

DAFTAR PUSTAKA

- Abdulrahman, Sri, R. U., Widia, Occa, R. (2021). Kajian Metabolit Sekunder Batang Bajakah (*Spatholobus littoralis Hassk*) dalam Pengembangan sebagai Obat Herbal Antikanker Payudara dan Antioksidan. *Seminar Nasional Penelitian dan Pengabdian pada Masyarakat*.
- Agustin, J. T., Michael, Kambira, P. F. A., Prismawan, D. (2025). Effect of Extraction Methods on Phenolic Content and Antioxidant Activity of Bajakah Root (*Spatholobus littoralis*). *Indonesian Journal for Health Sciences*. 9(2): 111-117. <https://doi.org/10.24269/ijhs.v9i2.11683>
- Alam, F. & Malik, S. (2026). Bioactive Alkaloids as Phytotherapeutic Agents from Family Rutaceae. *Pharmacological Research Natural Products*. 10. 100549
- Alfani, N.R., Febriyanti, R., Amananti, W. (2023). Analysis of Total Flavonoid Content in the Extract of Bajakah Kalalawit Root (*Uncaria gambir* Roxb) Infunded Results. *Indonesia Journal of Chemical Science and Technology (IJCST)*. 6(1): 65-75
- Amin, S., Andri, C. N., Selvira, A. I. M. (2021). *Skrining Virtual Senyawa Alkaloid Sebagai Inhibitor Main Protease Untuk Kandidat Anti-Sars-Cov-2*. Jakarta: Deepublish
- Anggarini, I. A. K. D., Darmayanti, L. P. T., Sugitha, M. (2020). Pengaruh Perebusan pada Pembuatan Minuman Herbal Daun Sawo (*Manilkara zapota*) Terhadap Karakteristik dan Daya Hambat Pertumbuhan *Escherichia coli*. *Jurnal Itepa*. 9(3): 272-281
- Baliyan, S., Mukherjee, R., Priyadarshini, A., Vibhuti, A., Gupta, A., Pandey, R. P., & Chang, C. M. (2022). Determination of Antioxidants by DPPH Radical Scavenging Activity and Quantitative Phytochemical Analysis of *Ficus religiosa*. *Molecules (Basel, Switzerland)*. 27(4). 1326. <https://doi.org/10.3390/molecules27041326>
- Bandy, N. A., Erniwati, Muthmainnah, Ariyani, Hapid, A., Asniati. (2022). Analisis Fitokimia Ekstrak Daun Bajakah (*Poikilospermum suaveolens* (Blume) Merr) Dari Desa Kapiro Kecamatan Palolo Kabupaten Sigi Provinsi Sulawesi Tengah. *Jurnal Warta Rimba*. 9(1): 31-41
- Bhambhani, S., Kondhare, K. R., Giri, A. P. (2021). Diversity in Chemical Structures and Biological Properties of Plant Alkaloids. *Molecules*. 26(11). 3374. <https://doi.org/10.3390/molecules26113374>

- Bhattacharya, S. & Pal, S. (2025). Review on Unraveling the Relationship Between Abiotic Stress and Secondary Metabolite Biosynthesis in Medicinal Plants. *Next Research*. 2(2). 100320
- Bouillon, P., Fanciullino, A. L., Belin, E., Breard, D., Boisard, S., Bannet, B., Hanteville, S., Bernard, F., Celton, J. M. (2024). Image analysis and polyphenol profiling unveil red-flesh apple phenotype complexity. *Plant Methods*. 20(71): 1-16
- Chanwitheesuk, A., Teerawutgulrag A., Rakariyatham N. (2004). Screening of Antioxidant Activity and Antioxidant Compounds of Some Edible Plants of Thailand. *Food Chemistry*. 92: 491-497
- Chen, S., Wang, X., Cheng, Y., Gao, H., Chen, X. (2023). A Review of Classifpramudyaication, Biosynthesis, Biological Activities and Potential Applications of Flavonoids. *Molecules*. 28. 4982. <https://doi.org/10.3390/molecules28134982>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences*. 2nd ed. Hillsdale: Lawrence Erlbaum Associates.
- Divekar, P. A., Narayana, S., Divekar, B. A., Kumar, R., Gadratagi, B. G., Ray, A., Singh, A. K., Rani, V., Singh, V., Singh, A. K., Kumar, A., Singh, R. P., Meena, R. S., Behera, T. K. (2022). Plant Secondary Metabolites as Defense Tools against Herbivores for Sustainable Crop Protection. *International Journal of Molecular Sciences*. 23(5). 2690. <https://doi.org/10.3390/ijms23052690>
- Elgailani, I. E. H., & Christina Y. I. (2016). Methods for Extraction and Characterization of Tannins from Some *Acacia* Species of Sudan. *Pak. J. Anal. Environ. Chem*. 17(1): 43-49.
- Elgamal, R., Song, C., Rayan, A. M., Liu, C., Al-Rejaie, S., Elmasry, G. (2023). Thermal Degradation of Bioactive Compounds during Drying Process of Horticultural and Agronomic Products: A Comprehensive Overview. *Agronomy*. 13. 1580. <https://doi.org/10.3390/agronomy13061580>
- Ferreira, M. L. F., Serra, P., Casati, P. (2021). Recent advances on the roles of flavonoids as plant protective molecules after UV and high light exposure. *Physiologia Plantarum*. 173(3). 736-749. <https://doi.org/10.1111/ppl.13543>
- Gonzalez, R. C., & Woods, R. E. (2018). *Digital Image Processing* (4th ed.). Pearson Education.
- Habibi, A.R., Johannes, E., Sulfahri. (2022). Potensi Senyawa Bioaktif Bajakah *Spatholobus litoralis* Hassk Sebagai Antimikroba dengan Cara *In-Vitro* dan *In-Silico*. *Jurnal Ilmu Alam dan Lingkungan*. 13(1): 38-44

- Hao, G., X. Du, F. Zhao, R. Shi, J. Wang. (2009). Role of nitric oxide in UV-B-induced activation of PAL and stimulation of flavonoid biosynthesis in *Ginkgo biloba callus*. *Plant Cell, Tissue and Organ Culture (PCTOC)*. 97(2): 175-185
- Harborne, J. B. (1998). *Phytochemical Methods A guide to modern techniques of plant analysis*. 5th Edition. Chapman & Hall: London. [https://doi.org/10.1016/0305-1978\(93\)90098-c](https://doi.org/10.1016/0305-1978(93)90098-c)
- Heinrich, M., Mah, J., Amirkia, V. (2021). Review Alkaloids Used as Medicines: Structural Phytochemistry Meets Biodiversity an Update and Forward Look. *Molecules*. 26. 1836
- Hidayatullah, M., Rakhmatullah, A. N., Perdana, D. (2024). Penetapan Kadar Fenolik dan Flavonoid Total Ekstrak Etanol Batang Bajakah Tampala (*Spatholobus littoralis* Hassk.). *Journal of Pharmacopolium*. 6(2). <https://doi.org/10.36465/jop.v6i2.1228>
- Hikmah, U. & Triastuti, A. (2022). Mekanisme dan senyawa bioaktif imunomodulator *Phyllanthus niruri* (meniran). *Jurnal Ilmiah Farmasi*. 18(2): 205-218
- Hui, C. K., Majid, N. I., Zainol, M. K. M., Mohammad, H., Zin, Z. H. M. (2018). Preliminary Phytochemical Screening and Effect of Hot Water Extraction Conditions on Phenolic Contents and Antioxidant Capacities of *Morinda citrifolia* Leaf. *Malaysia Applied Biology*. 47(4): 13-24
- Indonesian Farm, (2023). *Pohon Bajakah: Tumbuhan Herbal dari Hutan Kalimantan*. <https://indonesianfarm.info/pohon-bajakah/> [Diakses 13 Mei 2025].
- Isleroglu, H., & Turker, I. (2023). Thermal stability and degradation kinetics of the phenolics of *Trigonella-foenum graecum* L. leaf extracts. *International Advanced Researches and Engineering Journal*. 7(2): 116-124. <https://doi.org/10.35860/iarej.1262837>
- Isnaeni, D. M. R. N., Alfiraza, E. N., & Pramiastuti, O. (2023). Aktivitas Antioksidan Ekstrak Etanol Buah, Bunga dan Daun Pucuk Merah (*Syzygium paniculatum* Gearth) dengan Metode DPPH. *KUNIR: Jurnal Farmasi Indonesia*. 1(2): 25–32
- Jesus, O. N. D., Lima, L. K. S., Soares, T. L., Silva, L. N., Santos, I. S., Sampaio, S. R., Oliveira, E. J. (2022). Phenotypic diversity and alternative methods for characterization and prediction of pulp yield in passion fruit (*Passiflora* spp.) germplasm. *Scientia Horticulturae*. 292. 110573

- Julianto, T. S. (2019). *Fitokimia: Tinjauan Metabolit Sekunder dan Skrining Fitokimia*. Yogyakarta: Universitas Islam Indonesia.
- Kaderabek, L. E. B., Jackson, B. E., & Fonteno, W. C. (2016). *Fifty shades of gley: Using Munsell soil color to assess pine bark's true colors*. Konferensi ASHS, Raleigh, North Carolina, USA.
- Khofifah, D. N., & Rizky, I. A. (2025). Pengaruh Perbedaan Metode Ekstraksi Sirih Cina (*Peperomia pellucida* L.) Terhadap Kadar Total Flavonoid dan Alkaloid. *Jurnal Etnofarmasi*. 3(1): 33-46
- Konarska, A., Weryszko-Chmielewska, E., Materska, M., Sulborska-Różycka, A., Dmitruk, M., Chilczuk, B. (2025). Phenolic Compounds in Flowers and Herb of *Achillea millefolium* L.: Histochemical and Phytochemical Studies. *Molecules* (Basel, Switzerland). 30(9). 2084. <https://doi.org/10.3390/molecules30092084>
- Lembang, D. T., Daniel, Saleh, C. (2020). Uji Fitokimia dan Uji Aktivitas Antioksidan Ekstrak Fraksi n-Heksana, Etil Asetat dan Etanol Sisa dari Tumbuhan Suruhan (*Peperomia pellucida* (L.) Kunth) Menggunakan Metode DPPH. *Jurnal Atomik*. 5(1): 37–42.
- Leswana, N. F., Sianturi, S., Taufiqurrahman, M., Oklyan, R., Butar, M. E. T., Simanullang, R. (2025). Analysis of Tanin Content in Bajakah Tampala Root (*Spatholobus littoralis* Hassk) Infusion from East Kalimantan with Variation of Boiling Time Using Uv-Visible Spectrophotometry Method. *Indonesian Journal of Education and Psychological Science (IJEPS)*. 3(6): 623-634
- Leyva C., A. Q. Ramos, A. C. Dávila, M. A. de Jesús Zazueta, P. J. Aguilar, G. E. Ruiz, P. M. G. Meléndez, A. C. O. de Jesús Ruiz, Teresita. (2016). Polyphenolic Compound Stability and Antioxidant Capacity of Apple Pomace in an Extruded Cereal. *LWT - Food Sci. Technol.* 65: 228–236.
- Liga, S., Paul, C., Péter, F. (2023). Flavonoids: Overview of Biosynthesis, Biological Activity, and Current Extraction Techniques. *Plants*. 12. 2732. <https://doi.org/10.3390/plants12142732>
- Molyneux, P. (2004). The use of the stable free radical diphenylpicrylhydrazyl (DPPH) for estimating antioxidant activity. *Songklanakarinn Journal of Science and Technology*. 26(2): 211-219.
- Naik, A.V., Sellappan, K. (2024). Quantification and histochemical localization of secondary metabolites during development in *Annona muricata* L. (Annonaceae). *Sci Rep* 14. 27641. <https://doi.org/10.1038/s41598-024-79413-z>

- Nakitto, A. M. S., Byaruhanga, Y. B., Wagner, A. E., Muyonga, J. H. (2024). Effect of thermal processing on bioactive compounds contents and antioxidant capacities of unripe and ripe *Solanum anguivi* Lam. fruit accessions. *Journal of Applied Research on Medicinal and Aromatic Plants*. 39. 100535
- Nartea, A., Falcone, P. M., Torri, L., Ghanbarzadeh, B., Frega, N. G., Pacetti, D. (2021). Modeling Softening Kinetics at Cellular Scale and Phytochemicals Extractability in Cauliflower under Different Cooking Treatments. *Foods*. 10(9). <https://doi.org/10.3390/foods10091969>
- Nastiti, K. & Nugraha, D. F. (2022). Anti-Inflammatory Activity of Bajakah Wood Extract (*Spatholobus littoralis* Hassk.). *Jurnal Surya Medika*. 7(2): 45–50
- Noorhashim, N.S., Azar, S.N., Azlan, A. Razali, N. A., Li, A. R., Abidin, N. H. K. Z. (2025). Total phenolic contents, total flavonoid contents and antioxidant activities of endocarp and mesocarp of Malaysian local *Durio Zibethinus* (Musang King and Durian Kampung Peel). *Journal of Food Measurement and Characterization*. 19: 6828–6838. <https://doi.org/10.1007/s11694-025-03417-0>
- Nur, A.D.F., Zakiah, M., & Asseggaf, S.N.Y. (2024). Potensi Antioksidan Dari Akar Tumbuhan Bajakah (*Spatholobus littoralis* Hassk) Asal Kubu Raya Kalimantan Barat. *Ibnu Sina: Jurnal Kedokteran dan Kesehatan UISU*. 23(2)
- Oliveira, I. D., Buelga, C. S., Aquino, Y., Barros, L., Heleno, S. A. (2025). New frontiers in the exploration of phenolic compounds and other bioactives as natural preservatives. *Food Bioscience*. 68. 106571. <https://doi.org/10.1016/j.fbio.2025.106571>
- Panche, A. N., Diwan, A. D., & Chandra, S. R. (2016). Flavonoids: An Overview. *Journal of Nutritional Science*. 5(e47): 1-15
- Paramita, Pramudya. (2024). Kandungan Flavonoid dan Aktivitas Antioksidan Pada Beberapa Spesies Gulma Berpotensi Sebagai Obat. *Skripsi*. Universitas Diponegoro
- Pereira, J. P. J., Moura, C. S., Ayres, C., Stávale, L. M. (2021). An Innovative and Accessible Chemical Approach to Bisphenol Identification on Plastic Surfaces. *Revista Virtual de Química*. 13(1): 234-241
- Pieczywek, P. M., Chibrikov, V., Zdeunek, A. (2023). In silico Studies of Plant Primary Cell Walls – Structure and Mechanics. *Biological Reviews*. 98 (3). <https://doi.org/10.1111/brv.12935>

- Pourmorad, F., Hosseinimehr, S. J., Shahabimajd, N. (2006). Antioxidant activity, phenol and flavonoid contents of some selected Iranian medicinal plants. *African Journal of Biotechnology*. 5(11). 1142–1145.
- Putra, D. K., Nastiti, K., Rahmadani, R., Rohama, R. (2023). Profil GCMS Senyawa Kimia Jamur Endofit Batang Bajakah (*Spatholobus littoralis* Hassk) dan Potensinya Sebagai Antioksidan. *Innovative: Journal Of Social Science Research*. 3(6): 7907–7914.
- Putri, A., Nofita, Ulfa, A. M. (2022). Perbandingan Aktivitas Antioksidan Ekstrak Daun Bidara (*Ziziphus spina-christi* L.) dengan Teknik Ekstraksi Perkolasi dan Infusa. *Jurnal Ilmu Kedokteran dan Kesehatan*. 9(4).
- Raal, A., Meos, A., Hinrikus, T., Heinämäki, J., Romäne, E., Gudienė, V., Jakštas, V., Koshovyi, O., Kovaleva, A., Fursenco, C., Chiru, T., Nguyen, H. T. (2020). Dragendorff's Reagent: Historical Perspectives and Current Status of a Versatile Reagent Introduced Over 150 Years Ago at The University of Dorpat, Tartu, Estonia. *Pharmazie*. 75: 299-306.
- Rahman, Z. A., Shukor, S. A., Abbas, H., Machap, C. A. L., Suhaimi, M., Mirad, R., Sofiyanand, S., Othman, A. N., (2018). Optimization of Extraction Conditions for Total Phenolics and Total Flavonoids from *Kaempferia parviflora* Rhizomes. *Advances in Bioscience and Biotechnology*. 9: 205-214. <https://doi.org/10.4236/abb.2018.95014>
- Safrina, D., Susanti, D. Y., Widodo, H. (2024). Effect of boiling temperature and time on total flavonoids, total phenols, and radical scavenging activity of decoction water fresh gotu kola (*Centella asiatica* (L.) Urb.). *The 14th International Conference on Green Technology*. UIN Maulana Malik Ibrahim, Malang
- Salsabila, H., Febriyanti, R., Amananti, W. (2023). Penentuan Aktivitas Antioksidan Infundasi Akar Bajakah Tampala (*Spatholobus littoralis* Hassk) dan Kalawit (*Uncaria gambir* Roxb) dengan Metode DPPH. *Jurnal Crystal: Publikasi Penelitian Kimia dan Terapannya*. 5(1): 22-29
- Saleem, S., Ul Mushtaq, N., Shah, W.H., Rasool, A., Hakeem, K.R., Ul Rehman, R. (2022). Beneficial Role of Phytochemicals in Oxidative Stress Mitigation in Plants. In: Aftab, T., Hakeem, K.R. (eds) *Antioxidant Defense in Plants*. Springer. https://doi.org/10.1007/978-981-16-7981-0_20
- Sam. (2020). Ciri-ciri Pohon Bajakah (*Spatholobus littoralis*) di Alam Liar. <https://www.ciriciripohon.com/2020/01/ciri-ciri-pohon-bajakah-di-alam-liar.html> [Diakses pada 13 Mei 2025]
- Scribd, 2024. *Bajakah*. <https://id.scribd.com/document/794158301/Bajakah> [Diakses 13 Mei 2025].

- Segelman, A. B., Farnsworth, N. R., Quimby, M. D. (1969). False negative saponins test results induced by the presence of tannins. *Lloydia*, 32: 52-58.
- Sembiring, B.B., Fanani, M.Z., Jumiono, A. (2022). Pengaruh Teknologi Pengeringan Terhadap Mutu Simplisia Seledri. *Jurnal Ilmiah Pangan Halal*. 4(2): 1-6
- Shahidi, F., & Yeo, J. (2018). Bioactivities of Phenolics by Focusing on Suppression of Chronic Diseases: A Review. *International journal of molecular sciences*. 19(6). 1573. <https://doi.org/10.3390/ijms19061573>
- Sianipar, R. N. R., Suryanegara, L., Fatriasari, W., Arung, E. T., Kusuma, I. W., Achmadi, S. S., Azelee, N. I. W., & Hamid, Z. A. (2023). The Role of Selected Flavonoids from Bajakah Tampala (*Spatholobus littoralis* Hassk.) Stem on Cosmetic Properties: A Review. *Saudi Pharmaceutical Journal (SPJ)*. 31(3): 382–400.
- Singleton, V. L., Orthofer, R., LamuelaRaventós, R. M. (1999). Analysis of total phenols and other oxidation substrates and antioxidants by means of Folin–Ciocalteu reagent. *Methods in Enzymology*. 299: 152–178. [https://doi.org/10.1016/S0076-6879\(99\)99017-1](https://doi.org/10.1016/S0076-6879(99)99017-1)
- Suparno, S., Lestari, E. S. A., Grace, D. (2024). Antibacterial Activity of Bajakah Kalawit Phenolic Against *Staphylococcus aureus* and Possible Use of Phenolic Nanoparticles. *Scientific reports*, 14(1), 19734. <https://doi.org/10.1038/s41598-024-70799-4>
- Susilowati & Desi, A. (2022). Boiling Time- Dependent Studies on The Total Flavonoids Content and Antioxidant Activities in *Dendrophloe petandra* (L.) Miq. *Indonesian Journal of Global Health Research*. 4(4): 691-698
- Syfa, R. A. U., Faisal, M., Sastryarina, Y. (2024). Uji Toksisitas Akut Rebusan Kulit Batang Bajakah Merah (*Uncaria nervosa* Elmer) Pada Mencit Betina. *Journal Pharmasci (Journal of Pharmacy and Science)*. 65-69.
- Tsimogiannis & V. Oreopoulou. (2019). “Classification of Phenolic Compounds in Plants,” *Polyphenols in Plants*. 263– 284
- Wang, T., Li, Q., Bi, K., 2018. Bioactive Flavonoids in Medicinal Plants: Structure, Activity and Biological Fate. *Asian J. Pharm. Sci*. 13: 12–23.
- WFO (2025): *Uncaria gambir* (W.Hunter) Roxb. Published on the Internet; <http://www.worldfloraonline.org/taxon/wfo-0000329239>. Accessed on: 13 May 2025
- Wowor, M. G. G., Tampara, J., Saogo, S. P., Suryanto, E., Momuat, L. I. (2022). Skrining Fitokimia dan Uji Antibakteri Masker *Peel-Off* Ekstrak Etanol

- Daun Kalu Burung (*Barleria prionitis* L.). *Jurnal Ilmiah Sains*. 22(1): 75-86
- Wu, X., Zhu, S., He, L., Cheng, G., Li, T., Meng, W., Wen, F. (2025). Phenylalanine Ammonia-Lyase: A Core Regulator of Plant Carbon Metabolic Flux Redistribution—From Molecular Mechanisms and Growth Modulation to Stress Adaptability. *Plants*. 14(24). 3811. <https://doi.org/10.3390/plants14243811>
- Xu, L., & Wang, X. (2025). A Comprehensive Review of Phenolic Compounds in Horticultural Plants. *International Journal of Molecular Sciences*. 26: 57-67. <https://doi.org/10.3390/ijms26125767>
- Yadav, N. K., Patel, A. B., Debbarma, S., Priyadarshini, M. B., Priyadarshi, H. (2024). Characterization of Bioactive Metabolites and Antioxidant Activities in Solid and Liquid Fractions of Fresh Duckweed (*Wolffia globosa*) Subjected to Different Cell Wall Rupture Methods. *ACS Omega*, 9(18). <https://doi.org/10.1021/acsomega.3c09674>
- Yuangsoi, B., Jintasataporn, O., Arreechon, N., Tabthipwon, P. (2008). Validated TLC-densitometric Analysis for Determination of Carotenoids in fancy carp (*Cyprinus carpio*) serum and the application for pharmacokinetic parameter assessment. *Songklanakarin J Sci. Technol.* 30: 693-700
- Zayani, N., Susanto, B. N. A., Marsepa, E. (2022). Efek Antiinflamasi dan Antipiretik Ekstrak Batang Bajakah Tampala (*Spatholobus littoralis* Hassk) Pada Mencit. *e-Jurnal Ilmiah BIOSAIN TROPIS*. 8(1): 33–45.
- Zayed, A., Abdelkareem, S., Talaat, N. Dayem, D. A., Farag, M. A. (2025). Tannin in foods: Classification, Dietary Sources, and Processing Strategies to Minimize Anti-Nutrient Effects. *Food Bioprocess Technol.* 18: 9221–9249. <https://doi.org/10.1007/s11947-025-04020-3>