

DAFTAR PUSTAKA

- Aghnia, Y. (2015). *Formulasi Masker Gel Peel-Off Lendir Bekicot (Achatina Fulica) Dengan Variasi Konsentrasi Bahan Pembentuk Gel*. <http://repository.unisba.ac.id:8080/xmlui/handle/123456789/8309>
- Ahmadita, A. N. F. (2017). *Formulasi Losion Ekstrak Etanol 70% Herba Kemangi (Ocimum Americanum L.) Menggunakan Asam Stearat sebagai Emulgator*. UIN Syarif Hidayatullah Jakarta.
- Ahmed, S. M. (2018). *Karakterisasi fisik sediaan krim anti-acne dari kombinasi ekstrak rimpang kunyit (Curcuma domesticate. Val) dan minyak jintan hitam (Nigella sativa l.)* [Undergraduate, Universitas Islam Negeri Maulana Malik Ibrahim]. <http://etheses.uin-malang.ac.id/14329/>
- Akrinisa, J. A. M., SP .MP, & M.Si, M. A. (2019). Keragaman Morfologi Tanaman Nanas (Ananas Comosus (L) Merr) di Kabupaten Indragiri Hilir. *Jurnal Agro Indragiri*, 4(1), Art. 1. <https://doi.org/10.32520/jai.v4i1.1052>
- Amrillah, M. S., Rusli, R., & Fadraersada, J. (2015). Aktivitas Tabir Surya Daun Miana (Coleus atropurpureus L. Benth) secara In Vitro. *Jurnal Sains Dan Kesehatan*, 1(4), Art. 4. <https://doi.org/10.25026/jsk.v1i4.35>
- Andriani, D. A., & Pratimasari, D. P. (2018). Formulasi Ekstrak Rambut Jagung (Corn Silk Zea Mays) dalam Krim Tabir Surya Sebagai Preventif Kanker Kulit. *Indonesian Journal of Pharmacy and Natural Product*, 1(2), Art. 2. <https://doi.org/10.35473/ijpnp.v1i2.94>
- Ariviani, S., Raharjo, S., Anggrahini, S., & Naruki, S. (2017). Formulasi dan Stabilitas Mikroemulsi O/W dengan Metode Emulsifikasi Spontan Menggunakan VCO dan Minyak Sawit Sebagai Fase Minyak: Pengaruh Rasio Surfaktan-Minyak. *AgriTECH*, 35(1), Art. 1.
- Baitariza, A., Ghazali, A., & Rosmiati, R. (2021). Formulasi Larutan Obat Kumur Pencegah Plak Gigi Ekstrak Kulit Nanas (Ananas comosus L. Merr). *Jurnal Sabdariffarma*, 9(1), Art. 1. <http://journal2.unfari.ac.id/index.php/sabdariffarma/article/view/29>
- Baroni, A., Buommino, E., De Gregorio, V., Ruocco, E., Ruocco, V., & Wolf, R. (2012). Structure and function of the epidermis related to barrier properties. *Clinics in Dermatology*, 30(3), 257–262. <https://doi.org/10.1016/j.clindermatol.2011.08.007>
- Peraturan KBPOM No.HK.00.05.421018 Tentang Bahan Kosmetik, no. HK.00.05.42.1018, BADAN PENGAWAS OBAT DAN MAKANAN REPUBLIK INDONESIA, 2 (2008).
- Budiman, A., Praditasari, A., Rahayu, D., & Aulifa, D. L. (2019). Formulation of Antioxidant Gel from Black Mulberry Fruit Extract (Morus nigra L.). *Journal of Pharmacy & Bioallied Sciences*, 11(3), 216–222. https://doi.org/10.4103/jpbs.JPBS_57_18

- Cádiz-Gurrea, M. de la L., Villegas-Aguilar, M. del C., Leyva-Jiménez, F. J., Pimentel-Moral, S., Fernández-Ochoa, Á., Alañón, M. E., & Segura-Carretero, A. (2020). Revalorization of bioactive compounds from tropical fruit by-products and industrial applications by means of sustainable approaches. *Food Research International*, 138, 109786. <https://doi.org/10.1016/j.foodres.2020.109786>
- Chaves, J. O., de Souza, M. C., da Silva, L. C., Lachos-Perez, D., Torres-Mayanga, P. C., Machado, A. P. da F., Forster-Carneiro, T., Vázquez-Espinosa, M., González-de-Peredo, A. V., Barbero, G. F., & Rostagno, M. A. (2020). Extraction of Flavonoids From Natural Sources Using Modern Techniques. *Frontiers in Chemistry*, 8, 507887. <https://doi.org/10.3389/fchem.2020.507887>
- Costa, S. C. C., Damasceno, P. K. F., Lima, R. G. G., Botura, M. B., Branco, C. R. C., Silva, T. R. S., Oliveira, A. P., Guimarães, A. L., Almeida, J. R. G. S., & Branco, A. (2021). Evaluation of antioxidant, photoprotective and antinociceptive activities of Marcetia macrophylla extract: Potential for formulation of sunscreens. *Brazilian Journal of Biology*, 83. Scopus. <https://doi.org/10.1590/1519-6984.246312>
- Couteau, C., Chauvet, C., Paparis, E., & Coiffard, L. J. M. (2012). Influence of certain ingredients on the SPF determined in vivo. *Archives of Dermatological Research*, 304(10), 817–821. <https://doi.org/10.1007/s00403-012-1257-x>
- Damogalad, V., Edy, H. J., & Supriati, H. S. (2013a). *Formulasi Krim Tabir Surya Ekstrak Kulit Nanas (ANANAS COMOSUS L MERR) dan Uji In Vitro Nilai Sun Protecting Factor (SPF)*. 2(02), 7.
- Damogalad, V., Edy, H. J., & Supriati, H. S. (2013b). *Formulasi Krim Tabir Surya Ekstrak Kulit Nanas (Ananas Comosus L Merr) Dan Uji In Vitro Nilai Sun Protecting Factor (SPF)*. *Jurnal Ilmiah Farmasi – UNSRAT*, 02.
- Daud, N. S., & Musdalipah, M. (2018). Optimasi Formula Losio Tabir Surya Ekstrak Kulit Buah Naga Super Merah (*Hylocereus costaricensis*). *PHARMACY: Jurnal Farmasi Indonesia (Pharmaceutical Journal of Indonesia)*, 15(1), Art. 1. <https://doi.org/10.30595/pharmacy.v15i1.2718>
- Dewi, L. N., Nurhaini, R., & Handayani, S. (2016). Formulasi Gel Antinyamuk Minyak Atsiri Batang Sereh Wangi (*Cymbopogon nardus* ,L. Rendle). *CERATA Jurnal Ilmu Farmasi*, 3(1), Art. 1. <http://jurnal.stikesmukla.ac.id/index.php/cerata/article/view/131>
- Diniatik, -, Karlina, N., & Rahayu, W. S. (2021). Aktivitas Tabir Surya Kulit Nanas Madu (*Ananas comosus* L) Merr dari Tiga Tempat Tumbuh. *Prosiding SainsTeKes*, 2, 111–117. <https://doi.org/10.37859/sainstekes.v2i0.2890>
- D’Orazio, J., Jarrett, S., Amaro-Ortiz, A., & Scott, T. (2013). UV radiation and the skin. *International Journal of Molecular Sciences*, 14(6), 12222–12248. <https://doi.org/10.3390/ijms140612222>
- Edy, H. J., Juwita, A. P., & Yamlean, P. V. Y. (2013). Formulasi Krim Ekstrak Etanol Daun Lamun (*Syngonium isoetifolium*). *PHARMACON Jurnal Ilmiah Farmasi – UNSRAT*, 2(02).

- Faramayuda, F., Alatas, F., & Desmiaty, Y. (2010). Formulasi Sediaan Losion Antioksidan Ekstrak Air Daun Teh Hijau (*Camellia sinensis* L.). *Majalah Obat Tradisional*, 15(2010). <http://i-lib.ugm.ac.id/jurnal/detail.php?dataId=11864>
- Fatmawati, L. R. (2019). *Uji efektivitas antibakteri ekstrak kulit nanas (Ananas comosus [L.] Merr.) dan kulit pisang (Musa paradisiaca L.) terhadap pertumbuhan bakteri Escherichia coli* [Undergraduate, UIN Sunan Ampel Surabaya]. <http://digilib.uinsby.ac.id/38599/>
- Febrianti, N., Yunianto, I., & Dhaniaputri, R. (2015). Kandungan Antioksidan Asam Askorbat pada Jus Buah-Buahan Tropis. *Jurnal BIOEDUKATIKA*, 3(1), 6–9.
- Fidrianny, I., Virna, V., & Insanu, M. (2018). Antioxidant Potential of Different Parts of Bogor Pineapple (*Ananas comosus* [L.] Merr. Var. Queen) Cultivated in West Java-Indonesia. *Asian Journal of Pharmaceutical and Clinical Research*, 129–133. <https://doi.org/10.22159/ajpcr.2018.v11i1.22022>
- Fitriani, E. W., Imelda, E., Kornelis, C., & Avanti, C. (2016). Karakterisasi dan Stabilitas Fisik Mikroemulsi Tipe A/M dengan Berbagai Fase Minyak. *Pharmaceutical Sciences and Research (PSR)*, 3(1), Art. 1.
- Fujiastuti, T., & Sugihartini, N. (2015). Sifat Fisik Dan Daya Iritasi Gel Ekstrak Etanol Herba Pegagan (*Centella asiatica* L.) dengan Variasi Jenis Gelling Agent. *PHARMACY: Jurnal Farmasi Indonesia (Pharmaceutical Journal of Indonesia)*, 12(1), Art. 1.
- Gabros, S., Nessel TA, & Zito PM. (2019). *Sunscreens and Photoprotection*. StatPearls Publishing.
- Geoffrey, K., Mwangi, A. N., & Maru, S. M. (2019). Sunscreen products: Rationale for use, formulation development and regulatory considerations. *Saudi Pharmaceutical Journal*, 27(7), 1009–1018. <https://doi.org/10.1016/j.jsps.2019.08.003>
- Ghasemzadeh, A., Baghdadi, A., Z. E. Jaafar, H., Swamy, M. K., & Megat Wahab, P. E. (2018). Optimization of Flavonoid Extraction from Red and Brown Rice Bran and Evaluation of the Antioxidant Properties. *Molecules: A Journal of Synthetic Chemistry and Natural Product Chemistry*, 23(8), 1863. <https://doi.org/10.3390/molecules23081863>
- Gu, Y., Han, J., Jiang, C., & Zhang, Y. (2020). Biomarkers, oxidative stress and autophagy in skin aging. *Ageing Research Reviews*, 59, 101036. <https://doi.org/10.1016/j.arr.2020.101036>
- Gunarti, N. S., & Fikayuniar, L. (2020). Formulasi dan Uji Aktivitas Gel Tabir Surya dari Ekstrak Buah Blackberry (*Rubus fruticosus*) secara In Vitro Dengan Spektrofotometri Uv-Visibel. *Kartika: Jurnal Ilmiah Farmasi*, 7(2), Art. 2. <https://doi.org/10.26874/kjif.v7i2.227>
- Gurning, H. E. T. (2016). Formulasi Sediaan Losio Dari Ekstrak Kulit Buah Nanas (*Ananas comosus* L. (Merr)) sebagai Tabir Surya. *PHARMACON*, 5(3), Art. 3. <https://doi.org/10.35799/pha.5.2016.12944>

- Hamsinah, H., Darijanto, S. D., & Mauluddin, R. (2016). Uji Stabilitas Formulasi Krim Tabir Surya Serbuk Rumpun Laut (*Eucheuma cottonii*. Doty). *Jurnal Fitofarmaka Indonesia*, 3(2), Art. 2. <https://doi.org/10.33096/jffi.v3i2.215>
- Hatam, S. F., Suryanto, E., & Abidjulu, J. (2013). Aktivitas Antioksidan dari Ekstrak Kulit Nanas (*Ananas comosus* (L) Merr). *PHARMACON*, 2(1), Art. 1. <https://doi.org/10.35799/pha.2.2013.880>
- He, hailun, Li, anqi, Li, shiqin, Tang, jie, Li, li, & Xiong, lidan. (2021). Natural components in sunscreens: Topical formulations with sun protection factor (SPF). *Biomedicine & Pharmacotherapy*, 134, 111161. <https://doi.org/10.1016/j.biopha.2020.111161>
- Hikal, W. M., Said-Al Ahl, H. A. H., Tkachenko, K. G., Bratovcic, A., Szczepanek, M., & Rodriguez, R. M. (2021). Sustainable and environmentally friendly essential oils extracted from pineapple waste. *AMG Transcend Association*, 12(5). <https://doi.org/10.33263/BRIAC125.68336844>
- Himawan, H. C., Masaenah, E., & Putri, V. C. E. (2018). Aktivitas Antioksidan dan SPF Sediaan Krim Tabir Surya dari Ekstrak Etanol 70% Kulit Buah Pisang Ambon (*Musa acuminata* Colla). *Jurnal Farmamedika (Pharmamedika Journal)*, 3(2), Art. 2. <https://doi.org/10.47219/ath.v3i2.14>
- Hossain, M. A., Disha, N. K., Shourove, J. H., & Dey, P. (2020). Determination of Antioxidant Activity and Total Tannin from Drumstick (*Moringa oleifera* Lam.) Leaves Using Different Solvent Extraction Methods. *Turkish Journal of Agriculture - Food Science and Technology*, 8(12), Art. 12. <https://doi.org/10.24925/turjaf.v8i12.2749-2755.4038>
- Husnani, H., & Al Muazham, M. F. (2017). Optimasi Parameter Fisik Viskositas, Daya Sebar dan Daya Lekat Pada Basis Natrium CMC dan Carbopol 940 Pada Gel Madu Dengan Metode Simplex Lattice Design. *Jurnal Ilmu Farmasi dan Farmasi Klinik*, 14.
- Indawati, I., Ahidin, D., & Alvionita, E. (2019). Penentuan Nilai SPF (Sun Protection Factor) Lotion Tabir Surya Ekstrak Kulit Buah Nanas (*Ananas comosus* (L) Merr) dengan Metode Spektrofotometri. *Medimuh : Jurnal Kesehatan Muhammadiyah*, 1(2), Art. 2.
- Iskandar, B., Frimayanti, N., Firmansya, F., Agustini, T. T., & Putri, D. D. (2019). Evaluasi Sifat Fisik dan Uji Kelembaban Sediaan Losion Yang Dijual Secara Online-Shop. *Jurnal Dunia Farmasi*, 4(1), Art. 1. <https://doi.org/10.33085/jdf.v4i1.4561>
- Islam, Md. R., Haque, A. R., Kabir, Md. R., Hasan, Md. M., Khushe, K. J., & Hasan, S. M. K. (2021). Fruit by-products: The potential natural sources of antioxidants and α -glucosidase inhibitors. *Journal of Food Science and Technology*, 58(5), 1715–1726. <https://doi.org/10.1007/s13197-020-04681-2>
- Ismail, I. (2013). Potensi Bahan Alam Sebagai Bahan Aktif Kosmetik Tabir Surya. *Jurnal farmasi UIN Alauddin Makassar*, 1(1), Art. 1. <https://doi.org/10.24252/jurfar.v1i1.2094>

- Ji, F., Guo, Y., Wang, M., Wang, C., Wu, Z., Wang, S., Wang, H., Feng, X., & Zhao, G. (2021). New insights into ESIPT mechanism of three sunscreen compounds in solution: A combined experimental and theoretical study. *Colloids and Surfaces B: Biointerfaces*, 207, 112039. <https://doi.org/10.1016/j.colsurfb.2021.112039>
- Kalangi, S. J. R. (2013). HISTOFISIOLOGI KULIT. *Jurnal Biomedik: JBM*, 5(3), Art. 3. <https://ejournal.unsrat.ac.id/index.php/biomedik/article/view/4344>
- Kemit, N., Kencana, P. K. D., & Permana, D. G. M. (2019). Stabilitas Senyawa Flavonoid Ekstrak Daun Alpukat (*Persea americana* Mill.) terhadap perlakuan pH dan Suhu. *Media Ilmiah Teknologi Pangan*, 6(1), Art. 1. <https://erepo.unud.ac.id/id/eprint/30200/>
- Kiswandono, A. A. (2017). Skrining Senyawa Kimia dan Pengaruh Metode Maserasi dan Refluks pada Biji Kelor (*Moringa oleifera*, Lamk) terhadap Rendemen Ekstrak yang Dihasilkan. *JURNAL SAINS NATURAL*, 1(2), Art. 2. <https://doi.org/10.31938/jsn.v1i2.21>
- Kumalasari, E., Mardiah, A., & Sari. (2020). Formulasi sediaan krim ekstrak daun bawang dayak (*Eleutherine palmifolia* (L) Merr) dengan basis krim tipe A/M dan basis krim tipe M/A. *Jurnal Farmasi Indonesia AFAMEDIS*, 1(1).
- Latos-Brozio, M., & Masek, A. (2020). Natural Polymeric Compound Based on High Thermal Stability Catechin from Green Tea. *Biomolecules*, 10(8), Art. 8. <https://doi.org/10.3390/biom10081191>
- Lestari, I., Prajuwita, M., & Lastri, A. (2021). Penentuan Nilai SPF Kombinasi Ekstrak Daun Ketepeng Dan Binahong Secara In Vitro. *Parapemikir: Jurnal Ilmiah Farmasi*, 10(1), Art. 1. <https://doi.org/10.30591/pjif.v10i1.2030>
- Loh, S. C., Azlan, A., Chan, S. H., & Khoo, H. E. (2017). Extracts of peel and different parts of MD2 pineapple as potent nutraceuticals. *Undefined*. <https://www.semanticscholar.org/paper/Extracts-of-peel-and-different-parts-of-MD2-as-LoAzlan/2d017cabac670e12678ff819d4db0e7e0ac27dbe>
- Lubis, A. W., & Maulina, J. (2020). Pemanfaatan Ekstrak Kulit Nanas (*Ananas comosus* L.) Dalam Pembuatan Hand Wash Sebagai Antibakteri. *BEST Journal (Biology Education, Sains and Technology)*, 3(1), Art. 1. <https://doi.org/10.30743/best.v3i1.2438>
- Lumentut, N., Edi, H. J., & Rumondor, E. M. (2020). Formulasi dan Uji Stabilitas Fisik Sediaan Krim Ekstrak Etanol Kulit Buah Pisang Goroho (*Musa acuminata* L.) Konsentrasi 12.5% Sebagai Tabir Surya. *Jurnal MIPA*, 9(2), Art. 2. <https://doi.org/10.35799/jmuo.9.2.2020.28248>
- Malinović-Milićević, S., Mijatović, Z., Stanojević, G., Radovanović, M. M., & Popović, V. (2022). Health risks of extended exposure to low-level UV radiation – An analysis of ground-based and satellite-derived data. *Science of the Total Environment*, 831. Scopus. <https://doi.org/10.1016/j.scitotenv.2022.154899>

- Mansuri, R., Diwan, A., Kumar, H., Dangwal, K., & Yadav, D. (2021). Potential of Natural Compounds as Sunscreen Agents. *Pharmacog Rev*, 15(29), 47–56. <https://doi.org/10.5530/phrev.2021.15.5>
- Marjoni, R., & Ismail, T. (2016). *Dasar-Dasar Fitokimia Untuk Diploma III Farmasi*. Trans Info Media.
- Marnawati, Y. (2018). *Optimasi Kosurfaktan Polietilen Glikol 400 (PEG 400) Pada Nanoemulsi Ekstrak Daun Mengkudu (Morinda citrifolia)*. [Sarjana, Universitas Brawijaya]. <http://repository.ub.ac.id/id/eprint/167468/>
- Mohania, D., Chandel, S., Kumar, P., Verma, V., Digvijay, K., Tripathi, D., Choudhury, K., Mitten, S. K., & Shah, D. (2017). Ultraviolet Radiations: Skin Defense-Damage Mechanism. Dalam S. I. Ahmad (Ed.), *Ultraviolet Light in Human Health, Diseases and Environment* (hlm. 71–87). Springer International Publishing. https://doi.org/10.1007/978-3-319-56017-5_7
- Mohd Ali, M., Hashim, N., Abd Aziz, S., & Lasekan, O. (2020). Pineapple (Ananas comosus): A comprehensive review of nutritional values, volatile compounds, health benefits, and potential food products. *Food Research International*, 137, 109675. <https://doi.org/10.1016/j.foodres.2020.109675>
- Mu'awanah, I. A. U., Setiaji, B., & Syoufian, A. (2016). Pengaruh Konsentrasi Virgin Coconut Oil (VCO) Terhadap Stabilitas Emulsi Kosmetik dan Nilai Sun Protection Factor (SPF). *BIMIPA*, 24(1), Art. 1.
- Mumtazah, E. F., Salsabila, S., Lestari, E. S., Rohmatin, A. K., Ismi, A. N., Rahmah, H. A., Mugiarto, D., Daryanto, I., Billah, M., Salim, O. S., Damaris, A. R., Astra, A. D., Zainudin, L. B., & Ahmad, G. N. V. (2020). Pengetahuan Mengenai Sunscreen dan Bahaya Paparan Sinar Matahari serta Perilaku Mahasiswa Teknik Sipil terhadap Penggunaan Sunscreen. *Jurnal Farmasi Komunitas*, 7(2), 63. <https://doi.org/10.20473/jfk.v7i2.21807>
- Mursal, I. L. P., Kusumawati, A. H., & Puspasari, D. H. (2019). Pengaruh Variasi Konsentrasi Gelling Agent Carbopol 940 terhadap Sifat Fisik Sediaan Gel Hand Sanitizer Minyak Atsiri Daun Kemangi (Ocimum Sanctum L.). *Pharma Xplore: Jurnal Sains Dan Ilmu Farmasi*, 4(1), Art. 1. <https://doi.org/10.36805/farmasi.v4i1.617>
- Nichols, J. A., & Katiyar, S. K. (2010). Skin photoprotection by natural polyphenols: Anti-inflammatory, anti-oxidant and DNA repair mechanisms. *Archives of dermatological research*, 302(2), 71. <https://doi.org/10.1007/s00403-009-1001-3>
- Nurcahyo, H., Sumiwi, S. A., Halimah, E., & Wila, G. (2020). Total Flavonoid Levels of Ethanol Extract and Ethyl Acetate Fraction Dry Shallots (Allium cepa L. var. Garden Onion of Brebes) with Maceration Methods Using UV-Vis Spectrophotometry. *Sys Rev Pharm*, 11(10).
- Nurdalilah, O., Teoh, Y. P., Ooi, Z. X., & Sam, S. T. (2018). *Comparative Study on the Extraction of Bioactive Secondary Metabolites from Pomelo and Pineapple Peels Extract*. 429(1). Scopus. <https://doi.org/10.1088/1757-899X/429/1/012040>

- Nuryana, M. F. (2018). *Aktivitas Nilai SPF (Sun Protecting Factor) Krim Tabir Surya Ekstrak Kulit Buah Nanas (Ananas comosus L. Meer)*. Akafarma Putra Indonesia Malang.
- Nuryana, M. F., & Solandjari, W. (2018). *Aktivitas Nilai SPF (Sun Protecting Factor) Krim Tabir Surya Ekstrak Kulit Buah Nanas (Ananas comosus L. Meer)*. *Akademi Analis Farmasi Dan Makanan Putra Indonesia Malang*.
- Owoeye, T. F., Akinlabu, D. K., Ajayi, O. O., Afolalu, S. A., Popoola, J. O., & Ajani, O. O. (2022). *Phytochemical constituents and proximate analysis of dry pineapple peels*. 993(1). Scopus. <https://doi.org/10.1088/1755-1315/993/1/012027>
- Panche, A. N., Diwan, A. D., & Chandra, S. R. (2016a). Flavonoids: An overview. *Journal of Nutritional Science*, 5, e47. <https://doi.org/10.1017/jns.2016.41>
- Panche, A. N., Diwan, A. D., & Chandra, S. R. (2016b). Flavonoids: An overview. *Journal of Nutritional Science*, 5, e47. <https://doi.org/10.1017/jns.2016.41>
- Pandel, R., Poljšak, B., Godic, A., & Dahmane, R. (2013). Skin Photoaging and the Role of Antioxidants in Its Prevention. *ISRN Dermatology*, 2013, e930164. <https://doi.org/10.1155/2013/930164>
- Pounikar, Y., Jain, P., Khurana, N., Omray, L. K., Patil, S., & Gajbhiye, A. (2012). Formulation And Characterization Of Aloe Vera Cosmetic Herbal Hydrogel. *International Journal of Pharmacy and Pharmaceutical Sciences*, 4.
- Pratama, W. A., & Zulkarnain, A. K. (2017). Uji SPF In Vitro dan Sifat Fisik Beberapa Produk Tabir Surya yang Beredar di Pasaran. *Majalah Farmaseutik*, 11(1), Art. 1. <https://doi.org/10.22146/farmaseutik.v11i1.24116>
- Pratasik, M. C. M., Yamlean, P. V. Y., & Wiyono, W. I. (2019). Formulasi dan Uji Stabilitas Fisik Sediaan Krim Ekstrak Etanol Daun Sesewanua (Clerodendron squamatum Vahl.). *PHARMACON*, 8(2), Art. 2. <https://doi.org/10.35799/pha.8.2019.29289>
- Pratiwi, S., & Husni, P. (2017). *Artikel Tinjauan: Potensi Penggunaan Fitokonstituen Tanaman Indonesia sebagai Bahan Aktif Tabir Surya*. 14(4).
- Priani, S. E., Dewi, W. K., & Gadri, A. (2019). Formulasi Sediaan Mikroemulsi Gel Anti Jerawat Mengandung Kombinasi Minyak Jinten Hitam (Nigella sativa L.) dan Minyak Zaitun (Olea europaea L.). *Kartika : Jurnal Ilmiah Farmasi*, 6(2), Art. 2. <https://doi.org/10.26874/kjif.v6i2.143>
- Prietl, B., Treiber, G., Pieber, T. R., & Amrein, K. (2013). Vitamin D and Immune Function. *Nutrients*, 5(7), 2502–2521. <https://doi.org/10.3390/nu5072502>
- Purwaningsih, S., Salamah, E., & Adnin, M. N. (2015). Efek Fotoprotektif Krim Tabir Surya Dengan Penambahan Karaginan Dan Buah Bakau Hitam (Rhizopora mucronata Lamk.). *Jurnal Ilmu dan Teknologi Kelautan Tropis*, 7.

- Puspitasari, P., Wiraguna, A. a. G., & Pangkahila, W. (2017). Krim ekstrak teh hijau 20% (*Camellia sinensis*) mencegah peningkatan jumlah melanin sama efektif dengan krim hidrokuinon 4% pada kulit marmut (*Cavia porcellus*) yang dipajan sinar ultraviolet B. *Jurnal Biomedik:JBM*, 9(2), Art. 2. <https://doi.org/10.35790/jbm.9.2.2017.16358>
- Putri, Y. D., Kartamihardja, H., & Lisna, I. (2019). Formulasi dan Evaluasi Losion Tabir Surya Ekstrak Daun Stevia (*Stevia rebaudiana* Bertoni M). *Jurnal Sains Farmasi & Klinis*, 6(1), Art. 1. <https://doi.org/10.25077/jsfk.6.1.32-36.2019>
- Rabinovich, L., & Kazlouskaya, V. (2018). Herbal sun protection agents: Human studies. *Clinics in Dermatology*, 36(3), 369–375. <https://doi.org/10.1016/j.clindermatol.2018.03.014>
- RAHMAWATI, F. L. (2017). *Formulasi Krim Niasinamida Tipe A/M dengan Fase Minyak Mengandung Virgin Coconut Oil (VCO) (VCO Kadar 15 %, 20 %, dan 25 % dengan Emulgator Span 80)* [Undergraduate, University of Muhammadiyah Malang]. <https://eprints.umm.ac.id/42801/>
- Rahmawati, R., Muflihunna, A., & Amalia, M. (2018). Analisis Aktivitas Perlindungan Sinar UV Sari Buah Sirsak (*Annona muricata* L.) berdasarkan Nilai Sun Protection Factor (SPF) secara Spektrofotometri Uv-Vis. *Jurnal Fitofarmaka Indonesia*, 5(2), Art. 2. <https://doi.org/10.33096/jffi.v5i2.412>
- Reiza, I. A., Rijai, L., & Mahmudah, F. (2019). Skrining Fitokimia Ekstrak Etanol Kulit Nanas (*Ananas comosus* (L.) Merr). *Proceeding of Mulawarman Pharmaceuticals Conferences*, 10, 104–108. <https://doi.org/10.25026/mpc.v10i1.371>
- Rikadyanti, R., Sugihartini, N., & Yuliani, S. (2021). Sifat Fisik Krim Tipe M/A Ekstrak Etanol Daun Kelor [*Moringa oleifera* L] dengan Variasi Konsentrasi Menggunakan Emulgator Asam Stearat Dan Trietanolamin. *Media Farmasi*, 16(1), Art. 1. <https://doi.org/10.32382/mf.v16i1.1423>
- Rini, A. R. S., Supartono, S., & Wijayati, N. (2017). Hand Sanitizer Ekstrak Kulit Nanas sebagai Antibakteri *Staphylococcus aureus* dan *Escherichia coli*. *Indonesian Journal of Chemical Science*, 6(1), Art. 1. <https://doi.org/10.15294/ijcs.v6i1.11536>
- Romanhole, R. C., Fava, A. L. M., Tundisi, L. L., Macedo, L. M. de, Santos, É. M. dos, Ataide, J. A., & Mazzola, P. G. (2020). Unplanned absorption of sunscreen ingredients: Impact of formulation and evaluation methods. *International Journal of Pharmaceutics*, 591, 120013. <https://doi.org/10.1016/j.ijpharm.2020.120013>
- Sa'adah, L. (2010). *Isolasi dan Identifikasi Senyawa Tanin dari Daun Belimbing wuluh (Averrhoa bilimbi L.)*. Universitas Islam Negeri (UIN) Maulana Malik Ibrahim.
- Saewan, N., & Jimtaisong, A. (2015). Natural products as photoprotection. *Journal of Cosmetic Dermatology*, 14(1), 47–63. <https://doi.org/10.1111/jocd.12123>

- Safitri, N. A., Puspita, O. E., & Yurina, V. (2014). Optimasi Formula Sediaan Krim Ekstrak Stroberi (*Fragaria x ananassa*) sebagai Krim Anti Penuaan. *Majalah Kesehatan FKUB*, 1(4), Art. 4.
- Saleh, M., Amro, L., Barakat, H., Baker, R., Reyash, A. A., Amro, R., & Qasem, J. (2021). Fruit By-Product Processing and Bioactive Compounds. *Journal of Food Quality*, 2021. Scopus. <https://doi.org/10.1155/2021/5513358>
- Sarkar, S., & Gaddameedhi, S. (2018). UV-B-Induced Erythema in Human Skin: The Circadian Clock Is Ticking. *The Journal of Investigative Dermatology*, 138(2), 248–251. <https://doi.org/10.1016/j.jid.2017.09.002>
- Sayuti, N. A. (2015). Formulasi dan Uji Stabilitas Fisik Sediaan Gel Ekstrak Daun Ketepeng Cina (*Cassia alata* L.). *Jurnal Kefarmasian Indonesia*, 5(02).
- Sayuti, N., Kusumanti, D., Sayuti, N., & Indarto, A. (2017). Aktivitas Tabir Surya Formula Bedak Dingin Jawa. *Indonesian Journal of Pharmaceutical Science and Technology*, 1. <https://doi.org/10.15416/ijpst.v1i1.12156>
- Singh, T. A., Sarangi, P. K., & Singh, N. J. (2018). Tenderisation of Meat by Bromelain Enzyme Extracted from Pineapple Wastes. *International Journal of Current Microbiology and Applied Sciences*, 7. <https://doi.org/10.20546/ijemas.2018.709.404>
- Sohn, M., Hêche, A., Herzog, B., & Imanidis, G. (2014). Film thickness frequency distribution of different vehicles determines sunscreen efficacy. *Journal of Biomedical Optics*, 19(11), 115005. <https://doi.org/10.1117/1.JBO.19.11.115005>
- Sugiharta, S., & Ningsih, W. (2021). Evaluasi Stabilitas Sifat Fisika Kimia Sediaan Krim Ketoconazole dengan Metode Stabilitas Penyimpanan Jangka Panjang. *Majalah Farmasetika*, 6(0), Art. 0. <https://doi.org/10.24198/mfarmasetika.v6i0.36707>
- Suhendra, C. P., Widarta, I. W. R., & Wiadnyani, A. I. S. (2018). The Effect of Ethanol Concentration on Antioxidant Activity of Cogon grass Rhizome (*Imperata cylindrica* (Linn.) Beauv.) Extract Using Ultrasonic Wave. *Jurnal Ilmu dan Teknologi Pangan*, 8(1).
- Sukma, Y. C. (2018). *Formulasi sediaan tabir surya mikroemulsi ekstrak kulit buah Nanas (Ananas comosus L) dan uji in vitro nilai sun protection factor (SPF)* [Undergraduate, Universitas Islam Negeri Maulana Malik Ibrahim]. <http://etheses.uin-malang.ac.id/13428/>
- Suleria, H. A. R., Barrow, C. J., & Dunshea, F. R. (2020). Screening and Characterization of Phenolic Compounds and Their Antioxidant Capacity in Different Fruit Peels. *Foods*, 9(9), Art. 9. <https://doi.org/10.3390/foods9091206>
- Sumiati, T., Effendy, F., & Riani, E. (2019). Formulasi Losion Ekstrak Herba Pegagan (*Centella asiatica* (L.) Urban) dan Uji Mutu serta Stabilitasnya. *Jurnal Farmamedika (Pharmamedika Journal)*, 4(2), Art. 2. <https://doi.org/10.47219/ath.v4i2.82>
- Suryanto, E., Momuat, L. I., Yudistira, A., & Wehantouw, F. (2013). The Evaluation of Singlet Oxygen Quenching and Sunscreen Activity of Corn Cob Extract. *Indonesian Journal of Pharmacy*, 0(0), Art. 0. <https://doi.org/10.14499/indonesianjpharm0iss0pp267-276>

- Susanty, S., & Bachmid, F. (2016). Perbandingan Metode Ekstraksi Maserasi dan Refluks Terhadap Kadar Fenolik dari Ekstrak Tongkol Jagung (*Zea mays* L.). *JURNAL KONVERSI*, 5(2), Art. 2. <https://doi.org/10.24853/konversi.5.2.87-92>
- Swiader, A., Camaré, C., Guerby, P., Salvayre, R., & Negre-Salvayre, A. (2021). 4-Hydroxynonenal Contributes to Fibroblast Senescence in Skin Photoaging Evoked by UV-A Radiation. *Antioxidants*, 10(3), 365. <https://doi.org/10.3390/antiox10030365>
- Syafitri, N. E., Bintang, M., & Falah, S. (2014). Kandungan Fitokimia, Total Fenol, dan Total Flavonoid Ekstrak Buah Harendong (*Melastoma affine* D. Don). *Current Biochemistry*, 1(3), Art. 3. <https://jurnal.ipb.ac.id/index.php/cbj/article/view/17419>
- Syahrani. (2015). *Formulasi dan Uji Potensi Krim Tabir Surya dengan Bahan Aktif Ekstra Etanol Kulit Nanas (Ananas comosus (L.) Merr)*. UIN Alauddin Makassar.
- Tsabitah, A. F., Zulkarnain, A. K., Wahyuningsih, M. S. H., & Nugrahaningsih, D. A. A. (2020). Optimasi Carbomer, Propilen Glikol, dan Trietanolamin Dalam Formulasi Sediaan Gel Ekstrak Etanol Daun Kembang Bulan (*Tithonia diversifolia*). *Majalah Farmaseutik*, 16(2).
- Ulva, S. W., & Solandjari, W. (2018). Mutu Fisik dan Nilai Sun Protecting Factor Losio Tabir Surya Ekstrak Kulit Buah Nanas (*Ananas comosus* Merr.). *Akademi Analisis Farmasi dan Makanan Putra Indonesia*.
- USDA. (2022). *Ananas comosus (L.) Merr.* USDA PLANTS Database. <https://plants.sc.egov.usda.gov/home/plantProfile?symbol=ANCO30>
- Utami, R. N., Irmayani, Fatmawaty, A., Sugianka, A., Pakanan, M. M., & Jariah, N. (2021). Pengaruh Jenis dan Konsentrasi Surfaktan terhadap Karakteristik Fisik Mikroemulsi Minyak Dedak Padi. *Majalah Farmasi Dan Farmakologi*, 25(1), Art. 1. <https://doi.org/10.20956/mff.v25i1.13353>
- Vrianty, D., Qodariah, R. L., Widowati, W., Sinaga, A. P. F., Fibrina, D., Fachrial, E., & Lister, I. N. E. (2019). Comparison of Antioxidant and Anti-Tyrosinase Activities of Pineapple (*Ananas comosus*) Core Extract and Luteolin Compound. *Jurnal Kedokteran Brawijaya*, 30(4), Art. 4. <https://doi.org/10.21776/ub.jkb.2019.030.04.2>
- Wahyuningsih, S. E. (2018). *Evaluasi Karakteristik Fisika Kimia dan Nilai SPF Gel Tabir Surya Ekstrak Etanol Kulit Buah Nanas (Ananas comosus L. Merr)*. UNIVERSITAS WAHID HASYIM SEMARANG.
- Widyawati, E., Ayuningtyas, N. D., & Pitarisa, A. P. (2019). Penentuan Nilai SPF Ekstrak dan Losio Tabir Surya Ekstrak Etanol Daun Kersen (*Muntingia calabura* L.) dengan Metode Spektrofotometri Uv-Vis. *Jurnal Riset Kefarmasian Indonesia*, 1(3), Art. 3. <https://doi.org/10.33759/jrki.v1i3.55>
- Wiendarlina, I. Y., Indriati, D., & Rosa, M. (2019). Aktivitas Antibakteri Losion Anti Jerawat yang Mengandung Ekstrak Daun Beluntas (*Pluchea indica* (L.) Less.). *FITOFARMAKA: Jurnal Ilmiah Farmasi*, 9(1), Art. 1. <https://doi.org/10.33751/jf.v9i1.1256>

- Wiyanti, D. T., & Agustin, E. W. (2016). *Sistem Pakar Diagnosa Kulit untuk Menentukan Kosmetik Perawatan Wajah dengan Metode Certainty Factor dan Fuzzy Logic*. 5.
- Wiyono, A. S., & Yuliati, N. (2020). Gambaran Hematologi Tikus setelah Pemberian Terapi Gel Ekstrak Kasar Bromelin Kulit Nanas (*Ananas comosus (L.) Merr*). *PHARMACY: Jurnal Farmasi Indonesia (Pharmaceutical Journal of Indonesia)*, 17(2), Art. 2. <https://doi.org/10.30595/pharmacy.v17i2.8723>
- Wu, Z., Wang, M., Guo, Y., Ji, F., Wang, C., Wang, S., Zhang, J., Wang, Y., Zhang, S., Jin, B., & Zhao, G. (2021). Nonadiabatic Dynamics Mechanism of Chalcone Analogue Sunscreen FPPO-HBr: Excited State Intramolecular Proton Transfer Followed by Conformation Twisting. *The Journal of Physical Chemistry B*, 125(33), 9572–9578. <https://doi.org/10.1021/acs.jpcc.1c05809>
- Yanhendri, & Yenny, S. W. (2012). Berbagai Bentuk Sediaan Topikal dalam Dermatologi. *Bagian Ilmu Kesehatan Kulit dan Kelamin Fakultas Kedokteran Universitas Andalas*.
- Yin, Y., Li, W., Son, Y.-O., Sun, L., Lu, J., Kim, D., Wang, X., Yao, H., Wang, L., Pratheeshkumar, P., Hitron, A. J., Luo, J., Gao, N., Shi, X., & Zhang, Z. (2013). Quercitrin protects skin from UVB-induced oxidative damage. *Toxicology and Applied Pharmacology*, 269(2), 89–99. <https://doi.org/10.1016/j.taap.2013.03.015>
- Yusvita, L. Y. (2010). *Efek Span 80 dan Tween 80 Sebagai Emulgator terhadap Sifat Fisis dan Stabilitas Emulsi Oral A/M Ekstrak Etanol Buah Pare (Momordica charantia L.): Aplikasi Desain Faktorial*. Universitas Sanata Dharma Yogyakarta.
- Zulfa, E., & Fatchurrohman, M. (2019). Aktivitas Tabir Surya Sediaan Krim dan Lotion Ekstrak Etanol Kulit Buah Nanas (*Ananas comosus L.Merr*). *Jurnal Pharmascience*, 6(01), 50–56.
- Zulfa, E., & Mufrod, M. (2018). Evaluasi Karakteristik Fisika-Kimia Sediaan Krim dan Lotion Ekstrak Kulit Buah Nanas (*Ananas comosus L.Merr*). *Jurnal Ilmu Farmasi Dan Farmasi Klinik*, 15(2), Art. 2. <https://doi.org/10.31942/jiffk.v15i2.2565>
- Zulkarnain, A. K., & Oktaviasari, L. (2017). Formulation and Physical Stability Test of Lotion O/W Potato Starch (*Solanum tuberosum L.*) and the Activities as Sunscreen. *Majalah Farmaseutik*, 13(1), Art. 1. <https://doi.org/10.22146/farmaseutik.v13i1.38464>
- Zulkarnain, A. K., Susanti, M., & Lathifa, A. N. (2013). Stabilitas Fisik Sediaan Lotion O/w dan W/o Ekstrak Buah Mahkota Dewa sebagai Tabir Surya dan Uji Iritasi Primer pada Kelinci. *Traditional Medicine Journal*, 18(3), 141–150.