

DAFTAR PUSTAKA

- Abdel-Hameed, E. S. S., Bazaid, S. A., Shohayeb, M. M., El-Sayed, M. M., & El-Wakil, E. A. (2012). Phytochemical studies and evaluation of antioxidant, anticancer and antimicrobial properties of *Conocarpus erectus* L. growing in Taif, Saudi Arabia. *European Journal of Medicinal Plants*, 2(2), 93–112.
<https://doi.org/10.9734/ejmp/2012/1040>
- Abubakar, S., Al-Mansoub, M. A., Murugaiyah, V., & Chan, K. L. (2019). The phytochemical and anti-inflammatory studies of *Dillenia suffruticosa* leaves. *Phytotherapy Research*, 33(3), 1–16.
<https://doi.org/10.1002/ptr.6255>
- Abubakar, S., Khor, B. K., Khaw, K. Y., Murugaiyah, V., & Chan, K. L. (2021). Cholinesterase inhibitory potential of *Dillenia suffruticosa* chemical constituents and protective effect against A β -induced toxicity in transgenic *Caenorhabditis elegans* model. *Phytomedicine Plus*, 1(1), 100022.
<https://doi.org/10.1016/j.phyplu.2021.100022>
- Adams, T., Anwar, R., Mfarej, M., Rundatz, T., Coyle, M., & McLaughlin, J. S. (2015). Nutritional stress of cultured Vero cells causes altered growth and morphology as seen in neoplastic transformation. *American Journal of Undergraduate Research*, 12(3), 62–75.
<https://doi.org/10.33697/ajur.2015.016>

- Ahmad, F. B., & Holdsworth, D. K. (1995). Traditional medicinal plants of Sabah, Malaysia part III. The rungus people of kudat. *International Journal of Pharmacog*, 33(3), 262–264. <https://doi.org/10.3109/13880209509065377>
- Ahmad, H., Suprianto, Marhamah, & Rasmidar. (2014). Aktivitas antikanker dan antiproliferasi fraksi etanol sarang semut (*Myrmecodya pendans*) pada sel kanker lidah manusia SP-C1. *Dentofasial*, 13(1), 1–6.
- Aisy, N. S. R., Juniaty, L., Saputra, Y., Putri, R. H., Fadila, S. N., Ananda, C., & Farma, S. A. (2022). Studi literatur mekanisme perubahan sel normal menuju keganasan sel serta peran dalam pencegahannya. *Prosiding Seminar Nasional Biologi*, 1(2), 1172–1181.
- Ali, S. S., Kasoju, N., Luthra, A., Singh, A., Sharanabasava, H., Sahu, A., & Bora, U. (2008). Indian medicinal herbs as sources of antioxidants. *Food Research International*, 41, 1–15. <https://doi.org/10.1016/j.foodres.2007.10.001>
- Aljamali, N. M., Mujjed, A. N., & Jasim, D. A. (2022). Relationship between food type and increased risk of cancer. *J. Biomedical Research and Clinical Reviews*, 6(5), 1–6. <https://doi.org/10.31579/2690-4861/113>
- Anam, S., Yuliet, Ritna, A., Dwimurti, F., Rismayanti, D., & Zubair, M. S. (2014). Cytotoxic activity of benalu batu (*Begonia sp.*) methanolic extract: an ethnomedicine of wana tribe Central Sulawesi. *Jurnal Ilmu Kefarmasian Indonesia*, 12(1), 10–16.
- Arifah, I. S., Khasanah, K., Lidy, D., & Pandapotan, H. (2015). Kombinasi ekstrak temu putih (*Curcuma edoaria*) dan bawang putih (*Allium sativum* L.)

terhadap aktivitas sel limfoma dengan metode MTT assay. *Khazanah*, 7(2), 24–38. <https://doi.org/10.20885/khazanah.vol7.iss2.art3>

Arifianti, L., Sukardiman, Studiawan, H., Rakhmawati, & Megawati, L. (2014). Uji aktivitas ekstrak biji sirsak (*Annona muricata* L.) terhadap sel kanker mamalia secara in vitro. *Jurnal Farmasi Dan Ilmu Kefarmasian Indonesia*, 1(2), 63–66.

Armania, N., Yazan, L. S., Ismail, I. S., Foo, J. B., Tor, Y. S., Ishak, N., Ismail, N., & Ismail, M. (2013). *Dillenia suffruticosa* extract inhibits proliferation of human breast cancer cell lines (MCF-7 and MDA-MB-231) via Induction of G2/M arrest and apoptosis. *Molecules*, 18(11), 13320–13339. <https://doi.org/10.3390/molecules181113320>

Armania, N., Yazan, L. S., Musa, S. N., Ismail, I. S., Foo, J. B., Chan, K. W., Noreen, H., Hisyam, A. H., Zulfahmi, S., & Ismail, M. (2013). *Dillenia suffruticosa* exhibited antioxidant and cytotoxic activity through induction of apoptosis and G2/M cell cycle arrest. *Journal of Ethnopharmacology*, 146(2), 525–535. <https://doi.org/10.1016/j.jep.2013.01.017>

Bradley, S. H., Kennedy, M. P. T., & Neal, R. D. (2019). Recognising lung cancer in primary care. *Advances in Therapy*, 36, 19–30. <https://doi.org/10.1007/s12325-018-0843-5>

Bukowski, K., Kciuk, M., & Kontek, R. (2020). Mechanisms of multidrug resistance in cancer chemotherapy. *International Journal of Molecular Sciences*, 21(9), 1–24. <https://doi.org/10.3390/ijms21093233>

- Burhan, A., Aisyah, A. N., Awaluddin, A., Zulham, Z., Taebe, B., & Gafur, A. (2019). Efek antioksidan dan antikanker ekstrak batang murbei (*Morus alba* L.) secara in vitro. *Jurnal Ilmiah Farmasi*, 7(1), 17–21. <https://doi.org/10.26874/kjif.v7i1.173>
- Bystrická, J., Vollmannová, A., Margitanová, E., & Ová, I. Č. I. Č. (2010). Dynamics of polyphenolics formation in different plant parts and different growth phases of selected buckwheat cultivars. *Acta Agriculturae Slovenica*, 95(3), 225–230. <https://doi.org/10.2478/v10014-010-0014-0>
- Caleja, C., Ribeiro, A., Barreiro, M. F., & Ferreira, I. C. F. . (2017). Phenolic compounds as nutraceuticals or functional food ingredients. *Current Pharmaceutical Design*, 23(19), 2787–2806. <https://doi.org/10.2174/1381612822666161227153906>
- Cao, X., Liu, B., Cao, W., Zhang, W., Zhang, F., Zhao, H., Meng, R., Zhang, L., Niu, R., Hao, X., & Zhang, B. (2013). Autophagy inhibition enhances apigenin-induced apoptosis in human breast cancer cells. *Chinese Journal of Cancer Research*, 25(2), 212–222. <https://doi.org/10.3978/j.issn.1000-9604.2013.04.01>
- Cardoso, F., Kyriakides, S., Ohno, S., Penault-Llorca, F., Poortmans, P., Rubio, I. T., Zackrisson, S., & Senkus, E. (2019). Early breast cancer: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. *Annals of Oncology*, 30(8), 1194–1220. <https://doi.org/10.1093/annonc/mdz173>

- Carocho, M., & Ferreira, I. C. F. R. (2013). The role of phenolic compounds in the fight against cancer – a review. *Anti-Cancer Agents in Medicinal Chemistry*, 13(8), 1236–1258. <https://doi.org/10.2174/18715206113139990301>
- Chen, G. L., Fan, M. X., Wu, J. L., Li, N., & Guo, M. Q. (2019). Antioxidant and anti-inflammatory properties of flavonoids from *Lotus plumule*. *Food Chemistry*, 277, 706–712. <https://doi.org/10.1016/j.foodchem.2018.11.040>
- Conti, R. M., Bernstein, A. C., Villaflor, V. M., Schilsky, R. L., Rosenthal, M. B., & Bach, P. B. (2013). Prevalence of off-label use and spending in 2010 among patent-protected chemotherapies in a population-based cohort of medical oncologists. *Journal of Clinical Oncology*, 31(9), 1134–1139. <https://doi.org/10.1200/JCO.2012.42.7252>
- Cristiandari, E. M. (2018). Uji efek ekstrak dan fraksinasi daun salung (*Psychotria viridiflora* Reinw. Ex. Blume) pada sel kanker payudara T47D. *Jurnal Kesehatan Poltekkes Palembang*, 13(1), 9–20. <https://doi.org/10.36086/jpp.v13i1.81>
- Dallavalle, S., Dobričić, V., Lazzarato, L., Gazzano, E., Machuqueiro, M., Pajeva, I., Tsakovska, I., Zidar, N., & Fruttero, R. (2020). Improvement of conventional anti-cancer drugs as new tools against multidrug resistant tumors. *Drug Resistance Updates*, 50, 1-23. <https://doi.org/10.1016/j.drup.2020.100682>
- De la Rosa, L. A. (2019). *Postharvest Physiology and Biochemistry of Fruits and Vegetables*. Woodhead Publishing.

Demirgan, R., Karagöz, A., Pekmez, M., Önay-uçar, E., Artun, F. T., & Mat, A. (2016). In vitro anticancer activity and cytotoxicity of some papaver alkaloids on cancer and normal cell lines. *African Journal of Traditional, Complementary and Alternative Medicines*, 13(3), 22–26. <https://doi.org/10.4314/ajtcam.v3i3.3>

Eun, S. Y., Ko, Y. S., Park, S. W., Chang, K. C., & Kim, H. J. (2015). P2Y2 nucleotide receptor-mediated extracellular signal-regulated kinases and protein kinase C activation induces the invasion of highly metastatic breast cancer cells. *Oncology Reports*, 34, 195–202. <https://doi.org/10.3892/or.2015.3972>

Firdausi, I., Retnowati, R., & Sutrisno. (2015). Fraksinasi ekstrak metanol daun mangga kasturi (*Mangifera casturi* Kosterm.) dengan pelarut n-butanol. *Kimia Student Journal*, 1, 785–790.

Foo, J. B., Yazan, L. S., Tor, Y. S., Armania, N., Ismail, N., Imam, M. U., Yeap, S. K., Cheah, Y. K., Abdullah, R., & Ismail, M. (2014). Induction of cell cycle arrest and apoptosis in caspase-3 deficient MCF-7 cells by *Dillenia suffruticosa* root extract via multiple signalling pathways. *BMC Complementary and Alternative Medicine*, 14(1), 1–16. <https://doi.org/10.1186/1472-6882-14-197>

Foo, J. B., Yazan, L. S., Tor, Y. S., Wibowo, A., Ismail, N., Armania, N., Cheah, Y. K., & Abdullah, R. (2016). *Dillenia suffruticosa* dichloromethane root extract induced apoptosis towards MDA-MB-231 triple-negative breast

- cancer cells. *Journal of Ethnopharmacology*, 187, 195–204.
<https://doi.org/10.1016/j.jep.2016.04.048>
- Fuchs-Tarlovsky, V. (2013). Role of antioxidants in cancer therapy. *Nutrition*, 29, 15–21. <https://doi.org/10.1016/j.nut.2012.02.014>
- Gacche, R. N., & Jadhav, S. G. (2012). Antioxidant activities and cytotoxicity of selected coumarin derivatives: preliminary results of a structure-activity relationship study using computational tools. *Journal of Experimental and Clinical Medicine*, 4(3), 165–169.
<https://doi.org/10.1016/j.jecm.2012.04.007>
- Giovannini, C., Scazzocchio, B., Vari, R., Santangelo, C., D'Archivio, M., & Masella, R. (2007). Apoptosis in cancer and atherosclerosis: polyphenol activities. *Annali Dell'Istituto Superiore Di Sanita*, 43(4), 406–416.
- GLOBOCAN. (2020a). World, estimated number of new cases in 2020, both sexes, all ages. Retrieved from <https://gco.iarc.fr/today/data/factsheets/populations/900-world-factsheets.pdf>
- GLOBOCAN. (2020b). Indonesia, estimated number of new cases in 2020, both sexes, all ages. Retrieved from <https://gco.iarc.fr/today/data/factsheets/populations/360-indonesia-factsheets.pdf>
- Godinho-Mota, J. C. M., Gonçalves, L. V., Mota, J. F., Soares, L. R., Schincaglia, R. M., Martins, K. A., & Freitas-Junior, R. (2019). Sedentary behavior and

alcohol consumption increase breast cancer risk regardless of menopausal status: A case-control study. *Nutrients*, 11(8), 1–9.
<https://doi.org/10.3390/nu11081871>

Goh, M. P. Y., Basri, A. M., Yasin, H., Taha, H., & Ahmad, N. (2017). Ethnobotanical review and pharmacological properties of selected medicinal plants in Brunei Darussalam: *Litsea elliptica*, *Dillenia suffruticosa*, *Dillenia excelsa*, *Aidia racemosa*, *Vitex pinnata* and *Senna alata*. *Asian Pacific Journal of Tropical Biomedicine*, 7(2), 173–180.
<https://doi.org/10.1016/j.apjtb.2016.11.026>

Grigalius, I., & Petrikaite, V. (2017). Relationship between antioxidant and anticancer activity of trihydroxyflavones. *Molecules*, 22(12), 1–12.
<https://doi.org/10.3390/molecules22122169>

Gunadi, D., Oramahi, H. A., & Tavita, G. E. (2017). Studi tumbuhan obat pada etnis dayak di Desa Gerantung Kecamatan Monterado Kabupaten Bengkayang. *Jurnal Hutan Lestari*, 5(2), 425–436.

Hadi, S. (2012). Pengambilan minyak atsiri bunga cengkeh (*Clove oil*) menggunakan pelarut *n*-heksana dan benzena. *Jurnal Bahan Alam Terbarukan*, 1(2), 25–30.

Hanahan, D., & Weinberg, R. A. (2011). Hallmarks of cancer: the next generation. *Cell*, 144(5), 646–674. <https://doi.org/10.1016/j.cell.2011.02.013>

Hanum, F. (1999). the use of medicinal plant species by the Temuan Tribe of Ayer Hitam forest, Selangor, Peninsular Malaysia. *Pertanika Journal of Tropical Agricultural Science*, 22(2).

Haruna, N., Hamzah, Z. A., Syakri, S., Ismail, I., & Hamzah, N. (2018). Efek ekstrak metanol dan partisi dari kulit batang kayu jawa (*Lannea coromandelica* Houtt. Merr.) terhadap pertumbuhan Sel HeLa dan MCF-7. *Ad-Dawaa' Journal of Pharmaceutical Sciences*, 1(2), 71–77.
<https://doi.org/10.24252/djps.v1i2.11338>

Haryoto, Muhtadi, Indrayudha, P., Azizah, T., & Suhendi, A. (2013). Aktivitas sitotoksik ekstrak etanol tumbuhan sala (*Cynometra ramiflora* Linn) terhadap sel HeLa, T47D dan WiDR. *Jurnal Penelitian Saintek*, 18(2), 21–28.

Hediyansah, R., Salima, N., Siburian, K., Masriani, M., & Rasmawan, R. (2019). Aktivitas antidiabetes ekstrak etanol *Dillenia suffruticosa* (Griff.) Martelli pada tikus diabetes yang diinduksi streptozotosin-nikotinamid. *Pharmaceutical Journal of Indonesia*, 16(2), 326.
<https://doi.org/10.30595/pharmacy.v16i2.5783>

Hero, S. K. (2021). Faktor resiko kanker payudara. *Jurnal Medika Hutama*, 3(1), 1533–1538.

Ibrahim, H. A.-H. (2019). Introductory chapter: fractionation. *IntechOpen*, 1–11.
<https://doi.org/10.5772/intechopen.78050>

Ibrahim, S., & Sitorus, M. (2013). *Teknik Laboratorium Kimia Organik*. Graha Ilmu: Yogyakarta.

Iqbal, J., Abbasi, B. A., Mahmood, T., Kanwal, S., Ali, B., Shah, S. A., & Khalil, A. T. (2017). Plant-derived anticancer agents: a green anticancer approach. *Asian Pacific Journal of Tropical Biomedicine*, 7(12), 1129–1150. <https://doi.org/10.1016/j.apjtb.2017.10.016>

Iqmy, L. O., Setiawati, & Yanti, D. E. (2021). Faktor resiko yang berhubungan dengan kanker payudara. *Jurnal Kebidanan*, 7(1), 32–36.

Istiqomah. (2013). Perbandingan metode ekstraksi maserasi dan sokletasi terhadap kadar piperin buah cabe jawa (*Piperis retrofracti fructus*). Program Studi Farmasi Fakultas Kedokteran dan Ilmu Kesehatan Universitas Islam Negeri Syarif Hidayatullah: Jakarta.

Jin, H., Shen, S., Chen, X., Zhong, D., & Zheng, J. (2012). CYP3A-mediated apoptosis of dauricine in cultured human bronchial epithelial cells and in lungs of CD-1 mice. *Toxicology and Applied Pharmacology*, 261(3), 248–254. <https://doi.org/10.1016/j.taap.2012.03.025>

Kamiloglu, S., Sari, G., Ozdal, T., & Capanoglu, E. (2020). Guidelines for cell viability assays. *Food Frontiers*, 1(3), 332–349. <https://doi.org/10.1002/fft2.44>

Khorsandi, L., Orazizadeh, M., Niazvand, F., Abbaspour, M. ., Mansouri, E., & Khodadadi, A. (2017). Quercetin induces apoptosis and necroptosis in

MCF-7 breast cancer cells. *Bratislava Medical Journal*, 118(2), 123–128.

<https://doi.org/10.4149/BLL>

Klungsupya, P., Suthepakul, N., Muangman, T., Rerk-Am, U., & Thongdon-A., J.

(2015). Determination of free radical scavenging, antioxidative DNA damage activities and phytochemical components of active fractions from *Lansium domesticum* Corr. fruit. *Nutrients*, 7, 6852–6873.

<https://doi.org/10.3390/nu7085312>

Koirewoa, Y. A., Fatimawali, & Wiyono, W. I. (2012). Isolasi dan identifikasi senyawa flavonoid dalam daun beluntas (*Pluchea indica* L.). *Pharmacon*, 1(1), 47–52.

Lenny. (2006). *Senyawa Flavonoida, Fenil Propanoida Dan Alkaloida*. Fakultas Matematika dan Ilmu Alam Universitas Sumatera Utara: Sumatera Utara.

Ligasová, A., & Koberna, K. (2021). Dna dyes—highly sensitive reporters of cell quantification: comparison with other cell quantification methods. *Molecules*, 26(18). <https://doi.org/10.3390/molecules26185515>

Liu, X. L., Ding, J., & Meng, L. H. (2018). Oncogene-induced senescence: a double edged sword in cancer. *Acta Pharmacologica Sinica*, 39, 1553–1558.
<https://doi.org/10.1038/aps.2017.198>

Liu, Y., Harinantenaina, L., Brodie, P. J., Slebodnick, C., Callmander, M. W., Rakotondrajaona, R., Rakotobe, E., Rasamison, V. E., TenDyke, K., Shend, Y., & Kingstona, D. G. I. (2013). Structure elucidation of antiproliferative

bisbenzylisoquinoline alkaloids from *Anisocycla grandidieri* from the Madagascar dry forest. *Magnetic Resonance in Chemistry*, 1–6.

Liu, Y., Zhao, L., Li, D., Yin, Y., Zhang, C., Li, J., & Zhang, Y. (2013). Microvesicle-delivery miR-150 promotes tumorigenesis by up-regulating VEGF , and the neutralization of miR-150 attenuate tumor development. *Protein & Cell*, 4(12), 932–941. <https://doi.org/10.1007/s13238-013-3092-z>

Mahardika, A. B., Wahyuono, S., & Wahyuningsih, M. S. H. (2016). Sitotoksisitas senyawa hasil isolasi daun *Tithonia diversifolia* (Hemsley) A. Gray terhadap sel T47D, MCF7 dan EVSA-T. *Journal Majalah Farmaseutik*, 12(2), 401–410.

Mahdavi, M., Davoodi, J., Zali, M. ., & Foroumadi, A. (2011). Concomitant activation of caspase-9 and down regulation of IAP proteins as a mechanism of apoptotic death in HepG2, T47D and HCT-116 cells upon exposure to a derivative from 4-aryl-4H-chromenes family. *Biomedicine & Pharmacotherapy*, 65, 175–182.

Man, S., Gao, W., Zhang, Y., Huang, L., & Liu, C. (2010). Chemical study and medical application of saponins as anti-cancer agents. *Fitoterapia*, 81(7), 703–714. <https://doi.org/10.1016/j.fitote.2010.06.004>

Martinez, J. D., Parker, M. T., Fultz, K. E., Ignatenko, N. A., & Gerner, E. W. (2003). Molecular biology of cancer. *Burger's Medicinal Chemistry and Drug Discovery*, 5, 1–50.

- Masriani, Fadly, D., & Bohari. (2020). α -glucosidase inhibitory activity of ethanol extract obtained from *Dillenia suffruticosa* and *Pycnarrhena cauliflora*. *Journal of Global Pharma Technology*, 12(02), 881–887.
- Mazumder, K., Biswas, B., Raja, I. M., & Fukase, K. (2020). A review of cytotoxic plants of the Indian subcontinent and a broad-spectrum analysis of their bioactive compounds. In *Molecules*, 25. <https://doi.org/10.3390/molecules25081904>
- Medeiros, P. J., Al-Khazraji, B. K., Novielli, N. M., Postovit, L. M., Chambers, A. F., & Jackson, D. N. (2012). Neuropeptide Y stimulates proliferation and migration in the 4T1 breast cancer cell line. *International Journal of Cancer*, 131(2), 276–286. <https://doi.org/10.1002/ijc.26350>
- Momenimovahed, Z., & Salehiniya, H. (2019). Epidemiological characteristics of and risk factors for breast cancer in the world. *Breast Cancer: Targets and Therapy*, 11, 151–164. <https://doi.org/10.2147/BCTT.S176070>
- Moningka, M. E. W. (2019). Perkembangan terapi kanker terkait senyawa terpineol, P53 dan caspase 3. *Jurnal E-Biomedik*, 7(1), 37–43. <https://doi.org/10.35790/ebm.7.1.2019.23190>
- Muharini, R., Lestari, I., & Masriani. (2021). Antioxidant-phenolic content correlation of phenolics rich fractions from *Dillenia suffruticosa* wood bark. *Pharmaciana*, 11(2), 283–292. <https://doi.org/10.12928/pharmaciana.v11i2.20674>

- Mukhlisa, N., Sudibyo, R. S., & Murwanti, R. (2021). Uji sitotoksitas dan hambatan ekspresi VEGF pada sel 4T1 minyak atsiri rimpang *Curcuma mangga* Val. *Jurnal Penelitian Saintek*, 26(2), 122–130. <https://doi.org/10.21831/jps.v26i2.41386>
- Mukhriani. (2014). Ekstraksi, pemisahan senyawa, dan identifikasi senyawa aktif. *Jurnal Kesehatan*, 7(2), 361–367. <https://doi.org/10.1007/s11293-018-9601-y>
- Muliawan, S. Y. (2008). Effect of *Dillenia suffruticosa* extract on dengue virus type 2 replication. *Universa Medicina*, 27(1), 1–5.
- Muti'ah, R. (2014). *Pengembangan Fitofarmaka Antikanker*. UIN-Maliki Press: Malang.
- Najib, A. (2018). *Ekstraksi Senyawa Bahan Alam*. Deepublish: Yogyakarta.
- Ningsih, D. R., Zusfahair, & Kartika, D. (2016). Identifikasi senyawa metabolit sekunder serta uji aktivitas ekstrak daun sirsak sebagai antikanker. *Jurnal Molekul*, 11(1), 101–111.
- Nordin, M. L., Kadir, A. A., Zakaria, Z. A., Othman, F., Abdullah, R., & Abdullah, M. N. H. (2017). Cytotoxicity and apoptosis induction of *Ardisia crispa* and its solvent partitions against *Mus musculus* mammary carcinoma cell line (4T1). *Evidence-Based Complementary and Alternative Medicine*, 1–10. <https://doi.org/10.1155/2017/9368079>

- Novitasari, A. E., & Putri, D. Z. (2016). Isolasi dan identifikasi saponin pada ekstrak daun mahkota dewa dengan ekstraksi maserasi. *Jurnal Sains*, 6(12), 10–14.
- Nugroho, A. E., Hermawan, A., Putri, D. D. P., Novika, A., & Meiyanto, E. (2013). Combinational effects of hexane insoluble fraction of *Ficus septica* Burm. F. and doxorubicin chemotherapy on T47D breast cancer cells. *Asian Pacific Journal of Tropical Biomedicine*, 3(4), 297–302.
- Nurrohmah, A., Aprianti, A., & Hartutik, S. (2022). Risk factors of breast cancer. *Gaster Journal of Health Science*, 20(1), 1–10.
<https://doi.org/10.30787/gaster.v20i1.777>
- Okemoto-Nakamura, Y., Someya, K., Yamaji, T., Saito, K., Takeda, M., & Hanada, K. (2021). Poliovirus-nonsusceptible Vero cell line for the World Health Organization global action plan. *Scientific Reports*, 11, 1–9.
<https://doi.org/10.1038/s41598-021-86050-3>
- Otto, S. E. (2015). *Buku Saku Keperawatan Onkologi*. EGC: Jakarta.
- Pahlani, E., Sukmayadi, A. E., & Dewi, S. (2021). Literatur review: tumbuhan dengan aktivitas antikanker darah pada sel leukemia. *Jurnal Kesehatan Aeromedika*, 7(1), 9–21.
- Parveen, A., Akash, M. S. H., Rehman, K., & Kyunn, W. W. (2016). Dual role of p21 in the progression of cancer and its treatment. *Critical ReviewsTM in Eukaryotic Gene Expression*, 26(1), 49–62.
<https://doi.org/10.1615/CritRevEukaryotGeneExpr.v26.i1.60>

- Patterson, A. D., Gonzalez, F. J., Perdew, G. H., & Peters, J. M. (2018). Molecular regulation of carcinogenesis: friend and foe. *Toxicological Sciences*, 165(2), 277–283. <https://doi.org/10.1093/toxsci/kfy185>
- Peñarrieta, J. M., Tejeda, L., Mollinedo, P., Vila, J. L., & Bravo, J. A. (2014). Phenolic compounds in food. *Bolivian Journal of Chemistry*, 31(2), 68–81.
- Pinsolle, J., Terzi, N., Ferrer, L., Giaj Levra, M., Toffart, A. C., & Moro-Sibilot, D. (2019). Les avancées dans la prise en charge des cancers bronchopulmonaires : ce qui change pour le réanimateur. *Médecine Intensive Réanimation*, 28(4), 290–299. <https://doi.org/10.3166/rea-2019-0091>
- Plantamor. (2022). Informasi Spesies: Simpur Air (*Dillenia suffruticosa*). <http://www.plantamor.com/in dex.php?plant=479>
- Prasetya, B., Harlia, & Widiyantoro, A. (2021). Senyawa sitotoksik dari fraksi diklorometana kulit terong ungu (*Solanum melongena* L.) terhadap sel kanker payudara T47D. *Jurnal Ilmiah Farmasi*, 11(2), 99–108. <https://doi.org/10.33751/jf.v11i2.3110>
- Purwanti, S., Syukur, N. A., & Haloho, C. B. (2021). Faktor risiko berhubungan dengan kejadian kanker payudara wanita. *Jurnal Bidan Cerdas*, 3(4), 168–175. <https://doi.org/10.33860/jbc.v3i4.460>
- Putra, A. Y. T. P., Supriyadi, & Santoso, U. (2019). Skrining fitokimia ekstrak etil asetat daun simpor (*Dillenia suffruticosa*). *Jurnal Teknologi Dan Industri Pangan*, 4(1). <https://doi.org/10.33061/jitipari.v4i1.3017>

- Putri, W. S., Warditiani, N. K., & Larasanty, L. P. F. (2013). Skrining fitokimia ekstrak etil asetat kulit buah manggis (*Garcinia mangostana* L.). *Jurnal Farmasi Udayana*, 2(4), 56–59.
- Qiao, Y., Wei, Z., Qin, T., Song, R., Yu, Z., Yuan, Q., Du, J., Zeng, Q., Zong, L., Duan, S., & Pu, X. (2021). Combined nanosuspensions from two natural active ingredients for cancer therapy with reduced side effects. *Chinese Chemical Letters*, 32(9), 1–5. <https://doi.org/10.1016/j.cclet.2021.03.049>
- Rahmawati, E., Sukardiman, & Muti, A. (2013). The anticancer activity in *n*-hexane and methanol extracts of *Impatiens balsamina* Linn herbs against breast cancer cells T47D. *Media Farmasi*, 10(2).
- Rahmawati, S. (2021). Peran onkogen dan tumor suppressor gene pada karsinogenesis. *Jurnal Kedokteran Universitas Negeri Lampung*, 5(1), 61–68.
- Ribatti, D., Nico, B., Ruggieri, S., Tamma, R., Simone, G., & Mangia, A. (2016). Angiogenesis and antiangiogenesis in triple-negative breast cancer. *Translational Oncology*, 9(5), 453–457. <https://doi.org/10.1016/j.tranon.2016.07.002>
- Sabandar, C. W., Jalil, J., Ahmat, N., & Aladdin, N. A. (2017). Medicinal uses, chemistry and pharmacology of *Dillenia species* (Dilleniaceae). In *Phytochemistry*, 134, 6–25. <https://doi.org/10.1016/j.phytochem.2016.11.010>

Saifuddin, A., Rahayu, V., & Teruna, H. Y. (2011). *Standarisasi Bahan Obat Alam*. Graha Ilmu: Yogyakarta.

Saraswathy, M., & Gong, S. (2013). Different strategies to overcome multidrug resistance in cancer. *Biotechnology Advances*, 31(8), 1397–1407. <https://doi.org/10.1016/j.biotechadv.2013.06.004>

Sayuti, M. (2017). Pengaruh perbedaan metode ekstraksi, bagian dan jenis pelarut terhadap rendemen dan aktifitas antioksidan bambu laut (*Isis Hippuris*). *Technology Science and Engineering Journal*, 1(3), 166–174.

Sène, M., Xia, Y., & Kamen, A. A. (2022). Overview of recent advances in Vero cells genomic characterization and engineering for high-throughput vaccine manufacturing. *Clinical and Translational Discovery*, 2(2), 1–6. <https://doi.org/10.1002/ctd2.40>

Shaffer, B. C., Gillet, J.-P., Patel, C., Baer, M. R., Bates, S. E., & Gottesman, M. M. (2012). Drug resistance: still a daunting challenge to the successful treatment of AML. *Drug Resistance Updates*, 15(1–2), 62–69. <https://doi.org/10.1016/j.drup.2012.02.001>.

Shah, M. D., Seelan, J. S. S., & Iqbal, M. (2020). Phytochemical investigation and antioxidant activities of methanol extract, methanol fractions and essential oil of *Dillenia suffruticosa* leaves. *Arabian Journal of Chemistry*, 13(9), 7170–7182. <https://doi.org/10.1016/j.arabjc.2020.07.022>

Shah, M. D., Venmathi Maran, B. A., Iqbal, M., Ching, F. F., Mohamad Lal, M. T., Binti Othman, R., & Shapawi, R. (2020). Antiparasitic activity of the

medicinal plant *Dillenia suffruticosa* against the marine leech *Zeylanicobdella arugamensis* (Hirudinea) and its phytochemical composition. *Aquaculture Research*, 51(1), 215–221.

<https://doi.org/10.1111/are.14367>

Shao, C., Yu, Z., Xiao, J., Liu, L., Hong, F., Zhang, Y., & Jia, H. (2017). Prognosis of pregnancy-associated breast cancer: a meta-analysis. *BMC Cancer*, 20(746), 1–15. <https://doi.org/10.1186/s12885-020-07248-8>

Shoeb, H. A., Madkour, & Rea. (2014). Antioxidant and cytotoxic activities of *Gmelina arborea* ROXB. leaves. *British Journal of Pharmaceutical Research*, 4(1), 125–144. <https://doi.org/10.9734/bjpr/2014/6018>

Siegel, R. L., Miller, K. D., Fuchs, H. E., & Jemal, A. (2022). Cancer statistics, 2022. *Cancer Journal for Clinicians*, 72(1), 7–33.

<https://doi.org/10.3322/caac.21708>

Simstein, R., Burow, M., Parker, A., Weldon, C., & Beckman, B. (2003). Apoptosis, chemoresistance, and breast cancer: insight from the MCF-7 cell model system. *Experimental Biology and Medicine*, 228(9), 995–1003.

Suhendi, A., Haryoto, I. P., & Muhtadi, A. T. (2013). Determination of antioxidant activity of extract, polar, and semipolar fraction of *Cynometra ramnifolia* Linn leaf using DPPH assay. *Acta Pharmaciae Indonesia*, 1(1).

Sun, Y. (2015). Translational horizons in the tumor microenvironment: harnessing breakthroughs and targeting cures. *Medicinal Research Reviews*, 35(2), 408–436. <https://doi.org/10.1002/med.21338>

- Supomo, S., Warnida, H., & Said, B. M. (2019). Perbandingan metode ekstraksi umbi bawang rambut (*Allium chinense* G.Don.) menggunakan pelarut etanol 70% terhadap rendemen dan skrining fitokimia. *Jurnal Riset Kefarmasian Indonesia*, 1(1), 30–40.
- Susanto, T. H., Maryono, S., & Purwanto, B. (2017). Pengaruh ekstrak propolis terhadap ekspresi protein Bcl2, p21, dan induksi apoptosis pada sel HeLa. *Biomedika*, 9(2), 6–14. <https://doi.org/10.23917/biomedika.v9i2.5837>
- Susanty, A., Dachriyanus, Yanwirasti, Wahyuni, F. S., Fadhli, H., & Aswan, P. A. (2018). Aktivitas sitotoksik ekstrak etil asetat daun tanpa badak (*Voacanga foetida* (Bl.)K. Schum) pada kanker kolon HTB-38. *Jurnal Sains Farmasi & Klinis*, 5(2), 142–146. <https://doi.org/10.25077/jsfk.5.2.142-146.2018>
- Sutedjo, I. R., Putri, H., dan Meiyanto, E. 2016. Ethanolic leaves extract of awarawar (*Ficus septica*) as selective chemopreventive agent on various cancer cells. *NurseLine Journal*, 190-197.
<https://jurnal.unej.ac.id/index.php/NLJ/article/view/4897>
- Syaafriana, V., Febriani, A., Suyatno, S., Nurfitri, N., & Hamida, F. (2021). Antimicrobial activity of ethanolic extract of sempur (*Dillenia suffruticosa* (Griff.) Martelli) leaves against pathogenic microorganisms. *Borneo Journal of Pharmacy*, 4(2), 135–144.
<https://doi.org/10.33084/bjop.v4i2.1870>

Tao, K., Fang, M., Alroy, J., & Sahagian, G. G. (2008). Imagable 4T1 model for the study of late stage breast cancer. *BMC Cancer*, 8, 1–19.

<https://doi.org/10.1186/1471-2407-8-228>

Tor, Y. S., Yazan, L. S., Foo, J. B., Armania, N., Cheah, Y. K., Abdullah, R., Imam, M. U., Ismail, N., & Ismail, M. (2014). Induction of apoptosis through oxidative stress-related pathways in MCF-7, human breast cancer cells, by ethyl acetate extract of *Dillenia suffruticosa*. *BMC Complementary and Alternative Medicine*, 14(1), 1–12. <https://doi.org/10.1186/1472-6882-14-55>

Tor, Y. S., Yazan, L. S., Foo, J. B., Wibowo, A., Ismail, N., Cheah, Y. K., Abdullah, R., Ismail, M., Ismail, I. S., & Yeap, S. K. (2015). Induction of apoptosis in MCF-7 cells via oxidative stress generation, mitochondria-dependent and caspase-independent pathway by ethyl acetate extract of *Dillenia suffruticosa* and its chemical profile. *PLoS One*, 10(6), 1–25. <https://doi.org/10.1371/journal.pone.0127441>

Triatmoko, B., Hertiani, T., & Yuswanto, A. (2016). Sitotoksitas minyak mesoyi (*Cryptocarya massoy*) terhadap sel Vero. *Jurnal Pustaka Kesehatan*, 4(2), 263–266.

Tsou, S., Chen, T., Hsiao, H., & Chen, Y. (2015). A critical dose of doxorubicin is required to alter the gene expression profiles in MCF-7 cells acquiring multidrug resistance. *PLoS One*, 10(1), 1–24. <https://doi.org/10.1371/journal.pone.0116747>

Tusanti, I., Johan, A., & Kisdjamiyatun, R. (2014). Sitotoksisitas in vitro ekstrak etanolik buah parijoto (*Medinilla speciosa*, Reinw. ex Bl.) terhadap sel kanker payudara T47D. *Jurnal Gizi Indonesia*, 2(2), 53–58.
<https://doi.org/10.14710/jgi.2.2.53-58>

Utari, K., Nursafitri, E., Sari, I., Sari, R., Winda, A. K., & Harti, A. S. (2013). Kegunaan daun sirsak (*Annona muricata* L.) untuk membunuh sel kanker dan pengganti kemoterapi. *KesMaDasKa*, 110–115.

Vicente-Dueñas, C., Romero-Camarero, I., Cobaleda, C., & Sánchez-García, I. (2013). Function of oncogenes in cancer development: a changing paradigm. *The EMBO Journal*, 32(11), 1502–1513.
<https://doi.org/10.1038/emboj.2013.97>

Wahyuni, D. T., & Widjanarko, S. B. (2015). Pengaruh jenis pelarut dan lama ekstraksi terhadap ekstrak karotenoid labu kuning dengan metode gelombang ultrasonik. *Jurnal Pangan Dan Agroindustri*, 3(2), 390–401.

Wang, H., Ao, M., WU, J., & Yu, L. (2013). TNF α and Fas/FasL pathways are involved in 9-Methoxycamptothecin-induced apoptosis in cancer cells with oxidative stress and G2/M cell cycle arrest. *Food and Chemical Toxicology*, 55, 396–410.

Wang, X., Zhang, H., & Chen, X. (2019). Drug resistance and combating drug resistance in cancer. *Cancer Drug Resistance*, 2, 141–160.
<https://doi.org/10.20517/cdr.2019.10>

- Wardani, E. K., & Ambarwati, W. N. (2017). Respon fisik dan psikologi wanita dengan kanker serviks yang telah mendapat kemoterapi di RSUD Dr. Moewardi Surakarta. *Jurnal Berita Ilmu Keperawatan*, 10(2), 71–79.
- Wiart, C., Mogana, S., Khalifah, S., Mahan, M., Ismail, S., Buckle, M., Narayana, A. K., & Sulaiman, M. (2004). Antimicrobial screening of plants used for traditional medicine in the state of Perak, Peninsular Malaysia. *Fitoterapia*, 75(1). <https://doi.org/10.1016/j.fitote.2003.07.013>
- Widana, G. A. B. (2014). Kajian tentang potensi terkini senyawa kompleks sebagai antikanker. *Prosiding Seminar Nasional MIPA*, 4, 331–334. <https://ejournal.undiksha.ac.id/index.php/semnasmipa/article/view/10500>
- Widowati, L., & Mudahar, H. (2009). Uji aktivitas ekstrak etanol 50% umbi keladi tikus (*Typhonium flagelliforme* (Lodd) BI) terhadap sel kanker payudara MCF-7 in vitro. *Media Penelitian Dan Pengembangan Kesehatan*, 19(1).
- Widyanto, R. M., Putri, J. A., Rahmi, Y., Proborini, W. D., & Utomo, B. (2020). Aktivitas antioksidan dan sitotoksik in vitro ekstrak metanol buah nanas (*Ananas comosus*) pada sel kanker payudara T-47D. *Jurnal Pangan Dan Agroindustri*, 8(2), 95–103. <https://doi.org/10.21776/ub.jpa.2020.008.02.5>
- Wogan, G. N., Hecht, S. S., Felton, J. S., Conney, A. H., & Loeb, L. A. (2004). Environmental and chemical carcinogenesis. *Seminars in Cancer Biology*, 14, 473–486. <https://doi.org/10.1016/j.semancer.2004.06.010>

- Wu, Q., Yang, Z., Nie, Y., Shi, Y., & Fan, D. (2014). Multi-drug resistance in cancer chemotherapeutics: mechanisms and lab approaches. *Cancer Letters*, 347(2), 159–166. <https://doi.org/10.1016/j.canlet.2014.03.013>
- Yakop, F., Hamid, M. H. S. A., Ahmad, N., Majid, M. A. M., Pillai, M. K., & Taha, H. (2020). Phytochemical screening, antioxidant and antibacterial activities of extracts and fractions of *Dillenia suffruticosa* leaves. *Malaysian Applied Biology*, 49(1), 121–130. <https://doi.org/10.26538/tjnpr/v4i11.9>
- Yan, C., & Boyd, D. D. (2007). Regulation of matrix metalloproteinase gene. *Journal of Cellular Physiology*, 211(1), 19–26. <https://doi.org/10.1002/JCP>
- Yanti, E., Harmawati, Irman, V., Dewi, R. I. S., & Saintika, S. S. (2021). Peningkatan kesiapan pasien kanker menjalani kemoterapi. *Jurnal Abdimas Saintika*, 3(1), 85–88. <https://doi.org/10.30633/jas.v3i1.1102>
- Yazan, L. S., Ong, Y. S., Zaaba, N. E., Ali, R. M., Foo, J. B., & Tor, Y. S. (2015). Anti-breast cancer properties and toxicity of *Dillenia suffruticosa* root aqueous extract in BALB/c mice. *Asian Pacific Journal of Tropical Biomedicine*, 5(12), 1018–1026. <https://doi.org/10.1016/j.apjtb.2015.09.008>
- Yazan, S. L., & Armania, N. (2014). *Dillenia* species: A review of the traditional uses, active constituents and pharmacological properties from pre-clinical studies. *Pharmaceutical Biology*, 52(7), 890–897. <https://doi.org/10.3109/13880209.2013.872672>

- Yu, L., Xie, X., Cao, X., Chen, J., Chen, G., Chen, Y., Li, G., Qin, J., Peng, F., & Peng, C. (2021). The anticancer potential of maslinic acid and its derivatives: a review. *Drug Design, Development and Therapy*, 15, 3864–3879. <https://doi.org/10.2147/DDDT.S326328>
- Yudissanta, A., & Ratna, M. (2012). Analisis pemakaian kemoterapi pada kasus kanker payudara dengan menggunakan metode regresi logistik multinomial (studi kasus pasien di Rumah Sakit “X” Surabaya). *Jurnal Sains Dan Seni ITS*, 1(1), D112–D117.
- Yuningtyas, S., Roswiem, A. P., & Erfina, E. (2018). Aktivitas inhibisi α -glukosidase dari ekstrak air dan etanol daun simpur air (*Dillenia suffruticosa* (Griff.) Martelli). *Pharmamedica Journal*, 3(1), 21–26. <https://doi.org/10.47219/ath.v3i1.23>
- Zacharias, F., George, D., Michail, D., Ioannis, P., Marianna, T., Arzou, B., Dimitra, A., Athanasios, P., & Emmanuel, K. N. (2020). MicroRNAs determining carcinogenesis by regulating oncogenes and tumor suppressor genes during cell cycle. *MicroRNA*, 9(2), 82–92. <https://doi.org/10.2174/2211536608666190919161849>
- Zampieri, L., Bianchi, P., Ruff, P., & Arbuthnot, P. (2002). Differential modulation by estradiol of P-glycoprotein drug resistance protein expression in cultured MCF7 and T47D breast cancer cells. *Anticancer Research*, 22(4), 2253–2259.

Zhang, Q. W., Lin, L. G., & Ye, W. C. (2018). Techniques for extraction and isolation of natural products: A comprehensive review. *Chinese Medicine*, 13(20), 1–26. <https://doi.org/10.1186/s13020-018-0177-x>

Zlatić, N., Jakovljević, D., & Stanković, M. (2019). Temporal, plant part, and interpopulation variability of secondary metabolites and antioxidant activity of *Inula helenium* L. *Plants*, 8(6), 1–10. <https://doi.org/10.3390/plants8060179>