merlo S. The treatment of impaired wound healing in diabetes: Looking among old drugs. *Pharmaceuticals.* 2020;13(4):1–17.
11. Yan LP, Castaño IM, Sridharan R, Kelly D, Lemoine M, Cavanagh BL, et al. Collagen/GAG scaffolds activated by RALA-siMMP-9 complexes with

- potential for improved diabetic foot ulcer healing. *Mater Sci Eng C* [Internet]. 2020;114(April):111022.
12. Oktorina R, Wahyuni A, Harahap EY. Faktor-Faktor Yang Berhubungan Dengan Perilaku Pencegahan Ulkus Diabetikum Pada Penderita Diabetes Mellitus. *Real Nurs J*. 2019;2(3):108.
 13. Nur'Afni R. Formulasi Film Yang Mengandung Kolagen Kulit Ikan Gabus (*Channa striata* Bloch,1793) Sebagai Balutan Primer Luka Diabetes Pada Mencit Putih Jantan. [Skripsi] Padang : Fakultas Farmasi Universitas Andalas. 2020.
 14. Rachmasari A. Optimasi Formulasi Spray Gel Ekstraksi Kolagen Kulit Ikan Gabus (*Channa striata*) Variasi Konsentrasi HPMC-60SH - Carbopol @940 Menggunakan Desain Faktorial. *Farmasains* . 2018.
 15. Kementerian Kesehatan RI. *Farmakope Indonesia Edisi VI* [Internet]. Departemen Kesehatan Republik Indonesia. 2020. 2371 p. Available from: https://perpustakaan.bsn.go.id/index.php?p=show_detail&id=14835
 16. Di Martino A, Drannikov A, Surgutskaia NS, Ozaltin K, Postnikov PS, Marina TE, et al. Chitosan-collagen based film for controlled delivery of a combination of short life anesthetics. *Int. J. Biol Macromol* [Internet]. 2019;140:1183–93.
 17. Chattopadhyay S, Raines RT. Collagen-Based Biomaterials for Wound Healing. *Biopolymers*. 2014;101(8):821–33.
 18. Gould LJ. Topical Collagen-Based Biomaterials for Chronic Wounds: Rationale and Clinical Application. *Adv Wound Care*. 2016;5(1):19–31.
 19. Shoulders MD, Raines RT. Collagen structure and stability. *Annu Rev Biochem*. 2009;78:929–58.
 20. Fleck CA, Simman R. Modern collagen wound dressings: Function and purpose. *J Am Col Certif Wound Spec* [Internet]. 2010;2(3):50–4. Available from: <http://dx.doi.org/10.1016/j.jcws.2010.12.003>
 21. Prockop DJ, Kivirikko KI. Collagens: Molecular biology, diseases, and potentials for therapy. *Annu Rev Biochem*. 1995;64:403–34.
 22. Gelse K, Pöschl E, Aigner T. Collagens - Structure, function, and biosynthesis. *Adv Drug Deliv Rev*. 2003;55(12):1531–46.
 23. Silvipriya KS, Krishna Kumar K, Bhat AR, Dinesh Kumar B, John A, Lakshmanan P. Collagen: Animal sources and biomedical application. *J. Appl Pharm Sci*. 2015;5(3):123–7.

24. Myllyharju J, Kivirikko KI. Collagens and collagen-related diseases. *Ann Med*. 2001;33(1):7–21.
25. Mathew-Steiner SS, Roy S, Sen CK. Collagen in wound healing. *Bioengineering*. 2021;8(5):15.
26. Xue M, Jackson CJ. Extracellular Matrix Reorganization During Wound Healing and Its Impact on Abnormal Scarring. *Adv Wound Care*. 2015;4(3):119–36.
27. Alhana A, Suptijah P, Tarman K. Extraction and Characterization of Collagen from Sea Cucumber Flesh. *J. Pengolah Has Perikan Indones*. 2015;18(2):150–61.
28. Pamungkas BF, Supriyadi, Murdiati A, Indrati R. Ekstraksi dan Karakterisasi Kolagen Larut Asam dan Pepsin dari Sisik Haruan (*Channa striatus*) Kering. *J. Pengolah Has Perikan Indones*. 2018;21(3):513–21.
29. Setiani AR. Uji Efektivitas Gel Kolagen Dari Kulit Ikan Gabus (*Channa striata*) Terhadap Penyembuhan Dermatitis Kontak Iritan Pada Mencit. [Skripsi] Padang: Farmasi Universitas Andalas. 2019.
30. Listyanto N, Andriyanto S. Ikan Gabus (*Channa striata*) Manfaat Pengembangan dan Alternatif Teknik Budidayanya. *Media Akuakultur* [Internet]. 2009;4(1):18–25. Available from: www.practicalfishkeeping.com.
31. Courtenay WR, Williams JD. Snakeheads (Pisces, Channidae) A Biological Synopsis and Risk Assessment. Vol. 1251, *Geological Survey Circular*. 2004.
32. Irmawati I, Tresnati J, Fachruddin L, Arma NR, Haerul A. Identifikasi ikan gabus, *Channa* spp. (Scopoli 1777) stok liar dan generasi I hasil domestikasi berdasarkan gen Cytochrome C Oxidase Subunit I (COI). *J. Iktiologi Indones*. 2018;17(2):165.
33. Andriani D, Masyitha D, Zainuddin, Fitriani. Struktur Histologi Kulit Ikan Gabus (*Channa striata*). *J. Ilm Mhs Vet*. 2017;01(3):432–8.
34. Tanjung CA. Pengaruh suhu dan waktu terhadap ekstraksi gelatin dari kulit ikan gabus. *Teknik*. 2020.
35. Asikin AN, Kusumaningrum I. Edible Portion Dan Kandungan Kimia Ikan Gabus (*Channa Striata*) Hasil Budidaya Kolan di Kabupaten Kutai Kartanegara, Kalimantan Timur. *J. Fak Perikan dan Ilmu Kelaut Univ Mulawarman Samarinda*. 2017;42(3):158–63.
36. Rathod HJ, Mehta DP. A Review on Pharmaceutical Gel. *Acta Sci Int J Pharm Sci*. 2015;1(1):33–47.

37. Sharma B, Singh LR. Pharmaceutical gels for topical drug delivery: An overview. *Int. J. Res Pharm Pharm Sci* [Internet]. 2018;3(2):19–24. Available from: www.pharmacyjournal.in
38. Nabi SAA, Sheraz MA, Ahmed S, Mustaan N, Ahmad I. Pharmaceutical Gels : A Review. *RADS J. Pharm Pharm Sci*. 2016;4(1):40–8.
39. Sry W. Perbandingan sifat fisik sediaan krim, gel, dan salep yang mengandung etil p- metoksisinamat dari ekstrak rimpang kencur (*kaempferia galanga* linn.) [Internet]. *Lambung Farm J. Ilmu Kefarmasian*. Jakarta. 2015.130-141
40. Ahmed MM, Ali MM. Semisolid Dosage Form: Topical Gel Formulation A Review. *World J Pharm Res*. 2016;5(12):1256–68.
41. Ardana M, Aeyni V, Ibrahim A. Formulasi dan Optimasi Basis Gel HPMC (Hydroxypropylmethylcellulose) dengan Berbagai Variasi Konsentrasi. *J. Trop Pharm Chem*. 2015;3(2):101–8.
42. Kar M, Chourasiya Y, Maheshwari R, Tekade RK. Current developments in excipient science: Implication of quantitative selection of each excipient in product development [Internet]. *Basic Fundamentals of Drug Delivery*. Elsevier Inc.; 2018. 29–83 p. Available from: <http://dx.doi.org/10.1016/B978-0-12-817909-3.00002-9>
43. Danimayostu AA, Shofiana NM, Permatasari D. Pengaruh Penggunaan Pati Kentang (*Solanum tuberosum*) Termodifikasi Asetilasi-Oksidasi Sebagai Gelling Agent Terhadap Stabilitas Gel Natrium Diklofenak. *Pharm J. Indones*. 2017;3(1):25–32.
44. Dewi CC, Saptarini NM. Review Artikel : Hidroksi Propil Metil Selulosa dan Karbomer Serta Sifat Fisikokimianya Sebagai Gelling Agent. *Farmaka*. 2016;14(3):1–10.
45. Forestryana D, Surur Fahmi M, Novyra Putri A. Pengaruh Jenis dan Konsentrasi Gelling Agent pada Karakteristik Formula Gel Antiseptik Ekstrak Etanol 70% Kulit Buah Pisang Ambon. *Lambung Farm J. Ilmu Kefarmasian*. 2020;1(2):45–51.
46. Johan A, Sagita W, Zubaidah E. Pengaruh Jenis Dan Konsentrasi Plasticizer Terhadap Sifat Fisik Edible Film Kolang Kaling (*Arenga pinnata*) The Influence of The Type and Concentration of Plasticizer toward The Physical Characteristic of Edible Film from Palm Fruit (*Arenga pinnata*). *J. Pangan dan Agroindustr*. 2017;5(1):13–25.
47. Rifqiani A, Desnita R, Luliana S. Pengaruh Penggunaan Peg 400 Dan Gliserol Sebagai Plasticizer Terhadap Sifat Fisik Sediaan Patch Ekstrak Etanol Herba Pegagan. *J. Mhs Farm Fak Kedokt UNTAN*. 2019;4(1):1–10.

48. Astuti DP, Husni P, Hartono K. Formulasi Dan Uji Stabilitas Fisik Sediaan Gel Antiseptik Tangan Minyak Atsiri Bunga Lavender (*Lavandula angustifolia Miller*). *Farmaka*. 2017;15(1):176–84.
49. Gilaberte Y, Prieto-Torres L, Pastushenko I, Juarranz Á. Anatomy and Function of the Skin [Internet]. *Nanoscience in Dermatology*. Elsevier Inc.; 2016. 1–14 p. Available from: <http://dx.doi.org/10.1016/B978-0-12-802926-8.00001-X>
50. Suman D, Sangeeta, Beena K. Emugel for topical drug delivery: A novel approach. *GSC Biol Pharm Sci*. 2020;11(3):104–14.
51. Kalangi SJR. Histofisiologi Kulit. *J Biomedik*. 2013;5(3):12–20.
52. Dipiro J, Talbert RL, Yee GC, Matzke GR, Wells BG, Posey LM. Pharmacotherapy Handbook. *AIAA Guidance, Navigation, and Control Conference*. 2015. 976 p.
53. Clayton W, Elasy TA. A review of the pathophysiology, classification, and treatment of foot ulcers in diabetic patients. *Clin Diabetes*. 2009;27(2):52–8.
54. Baynest HW. Classification, Pathophysiology, Diagnosis and Management of Diabetes Mellitus. *J. Diabetes Metab*. 2015;06(05).
55. FRYKBERG RG, University DM, Moines D, Iowa. Diabetic foot ulcers: pathogenesis and management. *Am Fam Physician*. 2002;66(9):1655–62.
56. Huang Y, Kyriakides TR. The role of extracellular matrix in the pathophysiology of diabetic wounds. *Matrix Biol Plus* [Internet]. 2020;6–7:14. Available from: <https://doi.org/10.1016/j.mbplus.2020.100037>
57. Monteiro-Soares M, Boyko EJ, Jeffcoate W, Mills JL, Russell D, Morbach S, et al. Diabetic foot ulcer classifications: A critical review. *Diabetes Metab Res Rev*. 2020;36(S1):1–16.
58. Noor S, Zubair M, Ahmad J. Diabetic foot ulcer - A review on pathophysiology, classification and microbial etiology. *Diabetes Metab Syndr Clin Res Rev* [Internet]. 2015;9(3):192–9.
59. Syafril S. Pathophysiology diabetic foot ulcer. *IOP Conf Ser Earth Environ Sci*. 2018;125(1).
60. Park KH, Kwon JB, Park JH, Shin JC, Han SH, Lee JW. Collagen dressing in the treatment of diabetic foot ulcer: A prospective, randomized, placebo-controlled, single-center study. *Diabetes Res Clin Pract* [Internet]. 2019;156:107861.
61. Schaper NC, Van Netten JJ, Apelqvist J, Lipsky BA, Bakker K. Prevention

- and management of foot problems in diabetes: A Summary Guidance for Daily Practice 2015, based on the IWGDF guidance documents. *Diabetes Res Clin Pract* [Internet]. 2016;124:84–92.
62. Rosyid FN. Etiology, pathophysiology, diagnosis and management of diabetics' foot ulcer. *Int. J. Res Med Sci.* 2017;5(10):4206–13.
 63. Yang HJ, Kang SY. The Clinical Uses of Collagen-Based Matrices in the Treatment of Chronic Wounds. *J. Wound Manag Res.* 2019;15(2):103–8.
 64. Harsha L, Brundha MP. Role of collagen in wound healing. *Drug Invent Today.* 2020;13(1):55–7.
 65. Wang PH, Huang BS, Horng HC, Yeh CC, Chen YJ. Wound healing. *J. Chinese Med Assoc* [Internet]. 2018;81(2):94–101. Available from: <https://doi.org/10.1016/j.jcma.2017.11.002>
 66. Primadina N, Basori A, Perdanakusuma DS. Proses Penyembuhan Luka Ditinjau dari Aspek Mekanisme Seluler dan Molekuler. *Qanun Med - Med J. Fac Med Muhammadiyah Surabaya.* 2019;3(1):31–43.
 67. Handi P, Sriwidodo, Ratnawulan S. Review Sistematis : Proses Penyembuhan dan Perawatan Luka. *Farmaka J.* 2017;15(2):251–6.
 68. Petit GD. Collagen : Characteristics and Uses During the Wound HEALING Process. *wound care.*
 69. Elgharably H, Roy S, Khanna S, Abas M, DasGhatak P, Das A, et al. A Modified Collagen Gel Enhances Healing Outcome in a Pre- Clinical Swine Model of Excisional Wounds. *Wound Repair Regen* [Internet]. 2013;21(3):473–81.
 70. Reinke JM, Sorg H. Wound repair and regeneration. *Eur Surg Res.* 2012;49(1):35–43.
 71. Patel S, Srivastava S, Singh MR, Singh D. Mechanistic insight into diabetic wounds: Pathogenesis, molecular targets and treatment strategies to pace wound healing. *Biomed Pharmacother* [Internet]. 2019;112(October 2018):108615. Available from: <https://doi.org/10.1016/j.biopha.2019.108615>
 72. Kurniawan IA, Dwiastuti R, Yuliani SH. the Effect of Tempeh Extract Gel on Wound Healing in Diabetes Rat: Overview of Tissue Collagen, Wound Closure, Epithelialization and Capillarization. *J. Pharm Sci Community.* 2020;17(1):51–8.
 73. Suda S, Williams H, Medbury HJ, Holland AJA. A Review of Monocytes and Monocyte-Derived Cells in Hypertrophic Scarring Post Burn. *J. Burn Care Res.* 2015;37(5):265–72.

74. Tronci G. *Chapter 13 The application of collagen in advanced wound dressings*. 2013
75. Lee Y, Yun TK, Han S. Effect of Hyaluronic Acid Dressing on Diabetic Ulcer Healing -A Pilot Study Effect of Hyaluronic Acid Dressing on Diabetic Ulcer Healing - A Pilot Study. *J. Korean Wound Manag Soc.* 2014;10(2):67–74.
76. Abas M, El Masry M, Elgharably H. Collagen in diabetic wound healing [Internet]. *Wound Healing, Tissue Repair, and Regeneration in Diabetes*. Elsevier Inc.; 2020. 393–401 p.
77. Decroli E. *Diabetes Melitus Tipe 2*. Padang: Fakultas Kedokteran. 2019. 49 p.
78. Budiarti E, Budiarti P, Aristri MA, Batubara I. Kolagen dari Limbah Tulang Ayam (*Gallus gallus domesticus*) terhadap Aktivitas Anti Aging secara In Vitro. *ALCHEMY J. Penelit Kim.* 2019;15(1):44–56.
79. Paul RG, Bailey AJ. Glycation of collagen: The basis of its central role in the late complications of ageing and diabetes. *Int. J. Biochem Cell Biol.* 1996;28(12):1297–310.
80. Bondarenko LB. Diabetes and Collagen: Interrelations. *Avicenna J. Med Biochem* [Internet]. 2019;7(2):64–71.
81. Brookfield EL. *Brookfield Dial Viscometer*. USA: Brookfield engineering Laboratories, Inc. 2018. 36 p.
82. Cahyaningrum PL, Made Yuliari SA, Suta IBP. Antidiabetic Activity Test Using Amla Fruit (*Phyllanthus Emblica* L) Extract in Alloxan-Induced Balb/C Mice. *J. Vocat Heal Stud.* 2019;3:53–8.
83. Bora J, Sahariah P, Patar AK, Syiem D, Bhan S. Attenuation of diabetic hepatopathy in alloxan-induced diabetic mice by methanolic flower extract of *Phlogacanthus thyrsoiflorus* Nees. *J. Appl Pharm Sci.* 2018;8(7):114–20.
84. Tan WS, Arulselvan P, Ng S, Norma C, Taib M, Sarian MN. Improvement of diabetic wound healing by topical application of Vicenin-2 hydrocolloid film on Sprague Dawley rats. *BMC Complement Altern Med.* 2019;19(1):20.
85. Elfasyari TY, Kintoko K, Nurkhasanah N. Gambaran Penyembuhan Luka Tikus Diabetes Dengan Fraksi Etil Asetat Daun Binahong (*Anredera cordifolia* (Tenore) Steenis). *Talent Conf Ser Trop Med.* 2018;1(3):158–61.
86. Andriani D, Masyitha D, Zainuddin, Fitriani. Struktur Histologi Kulit Ikan Gabus (*Channa striata*). *Jimvet.* 2017;1(3):283–90.
87. Rosmawati, Abustam E, Tawali AB, Said MI, Sari DK. Effect of body weight on the chemical composition and collagen content of snakehead fish *Channa*

- striata skin. *Fish Sci* [Internet]. 2018;84(6):1081–9. Available from: <https://doi.org/10.1007/s12562-018-1248-8>
88. Shon J, Eun JB, Eo JH, Hwang SJ. Effect of processing conditions on functional properties of collagen powder from skate (*Raja kenoei*) skins. *Food Sci Biotechnol*. 2011;20(1):99–106.
 89. Yang H, Xu S, Shen L, Liu W, Li G. Changes in aggregation behavior of collagen molecules in solution with varying concentrations of acetic acid. *Int. J. Biol Macromol* [Internet]. 2016;92:581–6.
 90. Nursyam H. Ekstraksi Kolagen dari Limbah Kulit Ikan Tuna (*Thunnus sp*) dengan Berbagai Konsentrasi NaCl. *J. Penelit Perikan*. 2010;13(1):107–13.
 91. Wulandari W, Suptijah P. Effectiveness of Alkaline Pretreatment and Acetic Acid Hydrolysis on the Characteristics of Collagen from Fish Skin of Snakehead. *J. Pengolah Hasil Perikan Indones*. 2015;18(3):287–302.
 92. Devi HLN., Suptijah P, Nurilmala M. Efektifitas Alkali dan Asam Terhadap Mutu Kolagen dari Kulit Ikan Patin. *Jphpi* [Internet]. 2017;20(2):256–65. Available from: journal.ipb.ac.id/index.php/jphp
 93. Putra NA., Sanubawa L, Ekantari N. Ekstraksi dan Karakterisasi Kolagen dari Kulit Ikan Nila Hitam (*Oreochromis niloticus*). *JPB Perikan*. 2013;8(2):171–80.
 94. Potaros T, Raksakulthai N, Runglerdkreangkrai J, Worawattanamateekul W. Characteristics of collagen from Nile tilapia (*oreochromis niloticus*) skin isolated by two different methods. *Kasetsart J - Nat Sci*. 2009;43(3):584–93.
 95. Preetha Mini Jose HM, Murugesan P, Arumugam M, Mahesh Kumar K. Isolation and characterization of acid and pepsin - Solubilised collagen from the muscle of mantis shrimp (*Oratosquilla Nepa*). *Int. J. Pharm Pharm Sci*. 2014;6(1):654–7.
 96. Ulfah M, Fridayanti A, Masruhim M. Stabilitas Fisik Dan Aktivitas Antioksidan Sediaan Gel Berbahan Aktif Ekstrak Etanol Daun Miana (*Coleus Antropurpureus* Bent.). *Pros Semin Nas Tumbuh Obat Indones*. 2016;(April):87–95.
 97. Afifah N, Sholichah E, Indrianti N, Darmajana DA. Pengaruh Kombinasi Plasticizer terhadap Karakteristik Edible Film dari Keragenan dan Lilin Lebah. *Biopropal Ind*. 2018;9(1):49–60.
 98. Kuncari ES, Iskandarsyah, Praptiwi. Evaluasi, Uji Stabilitas Fisik dan Sineresis Sediaan Gel Yang Mengandung Minoksidil, Apigenin Dan Perasan Herba Seledri (*Apium graveolens* L.). *Bul Penelit Kesehat* [Internet]. 2014;42(5):213–22.

99. Sayuti NA. Formulasi dan Uji Stabilitas Fisik Sediaan Gel Ekstrak Daun Ketepeng Cina (*Cassia alata* L.). *J. Kefarmasian Indones.* 2015;5(2):74–82.
100. Rowe RC, Sheskey PJ, Quinn ME. *Handbook of Pharmaceutical Excipients*. UK: Pharmaceutical Press. 2009. 855 p.
101. Sugiyono. *Ilmu Bahan Pangan*. Yogyakarta: IKIP. 1996.
102. Wardani LR, Palupi DHS, Wijayahadi N. Aktivitas Gel Ekstrak Kolagen Sisik Ikan Kakap Merah (*Lutjanus argentimaculatus*) Terhadap Fase Epitelisasi Pada Proses Penyembuhan Luka Bakar Kulit Kelinci “Gambaran Makroskopis dan Mikroskopis.” *Media Farm Indones.* 2014;10(2):960–70.
103. Mursyid AM. Evaluasi Stabilitas Fisik Dan Profil Difusi Sediaan Gel (Minyak Zaitun). *J. Fitofarmaka Indones.* 2017;4(1):205–11.
104. Febriani A, Maruya I, Sulistyaningsih F. Formulasi dan Uji Iritasi Sediaan Gel Kombinasi Ekstrak Etanol Rimpang Kencur (*Kaempferia galanga* L.) dan Ekstrak Etanol Herba Pegagan (*Centella asiatica* (L.) Urban). *sainstech Farma J. Ilmu Kefarmasian* [Internet]. 2020;13(1):45–54. Available from: <https://ejournal.istn.ac.id/index.php/saintechfarma/article/view/524>
105. Indriaty S. Formulasi Dan Uji Stabilitas Gel Antiaging Dari Kombinasi Ekstrak Etanol Kulit Buah Naga Merah (*Hylocereus Polyrhizus*) Dan Lendir Bekicot (*Achatina Fulica*) Dengan Variasi Gelling Agent Carbomer 940 1%, 1,25%, 1,5% Dan 1,75%. *J. Pharmacopolium.* 2019;2(2):104–11.
106. Rizka Kurnia Cetika, Lidya Ameliana LWF. Optimasi Gom Xanthan dan Natrium Karboksimetilselulosa terhadap Mutu Fisik dan Laju Pelepasan Gel Meloksikam In Vitro. *e-Jurnal Pustaka Kesehatan.* 2015;3(1):50–5.
107. Setiawati D, Radiyono Y. Analisis Hubungan Kecepatan Terminal dengan Viskositas Zat Cair Menggunakan Software Tracker. *J Mater dan Pembelajaran Fis.* 2017;7(2):1–6.
108. Ardianingsih R, Kumoro AC. Analisis Viskositas Slurry Propelan Untuk Akurasi Karakterisasi Rheologi Berbasis Perekat Hidroxy Terminated Polybutadiene Dengan Plasticizer Dioctyl Adipate. *Teknik.* 2019;40(3):154–60.
109. Akrom, P.D H, T A. Efek Hipoglikemik Ekstrak Etanol Umbi Ketela Rambat (*Ipomoea batatas* P) (EEUKR) Pada Mencit Swiss Yang Diinduksi Aloksan. *Pharmaciana.* 2014;4(1):65–76.
110. Sakika KA, Hanwar D, Suhendi A, Trisharyanti I, Santoso B. Aktivitas Antidiabetes Ekstrak Etanol Rimpang Lempuyang Emprit (*Zingiber amaricans* BL) pada Tikus Putih yang Diinduksi Aloksan. *Res Gate* [Internet]. 2014;10–6. Available from: <https://www.researchgate.net/publication/281456456>

111. Hanny Setyowati WS. Potensi Nanokolagen Limbah Sisik Ikan Sebagai Cosmeceutical. *Farmaasi Sains Dan Komunitas*. 2015;12(1):30–40.
112. Marchianti ACN, Sakinah EN, Elfiah U, Putri NKS, Wahyuliswari DI, Maulana M, et al. Gel formulations of *Merremia mammosa* (Lour.) accelerated wound healing of the wound in diabetic rats. *J. Tradit Complement Med*. 2021;11(1):38–45.

