

DAFTAR PUSTAKA

- Ahmad, A. R., Juwita, J., & Ratulangi, S. A. D. 2015. Penetapan Kadar Fenolik Dan Flavonoid Total Ekstrak Metanol Buah Dan Daun Patikala (*Etlingera Elatior* (Jack) RM SM). *Pharmaceutical Sciences And Research*. 2(1): 1.
- Alam, K., Iqbal, M., Hasan, A., & Al-Maskari, N. 2020. Rheological Characterization Of Biological Hydrogels In Aqueous State. *Journal of Applied Biotechnology Reports*. 7(3): 171-175.
- Anindyajati, T. P., Lastianny, S. P., Yogiarti, F., & Murdiastuti, K. 2020. Effect Of Collagen-Chitosan Hydrogel Formula Combined With Platelet-Rich Plasma (A Study Of Ph, Viscosity, And Swelling Test). *Majalah Kedokteran Gigi Indonesia*. 6(3): 123-129.
- Carvalho, F. C., Calixto, G., Hatakeyama, I. N., Luz, G. M., Gremião, M. P. D., & Chorilli, M. 2013. Rheological, mechanical, and bioadhesive behavior of hydrogels to optimize skin delivery systems. *Drug Development and Industrial Pharmacy*. 39(11): 1750-1757.
- Che, X., Zhao, T., Hu, J., Yang, K., Ma, N., Li, A., & Ding, Q. 2024. Application of Chitosan-Based Hydrogel in Promoting Wound Healing: A Review. *Polymers*. 16(3): 344.
- de Oliveira, A. C., Vilsinski, B. H., Bonafé, E. G., Monteiro, J. P., Kipper, M. J., & Martins, A. F. 2019. Chitosan Content Modulates Durability And Structural Homogeneity Of Chitosan-Gellan Gum Assemblies. *International Journal Of Biological Macromolecules*. 128: 114-123.
- Delta dan Periselo, H. 2023. Uji Aktivitas Antimikroba Ekstrak Bunga Kecombrang (*Etlingera elatior*) terhadap Pertumbuhan *Staphylococcus aureus*. *Jurnal Kesehatan Luwu Raya*. 9(2): 11-18.
- Dodi, G., Sabau, R. E., Crețu, B. E. B., & Gardikiotis, I. 2023. Exploring The Antioxidant Potential Of Gellan And Guar Gums In Wound Healing. *Pharmaceutics*. 15(8): 2152.
- El-Kased, R.F., Amer, R., Attia, D. 2017. Honey-Based Hydrogel: *In Vitro* And Comparative *In Vivo* Evaluation For Burn Wound Healing. *Sci Rep* 7. 9692.
- Falcone, M., De Angelis, B., Pea, F., Scalise, A., Stefani, S., Tasinato, R., & Dalla Paola, L. 2021. Challenges In The Management Of Chronic Wound. *Journal Of Global Antimicrobial Resistance*. 26: 140-147.
- ..., S., & Aderibigbe, B. A. 2022. *Gellan gum* In Wound Dressing *Polymers*. 14(19): 4098.
- ..., Silva, J. P., Sousa, A., & Passarinha, L. A. 2023. Progress And ... In *Gellan gum*-Based Materials: A Review Of Preparation,



Characterization And Emerging Applications. *Carbohydrate Polymers*. 311: 120782.

Hamdan, H. F., Ross, E. E. R., Jalil, M. T. M., Hashim, M. A., & Yahya, M. F. Z. R. 2024. Antibiofilm Efficacy And Mode Of Action Of Etlingera Elatior Extracts Against Staphylococcus Aureus. *Malaysian Applied Biology*. 53(1): 27-34.

Harliantika, Y., & Noval, N. 2021. Formulasi dan Evaluasi Hidrogel Ekstrak Etanol Daun Gaharu (*Aquilaria malacensis* Lamk.) dengan Kombinasi Basis Karbopol 940 dan HPMC K4M. *Journal Pharmasci*. 6(1): 37-46.

Hishamuddin, N. I., Razali, M. H., & Mat Amin, K. A. 2022. Application Of *Gellan gum* Biopolymer In Biomedical Applications: A review. *Makara Journal of Science*. 26(1): 2.

Irimia, T., Dinu-Pîrvu, C. E., Ghica, M. V., Lupuleasa, D., Muntean, D. L., Udeanu, D. I., & Popa, L. 2018. Chitosan-Based In Situ Gels For Ocular Delivery Of Therapeutics: A State-Of-The-Art Review. *Marine drugs*. 16(10): 373.

Islam, S., Bhuiyan, M. R., & Islam, M. N. 2017. Chitin And Kitosan: Structure, Properties And Applications In Biomedical Engineering. *Journal Of Polymers And The Environment*. 25: 854-866.

Juwita, T., Puspitasari, I. M., & Levita, J. 2018. Torch Ginger (*Etlingera Elatior*): A Review On Its Botanical Aspects, Phytoconstituents And Pharmacological Activities. *Pakistan Journal Of Biological Sciences*. 21(4): 151-165.

Kaith, B. S., Singh, A., Sharma, A. K., & Sud, D. 2021. Hydrogels: Synthesis, Classification, Properties And Potential Applications—A Brief Review. *Journal of Polymers and the Environment*. 29(12): 3827-3841.

Khairani, I., & Nuryanti, S. 2019. Formulasi Sediaan Hidrogel Ekstrak Etil Asetat Bunga Kecombrang (*Nicolaia Speciosa*) Dengan Basis HPMC Dan Uji Aktivitas Antibakteri Terhadap *Staphylococcus Aureus*. *Acta Pharm Indo*. 7(1): 19-27.

Khorshidi, S., Khoobakht, F., Mirmoghtadaie, L., & Hosseini, S. M. 2023. Characterization Of *Gellan gum*-Chitosan Based Hydrogel To Evaluate As A Potential Gelatin Substitute. *Food Hydrocolloids*. 145, 109038.

Kim, S. Y., Choi, A. J., Park, J. E., Jang, Y. S., & Lee, M. H. 2022. Antibacterial Activity And Biocompatibility With The Concentration Of Ginger Fraction In Stimuli-Responsive Gelatin Methacryloyl (Gelma) Hydrogel Coating For Medical Polymers. 14(23): 5317.



C., Qin, Y., Wang, Z., Yang, F., & Wang, J. 2018. A Functional Hydrogel As A Wound Dressing And Drug Delivery System In Treatment Of Wound Healing. *RSC Advances*. 8(14): 7533-7549.

- Liu, L., Wang, B., Gao, Y., & Bai, T. C. 2013. Chitosan Fibers Enhanced Gellan Gum Hydrogels With Superior Mechanical Properties And Water-Holding Capacity. *Carbohydrate Polymers*. 97(1): 152-158.
- Maheswary, T., Nurul, A. A., & Fauzi, M. B. 2021. The Insights Of Microbes' Roles In Wound Healing: A Comprehensive Review. *Pharmaceutics*. 13(7): 981.
- Morsy, M. A., Abdel-Latif, R. G., Nair, A. B., Venugopala, K. N., Ahmed, A. F., Elsewedy, H. S., & Shehata, T. M. 2019. Preparation And Evaluation Of Atorvastatin-Loaded Nanoemulgel On Wound-Healing Efficacy. *Pharmaceutics*, 11(11), 609.
- Negut, I., Grumezescu, V., & Grumezescu, A. M. 2018. Treatment Strategies For Infected Wounds. *Molecules*. 23(9): 2392.
- Nisa, N. A., Purnomo, Y., & Widyaningrum, I. 2022. Peran Gelling Agent HPMC (Hydroxy Propyl Methyl Cellulose) Terhadap Sifat Fisikokimia Sediaan Gel Dengan Bahan Aktif Oleanolic Acid. *Jurnal Bio Komplementer Medicine*. 9(2).
- Noval, N., Rosyifa, R., & Annisa, A. 2020. Effect of HPMC Concentration Variation As Gelling Agent On Physical Stability Of Formulation Gel Ethanol Extract Bundung Plants (*Actinuscirpus grossus*). In *Proceedings of the First National Seminar Universitas Sari Mulia*.
- Nugrahaeni, F., & Okvianida, R. 2022. The effect of HPMC Concentration As A Gelling Agent On Color Stability Of Copigmented Blush Gel Extract Of Purple Sweet (*Ipomoea batatas* (L.) Lam.). In *IOP Conference Series: Earth and Environmental Science*. 1041(1): 012070.
- Nurman, S., Yulia, R., Irmayanti, I., Noor, E., & Sunarti, T. C. 2021. Optimizing anti-inflammatory activities of arabica coffee ground (*Coffea arabica* L.) nanoparticle gel. *Jundishapur Journal of Natural Pharmaceutical Products*. 16(2).
- Panche, A. N., Diwan, A. D., & Chandra, S. R. 2016. Flavonoids: An Overview. *Journal Of Nutritional Science*. 5: e47.
- Permana, A. D., Asri, R. M., Amir, M. N., Himawan, A., Arjuna, A., Juniarti, N., & Mardikasari, S. A. 2023. Development Of Thermoresponsive Hydrogels With Mucoadhesion Properties Loaded With Metronidazole Gel-Flakes For Improved Bacterial Vaginosis Treatment. *Pharmaceutics*. 15(5): 1529.



z., & Luliana, S. (2020). Pengaruh Ph Terhadap Stabilitas Alpha n Gel Niosom. *Majalah Farmaseutik*. 16(1): 91-100.

Junha, R. L. 2013. Chitosan–Gellan Electrostatic Complexes: Preparation Conditions And Surfactant Presence. *Carbohydrate* (1): 695-703.

- Purnamasari, V., Hamsinah, H., & Mu'awanah, A. 2023. Formulasi Masker Gel Peel Off Ekstrak Daun Tanaman Porang (*Amorphophallus muelleri Blume*) yang Stabil Secara Farmaseutik. *Journal of Pharmaceutical and Health Research*. 4(2): 190-198.
- Saeed, N., Khan, M. R., & Shabbir, M. 2012. Antioxidant Activity, Total Phenolic And Total Flavonoid Contents Of Whole Plant Extracts *Torilis Leptophylla* L. *BMC Complementary And Alternative Medicine*. 12: 1-12.
- Sahu, N., Gupta, D., & Nautiyal, U. 2020. Hydrogel: Preparation, Characterization And Applications. *Asian Pacific Journal Of Nursing And Health Sciences*. 3(1): 1-11.
- Sharma, A., Khanna, S., Kaur, G., & Singh, I. 2021. Medicinal Plants And Their Components For Wound Healing Applications. *Future Journal of Pharmaceutical Sciences*. 7(1): 1-13.
- Shirakura, T., Kelson, T. J., Ray, A., Malyarenko, A. E., & Kopelman, R. 2014. Hydrogel Nanoparticles With Thermally Controlled Drug Release. *ACS Macro Letters*. 3(7): 602-606.
- Su, J., Li, J., Liang, J., Zhang, K., & Li, J. 2021. Hydrogel preparation methods and biomaterials for wound dressing. *Life*. 11(10): 1016.
- Thang, N. H., Chien, T. B., & Cuong, D. X. 2023. Polymer-Based Hydrogels Applied In Drug Delivery: An Overview. *Gels*. 9(7): 523.
- Tofanica, B. M., Belosinschi, D., & Volf, I. 2022. Gels, Aerogels and Hydrogels: A Challenge for the Cellulose-Based Product Industries. *Gels*. 8(8): 497.
- Wathore, S. A. 2019. Formulation And In-Vitro Evaluation Of Tacrolimus Hydrogel. *European Journal Of Biomedical*. 6(10): 237-242.
- Whangsomnuek, N., Mungmai, L., Mengamphan, K., & Amornlerdpison, D. 2019. Bioactive Compounds Of Aqueous Extracts Of Flower And Leaf Of *Etlingera Elatior* (Jack) RM Sm. For Cosmetic Application. *Maejo International Journal Of Science And Technology*. 13(3): 196-208.
- Wong, R. S. H., & Dodou, K. 2017. Effect Of Drug Loading Method And Drug Physicochemical Properties On The Material And Drug Release Properties Of Poly (Ethylene Oxide) Hydrogels For Transdermal Delivery. *Polymers*. 9(7): 286.



S., Khan, M. F., Akram, N., Akhter, N., Noreen, A., & Zuber, M. t Trends On *Gellan gum* Blends With Natural And Synthetic A Review. *International Journal Of Biological illes*. 109: 1068-1087.