DAFTAR PUSTAKA

Anonim, 2008, *Prevention, Cancer Control: Knowledge into Action: WHO Guide for Effective Programmes*, module 2, World Health Organization, Geneva.

Anonim, 2011, *Vanillin GPS Safety Summary*, Rhodia, La Défense.

Anonim, 2012, *GLOBOCAN 2012: Estimated Cancer Incidence, Mortality, and Prevalence Worldwide in 2012*, International Agency for Research on Cancer (IARC), Lyon.

Anonim, 2013, *Laporan Riset Kesehatan Dasar (Riskesdas) 2013*, Badan Penelitian dan Pengembangan Kesehatan Departemen Kesehatan RI, Jakarta.

Banday, A.H., Mir, B.P., Lone, I.H., Suri, K.A., and Kumar, H.M.S., 2010, Studies on Novel D-ring Substituted Steroidal Pyrazolines as Potential Anticancer Agents, *Steroids*, 75, 805-809.

Burdall, E.S., Hanby, M.A., Landsdown, R.J.M., and Speirs, V., 2003, Breast Cancer Cell Line, *Breast Cancer Res.*, 5(2), 89-95.

Carey, F.A., and Sundberg, R.J., 2008, *Advanced Organic Chemistry Part B: Reactions and Synthesis*, 5th Ed., Springer, New York.

Choudhary, I.M., Alam, S.M., Atta-ur-Rahman, Yousuf, S., Wu, Y.C., Lin, A.S., and Shaheen, F., 2011, Pregnenolone Derivatives as Potential Anticancer Agents, *Steroids*, 76, 1554-1559.

Dewi, G.A.T., dan Hendrati, L.Y., 2015, Analisis Risiko Kanker Payudara Berdasar Riwayat Pemakaian Kontrasepsi Hormonal dan Usia Menarche, Jurnal Berkala Epidemiologi, 3(1), 12-23.

Dignum, M.J.W., Kerler, J., and Verpoorte, R., 2001, Vanilla Production: Technological, Chemical, and Biosynthetic Aspects, *Food Rev. Int.*, 17(2), 199-219.

Divekar, K., Swamy, S., and Murugan, V., 2014, Synthesis, Characterization and Anticancer Activity of Some Novel Pyrazoline Derivatives, *Int. J. Pharm. Phytopharmacol. Res.*, 3(6), 447-450.

Doan, T.N., and Tran, D.T., 2011, Synthesis, Antioxidant and Antimicrobial Activities of a Novel Series of Chalcones, Pyrazolic Chalcones, and Allilic Chalcones, *J. Pharm. Pharmacol*, 2, 282-288.

Doyle, A., Griffiths, J.B., and Newell, D.G., 2000, *Cell and Tissue Culture: Laboratory Procedures*, 3rd Ed., John Wiley & Sons, New Jersey.

Ebada, S.S., Edrada, R.A., Lin, W., and Proksch, P., 2008, Methods for Isolation, Purification and Structural Elucidation of Bioactive Secondary Metabolites from Marine Invertebrates, *Nat. Protoc.*, 3(12), 1821-1831.

Eicher, T., Hauptmann, S., and Speicher, A., 2013, *The Chemistry of Heterocycles: Structures, Reactions, Synthesis, and Application*, John Wiley & Sons, New Jersey.

Finney, D.J., 1971, *Probit Analysis* (dalam Heinrichs, E.A., Chellilah, S., Valencia, S.L., Arceo, M.B., Fabellar, L.T., Aquino, G.B., and Pickin, S., 1981, *Manual for Testing Insecticides on Rice*, International Rice Research Institute, Manila), 3rd Ed., Cambridge University Press, London.

Fleisher, V.L., and Andryukhova, M.V., 2012, Preparative Synthesis of Fragrance Substances Based on Vanillin and Veratraldehyde, *Proceedings of BSTU*, 19 March 2012, Minsk.

Geran, R.I., Greenberg, N.H., MacDonald, M.M., Schumacher, A.M., and Abbott, B.J., 1972, Protocol for Screening Chemical Agents and Natural Product Against Animal Tumors and Other Biological System, *Cancer Chemother*., 3, 59-61.

Goodwin, E., and DiMaio, D., 2000, Repression of Human Papillomavirus Oncogenes in Hela Cervical Carcinoma Cells Causes the Orderly Reactivation of Dormant Tumor Suppressor Pathways, *Biochem.*, 97(23), 12513-12518.

Gupta, R., Gupta, N., and Jain, A., 2010, Improved Synthesis of Chalcones and Pyrazolines under Ultrasonic Irradiation, *J. Indian. Chem. Soc.*, 49B, 351-355.

Gürdere, M.B., Gümüs, O., Yaglioglu, A.S., Budak, Y., and Ceylan, M., 2016, Synthesis and Anticancer Activities of 1,4-phenylene-bis-*N*-acetyl- and *N*-phenylpyrazoline Derivatives, *Res. Chem. Intermed.*, 1-13.

Handayani, S., Arianingrum, R., dan Haryadi, W., 2013, Aktivitas Antioksidan dan Antikanker Turunan Benzalaseton, *Jurnal Penelitian Saintek*, 18(1), 71-83.

Hawaiz, F.E., and Samad, M.K., 2012, Synthesis and Spectroscopic Characterization of Some New Biological Active Azo-pyrazoline Derivatives, *E. J. Chem.*, 9(3), 1613-1622.

Insuasty, B., Montoya, A., Becerra, D., Quiroga, J., Abonia, R., Robledo, S., Vélez, I.D., Upegui, Y., Nogueras, M., and Cobo, J., 2013, Synthesis of Novel Analogs of 2-pyrazoline Obtained from [(7-chloroquinolin-4-

yl)amino]chalcones and Hydrazine as Potential Antitumor and Antimalarial Agents, *Euro. J. Med. Chem.*, 67, 252-262.

Insuasty, B., Tigreros, A., Orozco, F., Quiroga, J., Abonía, R., Nogueras, M., Sanchez, A., and Cobo, J., 2010, Synthesis of Novel Pyrazolic Analogues of Chalcones and Their 3-aryl-4-(3-aryl-4,5-dihydro-1*H*-pyrazol-5-yl)-1-phenyl-1*H*-pyrazole Derivatives as Potential Antitumor Agents, *Bioorg. Med. Chem.*, 18, 4965-4974.

Jansen, W.J.M., Zwart, B., Hulscher, S.T.M., Giaccone, Pinedo, H.M., and Boven, E., 1997, CPT-11 in Human Colon-Cancer Cell Lines and Xenografts: Characterization of Cellular Sensitivity Determinants, *Int. J. Cancer*, 70, 335-340.

Jarag, K.J., Pinjari, D.V., Pandit, A.B., and Shankarling, G.S., 2011, Synthesis of Chalcone (3-(4-fluorophenyl)-1-(4-methoxyphenyl)-prop-2-en-1-one): Advantage of Sonochemical Method over Conventional Method, *Ultrason. Sonochem.*, 18, 617-623.

Johnson, M., Younglove, B., Lee, L., LeBlanc, R., Holt, Jr. H., Hills, P., Mackay, H., Brown, T., Mooberry, S.L., and Lee, M., 2007, Design, Synthesis, and Biological Testing of Pyrazoline Derivatives of Combretastatin-A4, *Bioorg. Med. Chem. Lett.*, 17, 5897-5901.

Karabacak, M., Altıntop, M.D., Çiftçi, H.I., Koga, R., Otsuka, M., Fujita, M., and Özdemir, A., 2015, Synthesis and Evaluation of New Pyrazoline Derivatives as Potential Anticancer Agents, *Molecules*, 20, 19066-19084.

Kiran, K., Ashok, D., Rao, B.A., Sarasija, M., and Rao, A.S., 2017, Synthesis of Novel Pyrazoline-based bis(1,2,3-triazole) Scaffolds via Click Chemistry, *J. Serb. Chem. Soc.*, 82(3), 241-251.

Kotla, V.V., Dalavai, V.K., and Chunduri, V.R., 2012, Synthesis and Biological Activity Studies of Some Novel Pyrazoline Derivatives, *Der. Pharma. Chemica.*, 4(5), 2003-2008.

Kumar, R., Sharma, P.K., and Mishra, P.S., 2012, A Review on the Vanillin Derivatives Showing Various Biological Activities, *Int. J. PharmTech. Res.*, 4(1), 266-279.

Li, J.T., Zhang, X.H., and Lin, Z.P., 2007, An Improved Synthesis of 1,3,5-triaryl-2-pyrazolines in Acetic Acid Aqueous Solution under Ultrasound Irradiation, *Beilstein J. Chem.*, 3(13), 1-4.

Lv, C.P., Li, H.Q., Sun, J., Zhou, Y., and Zhu, H.L., 2010, Synthesis and Biological Evaluation of Pyrazole Derivatives Containing Thiourea Skeleton as Anticancer Agents, *Bioorg. Med. Chem.*, 18, 4606-4614.

Mahapatra, D.K., Bharti, S.K., and Asati, V., 2015, Anti-cancer Chalcones: Structural and Molecular Target Perspectives, *Eur. J. Med. Chem.*, 98, 69-114.

Manna, F., Chimenti, F., Fioravanti, R., Bolasco, A., Secci, D., Chimenti, P., Ferlini, C., and Scambia G., 2005, Synthesis of Some Pyrazole Derivatives and Preliminary Investigation of Their Affinity Binding to P-glycoprotein, *Bioorg. Med. Chem. Lett.*, 15, 4632-4635.

March, J., and Smith, M.B., 2007, *March's Advanced Organic Chemistry: Reaction, Mechanism, and Structure*, 6th Ed., Wiley, New York.

McCauley, J., Zivanovic, A., and Skropeta, D., 2013, Bioassays for Anticancer Activities, *Mol. Biol.*, 1055, 191-205.

Meiyanto, E., Susidarti, R.A., Handayani, S., dan Rahmi, F., 2008, Ekstrak Etanolik Biji Buah Pinang (*Areca catechu* L.) Mampu Menghambat Proliferasi dan Memacu Apoptosis Sel MCF-7, *Majalah Farmasi Indonesia*, 19(1), 12-19.

Nofiyanti, E.D., 2014, Sintesis dan Uji Aktivitas Antibakteri Secara *In Vitro* Turunan Kloropirazolina Berbahan Dasar Vanilin, *Tesis*, Departemen Kimia FMIPA UGM, Yogyakarta.

Ouyang, Y., Dong, D., Pan, W., Zhang, J., and Liu, Q., 2006, Facile and Clean Synthesis of L-alkenoyl Ketene-(S,S)-acetals via the Aldol Condensation Reactions in Water, *Tetrahedron.*, 62, 10111-10116.

Pambuka, R.I., 2016, Sintesis *N*-asetil Pirazolina Berbahan Dasar 4-hidroksiasetofenon dan Vanilin serta Uji Toksisitasnya Terhadap Beberapa Sel Kanker, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.

Parajuli, R.R., Pokhrel, P., Tiwari, A.K., and Banerjee, J., 2013, Pharmacological Activities of Pyrazolone Derivatives, *J. App. Pharm. Res.*, 10(1), 5-13.

Patil, C.B., Mahajan, S.K., and Katti, S.A., 2009, Chalcone: A Versatile Molecule, *J. Pharm. Sci. & Res.*, 1(3), 11-22.

Prasetyorini, Wiendarlina, I.Y., dan Peron, A.B., 2011, Toksisitas Beberapa Ekstrak Rimpang Cabang Temulawak (*Curcuma xanthorrhiza* Roxb.) pada Larva Udang (*Artemia salina* Leach), *Fitofarmaka*, 1(2), 14-20.

Raghavan, S., Manogaran, P., Kuppuswami, B.K., Venkatraman, G., and Narasimha, K.K.G., 2015, Synthesis and Anticancer Activity of Chalcones Derived from Vanillin and Isovanillin, *Med. Chem. Res.*, 24, 4157-4165.

Rahman, M.A., and Siddiqui, A.A., 2010, Pyrazoline Derivatives: A Worthy Insight into the Recent Advances and Potential Pharmacological Activities, *Int. J. Pharma. Sci. Drug Res.*, 2(3), 165-175.

Sharma, M., Sharma, S., Buddhiraja, A., Saxena, A.K., Nepali, K., and Bedi, P.M.S., 2014, Synthesis and Cytotoxicity Studies of 3,5-diaryl *N*-acetylpyrazoline-isatin Hybrids, *Med. Chem. Res.*, 23, 4337-4344.

Sharshira, E.M., and Hamada, N.M.M., 2011, Synthesis and In-vitro Antimicrobial Activity of Some Pyrazolyl-1-carboxamide Derivatives, *Molecules*, 16, 7736-7745.

Sigmond, J., Backus, H.H., Wouters, D., Temmink, O.H., Jansen, G., and Peters, G.J., 2003, Induction of Resistance to the Multitargeted Antifolate Pemetrexed (ALIMTA) in WiDr Human Colon Cancer Cells is Associated with Thymidilate Synthase Overexpression, *Biochem. Pharmacol.*, 66(3), 431-438.

Siregar, F., dan Hadijono, B.S., 2000, Uji Sitotoksisitas dengan Esei MTT, *Jurnal Kedokteran Gigi Universitas Indonesia (JKGUI)*, 7(Edisi Khusus), 28-32.

Siswandono, dan Soekardjo, 1995, *Kimia Medisinal*, Airlangga University Press, Surabaya.

Verma, S.P., Goldin, B.R., and Lin, P.S., 1998, The Inhibition of the Estrogenic Effects of Pesticides dan Enviromental Chemicals by Curcumin and Isoflavonoids, *Envir. Health Presp.*, 106(12), 807-812.

Vogel, A.I., Mendham, J., Denney, R.C., and Barnes, J.D., 2000, *Vogel's Textbook of Quantitative Chemical Analysis*, 6th Ed., Prentice Hall, New Jersey.

Wati, A., 2016, Sintesis *N*-asetilpirazolina Berbahan Dasar Veratraldehida dan 2-hidroksiasetofenon serta Selektivitasnya Terhadap Beberapa Sel Kanker, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.

Wulandari, R.D., 2008, Genetika Kanker, *Jurnal Ilimah Kedokteran Wijaya Kusuma*, 2(1), 1-7.

Yanty, S.D., 2016, Sintesis dan Uji Aktivitas Antikanker Senyawa *N*-asetil Pirazolina Berbahan Dasar Veratraldehida dan 4-kloroasetofenon, *Skripsi*, Departemen Kimia FMIPA UGM, Yogyakarta.

Zampieri, L., Bianchi, P., Ruff, P., and Arbuthnot, P., 2002, Differential Modulation by Estradiol of P-glycoprotein Drug Resistance Protein Expression in Cultured MCF7 and T47D Breast Cancer Cells, *Anticancer Res.*, 22(4), 2253-2259.