

DAFTAR PUSTAKA

- Adji, G.D.P. (2021) *Pengaruh Variasi Waktu Rebusan Wedang Uwuh terhadap Aktivitas Antioksidan dengan Metode DPPH (2,2 Diphenyl-1-Picrylhydrazyl)*. Karya Tulis Ilmiah, Sekolah Tinggi Ilmu Kesehatan Nasional Sukoharjo.
- Ahmad, F., Surapaneni, K.M., Al-Subaie, A.M., dan Kamaraj, B. (2024) Anti-proliferative activity and apoptotic induction of tannins extracted from *Quercus infectoria* on oral cancer KB cell lines. *Journal of Applied Pharmaceutical Science*, 14(6), pp. 184-199.
- Aklimah, A. dan Ekayanti, M. (2022) Analisis Flavonoid Total dan Aktivitas Antioksidan Ekstrak Etanol *Syzygium aromaticum* dan *Syzygium polyanthum*. *Jurnal Kedokteran Universitas Palangka Raya*, 10(2), pp. 11-14.
- Alkandahri, M.Y., Shafirany, M.Z., Agustina, L.S., Pangaribuan, F., Fitrianti, F., Farhamzah, Kusumawati, A.H., Sugiharta, S., Arfania, M., dan Mardiana, L.A. (2021) *Amomum compactum*: A Review of Pharmacological Studies. *Plant Cell Biotechnology and Molecular Biology*, 22(33&34), pp. 61-69.
- Anandani, E.T., Kusnanto, P., dan Purwanto, B. (2017) Pengaruh Ekstrak Propolis terhadap Ekspresi Caspase 3, Proliferasi, dan Induksi Apoptosis pada Sel Kanker Kolon (*Cell Line WiDr*). *Biomedika*, 9(2), pp. 23-30.
- Aprilia, B. Dan Sari, D.A. (2024) Pengaruh Suhu Evaporasi-Kristalisasi dan Persentase Gula Batu terhadap Warna Produk Serbuk Jahe Merah (*Zingiber officinale*). *Jurnal Teknologi*, 17(1), pp. 28-35.
- Aslantürk, O.S. (2018) *In vitro Cytotoxicity and Cell Viability Assays: Principles, Advantages, and Disadvantages*. Genotoxicity - A Predictable Risk to Our Actual World. InTech. Available at: <http://dx.doi.org/10.5772/intechopen.71923>.
- Aswad, H. dan Irma, A. (2022) Uji Sitotoksik Ekstrak Kembang Kol (*Brassica oleracea* Var. Botrytis) Terhadap Viabilitas Kanker Kolon WiDr. *Syntax Literate: Jurnal Ilmiah Indonesia*, 7(12), pp. 19556-19567.
- Billau, A. (2016) *Kanker Kolorektal: Panduan Pasien*. (Haryanto, A., Sudoyo, A.W., dan Yasin, M., Terjemahan). Jakarta: ISHMO.
- Damantia, I. dan Da'i, M. (2022) Uji Aktivitas Antiproliferasi dan Induksi Apoptosis Ekstrak Etanol Rimpang Lengkuas (*Alpinia galanga* L.) terhadap Sel MCF-7. *Usadha: Journal of Pharmacy*, 1(3), pp. 291-300.
- Dewa, W.J., Handharyani, E., Purwaningsih, S., dan Mariya, S. (2024) Aktivitas Sitotoksik Ekstrak Keong Laut Matah Merah (*Cerithidea obtusa*) terhadap Sel Kanker Kolon WiDr. *Jurnal Sain Veteriner*, 42(1), pp. 129-135.
- Dewatisari, W.F. dan Hariyadi, Potensi Antibakteri Minuman Fungsional Tradisional Jawa (Wedang Uwuh) Berdasarkan Variasi Waktu Rebusan. *Jurnal Teknologi dan Industri Pangan*, 35(1), pp. 10-26.

- Ding, H., Wang, Y., Li, Y., Dong, Y., Dai, X., Kang, C., Li, K., Han, H., Peng, X., dan Chen, X. (2023) Research Progress on Anti-Tumor Mechanism of Tannins in Traditional Chinese Medicine. *Biomedical Research & Environmental Sciences*, 4(4), pp. 779-792.
- Elekofehinti, O.O., Iwaloye, O., Olawale, F., dan Ariyo, E.O. (2021) Saponins in Cancer Treatment: Current Progress and Future Prospects. *Pathophysiology*, 28(2), pp. 250-272.
- Fawwaz, M., Nurdiansyah, S., dan Baits, M. (2017) Potensi Daun Pala (*Myristica fragrans* Houtt) Sebagai Sumber Fenolik. *Jurnal Fitofarmaka Indonesia*, 4(1), pp. 212-214.
- Fadholly, A., Sudjarwo, S.A., Rantam, F.A., Mustika, A.A., Andriyanto, Pristihadi, D.N., dan Sutardi, L.N. (2023) Uji Sitotoksik Ekstrak Cabai Merah Keriting (*Capsicum annum*) pada Sel WiDr secara in vitro. *Curr Biomed*, 1(2), pp. 70-75.
- Fathy, M., Fawzy, M.A., Hintzsche, H., Nikaido, T., Dandekar, T., dan Othman, E.M. (2019) Eugenol Exerts Apoptotic Effect and Modulates the Sensitivity of HeLa Cells to Cisplatin and Radiation. *Molecules*, 24(21), pp. 1-14.
- Fitri, H.A. dan Pamungkasih, C.O. (2022) Pengaruh Proses Pembuatan Tisane "Wedang Uwuh" terhadap Kandungan Polifenol dan Aktivitas Penangkap Radikal Bebasnya. *Jurnal Farmasi Indonesia*, 19(1), pp. 108-121.
- Ginting, B., Marpaung, L., Barus, T., dan Simanjuntak, P. (2016) Isolation and Identification of Flavonoid Compound from Nutmeg Leaves (*Myristica fragrans* Houtt). *Asian Journal of Chemistry*, 28(1), pp. 199-202.
- GLOBOCAN (2020) Global Cancer Observatory: Cancer Today. [online]. Tersedia di: <https://gco.iarc.fr/today/home>. [Diakses 1 November 2023].
- Gothai, S., Muniandy, K., Gnanaraj, C., Ibrahim, I.A.A., Shahzad, N., Al-Ghamdi, S.S., Ayoub, N., Veeraraghavan, V.P., Kumar, S.S., Esa, N.M., dan Arulselvan, P. (2018) Pharmacological insights into antioxidants against colorectal cancer: A detailed review of the possible mechanisms. *Biomedicine & Pharmacotherapy*, 107, pp. 1514-1522.
- Gupta, E., Kaushik, S., Purwar, S., Sharma, R., Balapure, A.K., dan Sundaram, S. (2017) Anticancer Potential of Steviol in MCF-7 Human Breast Cancer Cells. *Pharmacog Mag*, 13(51), pp. 345-350.
- Helen, L.R., Jyothilakshmi, Latha, M.S. (2015) Isolation and quantification of tannins from the root bark of Clerodendrum infortunatum linn. And assessment of their antioxidant potential and antiproliferative effect on HCT-15 cells. *International Journal of Pharmacy and Pharmaceutical Sciences*, 7(10), pp. 170-175.
- Hossain, M.S., Karuniawati, H. Jairoun, A.A., Urbi, Z. Ooi, D.J., John, A., Lim, Y.C., Kibria, K.M.K., Mohiuddin, A.K.M., Ming, L.C., Goh, K.W., dan Hadi, M.A. (2022) Colorectal Cancer: A Review of Carcinogenesis, Global Epidemiology, Current Challenges, Risk Factors, Preventive and Treatment Strategies. *Cancers*, 14(7), pp. 1-25.

- Ilmi, I.N., Filianty, F., dan Yarlina, V.P. (2022) Sediaan Kayu Manis (*Cinnamomum Sp.*) sebagai Minuman Fungsional Antidiabetes: Kajian Literatur. *Kimia Padjadjaran*, 1, pp. 31-59.
- Indiarto, R., Subroto, E., Angeline, dan Selly (2021) Ginger rhizomes (*Zingiber officinale*) functionality in food and health perspective: a review. *Food Research*, 5(1), pp. 497-505.
- Irianti, T.T., Kuswandi, Nuranto, S., dan Purwanto (2021) *Antioksidan dan Kesehatan*. Sleman: Gadjah Mada University Press.
- Khan, M.I., Karima, G., Khan, M.Z., Shin, J.H., dan Kim, J.D. (2022) Therapeutic Effects of Saponins for the Prevention and Treatment of Cancer by Ameliorating Inflammation and Angiogenesis and Inducing Antioxidant and Apoptotic Effects in Human Cells. *International Journal of Molecular Science*, 23(18), pp. 1-15.
- Khosama, Y. (2015) Faktor Risiko Kanker Kolorektal. *CDK* 234, 42(11), pp. 829-832.
- Kirtishanti, A., Kesuma, D., Trisa, F., dan Tuga, M.C.D. (2022) Aktivitas Sitotoksik Ekstrak Biji Alpukat (*Persea americana* Mill.) pada Sel Kanker Payudara dan Serviks Secara *In Silico* dan *In vitro*. *MPI (Media Pharmaceutica Indonesia)*, 4(2), pp. 188-194.
- Kopustinskiene, D.M., Jakstas, V., Savickas, A., dan Bernatoniene, J. (2020) Flavonoids as Anticancer Agents. *Nutrients*, 12(2), pp. 1-25.
- Kumar, R., Saneja, A., dan Panda, A.K. (2021) An Annexin V-FITC – Propidium Iodide- Based Method for Detecting Apoptosis in a Non-Small Cell Lung Cancer Line. *Methods in Molecular Biology*, 2279, pp. 213-223.
- Laila, F., Fardiaz, D., Yuliana, N.D., Damanik, M.R.M., dan Dewi, F.N.A. (2020) Methanol Extract of *Coleus amboinicus* (Lour) Exhibited Antiproliferative Activity and Induced Programmed Cell Death in Colon Cancer Cell WiDr. *Hindawi: International Journal of Food Science*, 2020, pp. 1-12.
- Leboe, D.W., Ningsi, S., dan Fiqardina, A. (2017) Uji Sitotoksik Ekstrak N-Heksan Daun Botto'-Botto' (*Chromolaena odorata* L.) Terhadap Cell Line Kanker Kolon WiDr. *Jurnal Kesehatan*, 10(2), pp. 1-5.
- Lewandowska, A., Religioni, U., Czerw, A., Deptala, A., Karakiewicz, B., Partyka, O., Pajewska, M., Sygit, K., Cipora, E., Kmiec, K., Augustynowicz, A., Mekal, D., Waszkiewicz, M., Baranska, A., Minarikova, D., Minarik, P., dan Merks, P. (2022) Nutritional Treatment of Patients with Colorectal Cancer. *International Journal of Environmental Research and Public Health*, 19(11), pp. 1-12.
- Liu, W., Cui, X., Zhong, Y., Ma, R., Liu, B., dan Xia, Y. (2023) Phenolic metabolites as therapeutic in inflammation and neoplasms: Molecular pathways explaining their efficacy. *Pharmacological Research*, 193, pp. 1-10.
- Ma'arif, B., Rosa, N., Dianti, M.R., Firdausy, A.F., Laswati, H., dan Agil, M. (2020) Uji Sitotoksitas Ekstrak Etanol 96% Daun Semanggi (*Marsilea crenata*

Presl.) pada Sel hFOB 1.19 dengan Metode *Microtetrazolium* (MTT) Assay. *FARMASIS: Jurnal Sains Farmasi*, 1(1), pp. 26-32.

Macey, M.G. (2007) *Flowcytometry: Principles and Applications*. Totowa: Humana Press.

Margawati, H., Yustisia, I., Hardjo, M., Natsir, R., Azis, I., Hafiyani, L., dan Aswad, H. (2023) GLUT5, GLUT7, and GLUT11 expression and Bcl-2/Bax ratio on Breast Cancer Cell Line MCF-7 Treated with Fructose and Glucose. *Asian Pasific Journal of Cancer Prevention*, 24, pp. 3917-3924.

Morgan, E., Arnold, M., Gini, A., Lorenzoni, V., Cabasag, C.J., Laversanne, M., Vignat, J., Ferlay, J., Murphy, N., dan Bray, F. (2023) Global burden of colorectal cancer in 2020 and 2040: incidence and mortality estimates from GLOBOCAN. *Gut*, 72(2), pp. 338-344.

Nafees, S., Zafaryab, M., Mehdi, S.H., Zia, B., Rizvi, M.A., dan Khan, M.A. (2021) Anti-Cancer Effect of Gingerol in Cancer Prevention and Treatment. *Anti-Cancer Agents in Medicinal Chemistry*, 21, pp. 1-5.

Nisa', F.Z., Hidayati, M.N., Putri, A.R., dan Rahayu, P. (2021) *Bahan Pangan Pencegah Kanker*. Sleman: Gadjah Mada University Press.

Nurani, L.H., Nurkhasanah, dan Irham, L.M. (2023) *Kanker dan Karsinogenesis*. Yogyakarta: UAD Press.

Padang, M.S. dan Rotty, L. (2020) Adenokarsinoma Kolon: Laporan Kasus. *e-CliniC*, 8(2), pp. 229-236.

Panuluh, P.D. (2019) Potensi Cengkeh (*Syzygium aromaticum*) sebagai Antibakteri Methicillin Resistant *Staphylococcus Aureus* (MRSA). *Jurnal Ilmiah Kesehatan Sandi Husada*, 10(2), pp. 270-274.

Pfeffer, C.M. dan Singh, A.T.K. (2018) Apoptosis: A Target for Anticancer Therapy. *International Journal of Molecular Sciences*, 19(2), pp. 1-10.

Prasetyo, D., Maryono, S., dan Purwanto, B. (2017) Pengaruh Ekstrak Propolis Terhadap Peningkatan Ekspresi p21, Ekspresi Protein BAX dan Induksi Apoptosis pada Kultur Sel Kanker Kolon (*Cell Line WiDr*). *Biomedika*, 9(1), pp. 14-23.

Purnamasari, D. (2019) Efek Ekstrak Metanol Daun Kersen (*Muntingia calabura* L.) terhadap Induksi Apoptosis Sel Kanker WiDr. *Proceedings of Continuing Medical Education, Workshop and Symposium Maternity: Medical Update Emergency Obstetry and Gynecology in the Primary Care*. Surakarta: Universitas Muhammadiyah Surakarta.

Riss, T.L., Moravec, R.A., Niles, A.L., Duellman, S., Benink, H.A., Worzella, T.J., dan Minor, L. (2016) *Cell Viability Assays*. Maryland: Eli Lilly & Company and the National Center for Advancing Translational Sciences.

Rivanti, E., Adlina, B., Nurziah, I., Ayu, C., dan Hermawan, A. (2017) Heartwood of Secang (*Caesalpinia sappan* L.) Ethanolic Extract Show Selective Cytotoxic Activities on T47D and WiDr Cells But not on Hela Cells. *Indonesian Journal of Cancer Chemoprevention*, 7(2), pp. 60-67.

- Röhrh, K. (2020) *Symptoms and quality of life during chemotherapy in patients with colorectal cancer*. Oslo: University of Oslo.
- Rosa, L.S., Silva, N.J.A., Soares, N.C.P., Monteiro, M.C., dan Teodoro, A.J. (2016) Anticancer Properties of Phenolic Acids in Colon Cancer. *Journal of Nutrition & Food Science*, 6(2), pp. 1-7.
- Saraswati, M., Harmastuti, N., dan Herdwiani, W. (2020) Aktivitas Sitotoksik dan ekspresi Protein p53 BCL-2 Eksrak dan Fraksi Daun Kersen (*Muntingia calabura* L.) terhadap Sel Kanker Payudara T47D. *PHARMACY: Jurnal Farmasi Indonesia*, 17(2), pp. 292-303.
- Sari, F. dan Cahyaningrum, D.W. (2017) Pembuatan Minuman Kesehatan Wedang Uwuh di Desa Gambyok Kecamatan Grogol. *Prosiding Seminar Pengabdian Masyarakat 2017*. Kediri: Institut Ilmu Kesehatan Bhakti Wiyata.
- Sari, R. dan Suhartati (2016) Secang (*Caesalpinia sappan* L.): Tumbuhan Herbal Kaya Antioksidan. *Info Teknis EBONI*, 13(1), pp. 57-67.
- Sarmoko, Solihati, I., Setyono, J., Ekowati, H., dan Fadlan, A. (2020) *Zingiber officinale* Var. Rubrum Extract Increases the Cytotoxic Activity of 5-Fluorouracil in Colon Adenocarcinoma Widr Cells. *Indonesian Journal of Pharmacy*, 31(4), pp. 266-272.
- Seo, H.W., No, H., Cheon, H.J., dan Kim, J.K. (2020) Sappanchalcone, a flavonoid isolated from *Caesalpinia sappan* L., induces caspase-dependent and AIF-dependent apoptosis in human colon cancer cells. *Chemico-Biological Interaction*, 327, pp. 1-9.
- Septiyani R. dan Rahmawati, E. (2019) Perbedaan Aktivitas Antioksidan pada Minuman Tradisional Wedang Uwuh Original, Seduh, Celup, Instan, dan Sirup. *CHEMICA: Jurnal Teknik Kimia*, 6(1), pp. 23-29.
- Setiawan, M.J., Prasetyo, R.A., dan Harismah, K. (2018) Formulasi Instan *Zingiber officinale* var. *Rubrum* dan Kayu Manis dengan Pemanis Stevia. *The 8th University Research Colloquium 2018*. Purwokerto: Universitas Muhammadiyah Purwokerto.
- Setiawan, S.I., Safitri, E.I., Muna, L.N., dan Hidayati, D.V. (2021) Aktivitas Sitotoksik dan Induksi Apoptosis dari Ekstrak Etanol Kulit Apel Hijau (*Pyrus malus* L.) terhadap Sel MCF-7. *Jurnal Pharmascience*, 8(2), pp. 69-78.
- Setyowati, N., Masyhuri, Mulyo, J.H., Irham, dan Yudhistira, B. (2023) The hidden treasure of wedang uwuh, an ethnic traditional drink from Java, Indonesia: Its benefits and innovations. *International Journal of Gastronomy and Food Science*, 31, pp. 1-11.
- Sholikhah, I.Y., Haryanti, S., dan Budiarti, M. (2019) Aktivitas Antikanker *Acalypha wilkesiana* Mull.Arg., *Ziziphus nummularia* (Burm.f.) Wight & Arn., dan *Glochidion zeylanicum* (Gaertn.) A.Juss. Terhadap Sel Kanker Payudara MCF-7. *Prosiding Pokjanas TOI ke 57*. Tawangmangu, Surakarta: Balai Besar Penelitian dan Pengembangan Tanaman Obat dan Obat Tradisional, Badan Penelitian dan Pengembangan Kesehatan.

- Suyatmi, Mudigdo, A., Purwanto, B., Indarto, D., Hakim, F.A., dan Krisnawati, D.I. (2022) Brazilin Isolated from *Caesalpinia Sappan* Wood Induces Intrinsic Apoptosis on A549 Cancer Cell Line by Increasing p53, caspase-9, and caspase-3. *Asian Pac J Cancer Prev*, 23(4), pp. 1337-1343.
- Taher, D.M., Solihin, D.D., Cahyaningsih, U., dan Sugita, P. (2018) Ekstrak Metanol Cengkeh (*Syzygium aromaticum* (L.) Merr & Perry) Varietas Tuni Buru Selatan sebagai Antimalaria. *ACTA Veterania Indonesiana*, 6(2), pp. 38-47.
- To'bungan, N. (2023) Antiproliferative and apoptotic effect of Knobweed (*Hyptiscapitata*) root methanol extract on WiDr colorectal cancer cells. *Plant Science Today*, 10(3), pp. 393-398.
- Utari, D. (2024) Efek Sinergis Kurkumin dan Kuersetin sebagai Agen Antikanker pada Sel Hela dan Sel Vero secara *in vitro*. *Medical Sains*, 8(4), pp. 1-8.
- Vodenkova, S., Buchler, T., Cervena, K., Veskrnova, V., Vodicka, P., dan Vymetalkova, V. (2020) 5-fluorouracil and other fluoropyrimidines in colorectal cancer: Past, present and future. *Pharmacology & Therapeutics*, 206, pp. 1-19.
- Wang, R., Ma, L., Weng, D., Yao, J., Liu, X., dan Jin, F. (2016) Gallic acid induces apoptosis and enhances the anticancer effects of cisplatin in human small cell lung cancer H446 cell line via the ROS-dependent mitochondrial apoptotic pathway. *Oncology Report*, 35, pp. 3075-3083.
- Winasih, P.A., Supriyadi, dan Turahman, T. (2023) Uji Aktivitas Antioksidan Wedang Uwuh dengan Variasi Formula Jenis Jahe dan Waktu Penyeduhan. *Jurnal Sains dan Kesehatan*, 5(5), pp. 633-642.
- Worsley, C.M., Veale, R.B., dan Mayne, E.S. (2022) Inducing apoptosis using chemical treatment and acidic pH, and detecting it using the Annexin V flow cytometric assay. *Plos One*, 17(6), pp. 1-7.
- Yadav, A.K. dan Jang, B.C. (2020) Anti-Survival and Pro-Apoptotic Effects of 6-Shogaol on SW872 Human Liposarcoma Cells via Control of the Intrinsic Caspase Pathway, STAT-3, AMPK, and ER Stress. *Biomolecules*, 10(10), pp. 1-17.
- Yudhani, R.R. (2014) Farmakogenomik dan Terapi Kanker. *CKD-217*, 41(6), pp. 412-415.
- Zhao, Q., Long, Y., Cheng, W., Huang, Y., Li, J., Li, Y., Li, X., Guo, X., Li, Y., Li, G., Gong, K., dan Zhang, J. (2022) Visfatin inhibit colon cancer cell apoptosis and decreases chemosensitivity to 5-FU by promoting the SDF-1/CXCR4/Akt axis. *International Journal of Oncology*, 60(75), pp. 1-13.