

## DAFTAR PUSTAKA

- Afifah, E. dan Lentera, 2003. , dalam: *Khasiat & manfaat temulawak: rimpang penyembuh aneka penyakit*. AgroMedia, hal. 2–3.
- Ahuja, S. dan Dong, M., 2005. , dalam: *Handbook of Pharmaceutical Analysis by HPLC*. Elsevier, hal. 20-22; 203.
- Anubala, S., Sekar, R., dan Nagaiah, K., 2014. Development and validation of an analytical method for the separation and determination of major bioactive curcuminoids in *Curcuma longa* rhizomes and herbal products using non-aqueous capillary electrophoresis. *Talanta*, **123**: 10–17.
- Araujo, P., 2009. Key aspects of analytical method validation and linearity evaluation. *Journal of Chromatography B*, **877**: 2224–2234.
- Bos R, Windono T, Woendenbag HJ, Boersma YL, Koulman A, dan Kayser O, 2007. HPLC-photodiode array detection analysis of curcuminoids in curcuma species indigenous to Indonesia. *Phytochemical Analysis* **18**, 118–122.
- Brereton, R.G., 2013. Chemometrics and Statistics: Multivariate Classification Techniques, dalam: *Reference Module in Chemistry, Molecular Sciences and Chemical Engineering*. Elsevier.
- Danzer, K., Otto, M., dan Currie, L.A., 2004. Guidelines for calibration in analytical chemistry Part 2. multispecies calibration: (IUPAC Technical Report). *Pure and Applied Chemistry*, **76**: 1215–1225.
- Depkes RI, 2008. *Farmakope Herbal Indonesia*, 1st ed. Departemen Kesehatan Republik Indonesia, Jakarta.
- Depkes RI, 2013. 'Permenkes No.33 tahun 2013 tentang Rencana Induk Pengembangan Bahan Baku Obat Tradisional', . Departemen Kesehatan Republik Indonesia, Jakarta.
- Devaraj, S., Esfahani, A.S., Ismail, S., Ramanathan, S., dan Yam, M.F., 2010. Evaluation of the antinociceptive activity and acute oral toxicity of standardized ethanolic extract of the rhizome of *Curcuma xanthorrhiza* Roxb. *Molecules (Basel, Switzerland)*, **15**: 2925–2934.
- Devaraj, S., Ismail, S., Ramanathan, S., dan Yam, M.F., 2014. Investigation of antioxidant and hepatoprotective activity of standardized *Curcuma xanthorrhiza* rhizome in carbon tetrachloride-induced hepatic damaged rats. *TheScientificWorldJournal*, **2014**: 353128.
- González, A.G. dan Herrador, M.A., 2007. A practical guide to analytical method validation, including measurement uncertainty and accuracy profiles. *TrAC Trends in Analytical Chemistry*, **26**: 227–238.
- Huber, L., 2007. Validation of Analytical Methods, dalam: *Validation and Qualification in Analytical Laboratories*. Informa Healthcare, hal. 8–28.

- ICH Q2R1, 2005. 'Validation of Analytical Procedures: Text and Technology', .  
Dipresentasikan pada International Conference On Harmonisation of  
Technical Requirement for Pharmaceuticals for Human Use.
- ISO IEC 17025, 2005. 'General requiremen for the competence of testing and  
calibration laboratorium', .
- Jadhav, B.-K., Mahadik, K.-R., dan Paradkar, A.-R., 2007. Development and  
Validation of Improved Reversed Phase-HPLC Method for Simultaneous  
Determination of Curcumin, Demethoxycurcumin and Bis-  
Demethoxycurcumin. *Chromatographia*, **65**: 483–488.
- Jantan, I., Saputri, F.C., Qaisar, M.N., dan Buang, F., 2012. Correlation between  
Chemical Composition of *Curcuma domestica* and *Curcuma xanthorrhiza*  
and Their Antioxidant Effect on Human Low-Density Lipoprotein  
Oxidation. *Evidence-Based Complementary and Alternative Medicine: eCAM*, **2012**: 438356.
- Jayaprakasha, G.K., Jagan Mohan Rao, L., dan Sakariah, K.K., 2002. Improved  
HPLC method for the determination of curcumin, demethoxycurcumin,  
and bisdemethoxycurcumin. *Journal of Agricultural and Food Chemistry*,  
**50**: 3668–3672.
- Jiang, H., Somogyi, A., Jacobsen, N.E., Timmermann, B.N., dan Gang, D.R.,  
2006. Analysis of curcuminoids by positive and negative electrospray  
ionization and tandem mass spectrometry. *Rapid communications in mass  
spectrometry: RCM*, **20**: 1001–1012.
- Kealey, D. dan Haines, P.J., 2002. , dalam: *BIOS Instant Notes in Analytical  
Chemistry*. Garland Science, hal. 155–166.
- Kim, A.-J., Kim, Y.-O., Shim, J.-S., dan Hwang, J.-K., 2007. Immunostimulating  
activity of crude polysaccharide extract isolated from *Curcuma  
xanthorrhiza* Roxb. *Bioscience, Biotechnology, and Biochemistry*, **71**:  
1428–1438.
- Lechtenberg, M., Quandt, B., dan Nahrstedt, A., 2004. Quantitative determination  
of curcuminoids in *Curcuma* rhizomes and rapid differentiation of  
*Curcuma domestica* Val. and *Curcuma xanthorrhiza* Roxb. by capillary  
electrophoresis. *Phytochemical analysis: PCA*, **15**: 152–158.
- Lee, J.H. dan Choung, M.-G., 2011. Determination of curcuminoid colouring  
principles in commercial foods by HPLC. *Food Chemistry*, **124**: 1217–  
1222.
- Li, H.-X., Zhang, H.-L., Zhang, N., Wang, N., Yang, Y., dan Zhang, Z.-Z., 2014.  
Isolation of three curcuminoids for stability and simultaneous  
determination of only using one single standard substance in turmeric  
colour principles by HPLC with ternary gradient system. *LWT - Food  
Science and Technology*, **57**: 446–451.

- Li, R., Xiang, C., Ye, M., Li, H.-F., Zhang, X., dan Guo, D.-A., 2011. Qualitative and quantitative analysis of curcuminoids in herbal medicines derived from *Curcuma* species. *Food Chemistry*, **126**: 1890–1895.
- Lin, S.-C., Teng, C.-W., Lin, C.-C., Lin, Y.-H., dan Supriyatna, S., 1996. Protective and Therapeutic Effect of the Indonesian Medicinal Herb *Curcuma xanthorrhiza* on  $\beta$ -D-Galactosamine-induced Liver Damage. *Phytotherapy Research*, **10**: 131–135.
- Lu, H., Wang, S., Cai, R., Meng, Y., Xie, X., dan Zhao, W., 2012. Rapid discrimination and quantification of alkaloids in *Corydalis* Tuber by near-infrared spectroscopy. *Journal of Pharmaceutical and Biomedical Analysis*, **59**: 44–49.
- Miller, J.N. dan Miller, J.C., 2005. , dalam: *Statistics and Chemometrics for Analytical Chemistry*. Pearson/Prentice Hall, hal. 37–65, 243–244,266.
- Moros, J., Garrigues, S., dan Guardia, M. de la, 2010. Vibrational spectroscopy provides a green tool for multi-component analysis. *TrAC Trends in Analytical Chemistry*, , Green analytical chemistry **29**: 578–591.
- Osborne, S.D., Künnemeyer, R., Osborne, S.D., dan Jordan, R.B., 1997. Method of Wavelength Selection for Partial Least Squares. *The Analyst*, **122**: 1531–1537.
- Park, J.H., Park, K.K., Kim, M.J., Hwang, J.K., Park, S.K., dan Chung, W.Y., 2008. Cancer chemoprotective effects of *Curcuma xanthorrhiza*. *Phytotherapy research: PTR*, **22**: 695–698.
- Pavia, D.L., Lampman, G.M., dan Kriz, G.S., 2001. , dalam: *Introduction To Spectroscopy*. Thomson Learning, Inc., hal. 13–71.
- Péret-Almeida, L., Cherubino, A.P.F., Alves, R.J., Dufossé, L., dan Glória, M.B.A., 2005. Separation and determination of the physico-chemical characteristics of curcumin, demethoxycurcumin and bisdemethoxycurcumin. *Food Research International*, , Third International Congress on Pigments in Food Third International Congress on Pigments in Food **38**: 1039–1044.
- Rohaeti, E., Rafi, M., Syafitri, U.D., dan Heryanto, R., 2015. Fourier transform infrared spectroscopy combined with chemometrics for discrimination of *Curcuma longa*, *Curcuma xanthorrhiza* and *Zingiber cassumunar*. *Spectrochimica Acta. Part A, Molecular and Biomolecular Spectroscopy*, **137**: 1244–1249.
- Rohman, A., 2014. , dalam: *Spektroskopi Inframerah Dan Kemometrika Untuk Analisis Farmasi*. Pustaka Pelajar, Yogyakarta, hal. 48-68-225.
- Ruslay, S., Abas, F., Shaari, K., Zainal, Z., Maulidiani, Sirat, H., dkk., 2007. Characterization of the components present in the active fractions of health gingers (*Curcuma xanthorrhiza* and *Zingiber zerumbet*) by HPLC–DAD–ESIMS. *Food Chemistry*, **104**: 1183–1191.

- Sarker, S.D., Latif, Z., dan Gray, A.I., 2005. , dalam: *Natural Products Isolation*. Springer Science & Business Media, hal. 78–82.
- Snyder, L.R. dan Dolan, J., 2010. , dalam: *Introduction to Modern Liquid Chromatography*. John Wiley & Sons Inc. Publication, USA, hal. 542–543.
- Snyder, L.R., Kirkland, J.J., dan Glajch, J.L., 1997. , dalam: *Practical HPLC Method Development*. John Wiley & Sons, New York, hal. 77–79, 235–251, 705–706.
- Stuart, B.H., 2004. , dalam: *Infrared Spectroscopy: Fundamentals and Applications*. John Wiley & Sons, hal. 15–70.
- Sun, X., Gao, C., Cao, W., Yang, X., dan Wang, E., 2002. Capillary electrophoresis with amperometric detection of curcumin in Chinese herbal medicine pretreated by solid-phase extraction. *Journal of Chromatography A*, **962**: 117–125.
- Syed, H.K., Liew, K.B., Loh, G.O.K., dan Peh, K.K., 2015. Stability indicating HPLC–UV method for detection of curcumin in *Curcuma longa* extract and emulsion formulation. *Food Chemistry*, **170**: 321–326.
- Tanaka, K., Kuba, Y., Sasaki, T., Hiwatashi, F., dan Komatsu, K., 2008. Quantitation of Curcuminoids in *Curcuma* Rhizome by Near-infrared Spectroscopic Analysis. *Journal of Agricultural and Food Chemistry*, **56**: 8787–8792.
- Uehara, S., Yasuda, I., Takeya, K., dan Itokawa, H., 1992. [Terpenoids and curcuminoids of the rhizoma of *Curcuma xanthorrhiza* Roxb]. *Yakugaku Zasshi: Journal of the Pharmaceutical Society of Japan*, **112**: 817–823.
- Wagner, H. dan Bladt, S., 1996. , dalam: *Plant Drug Analysis: A Thin Layer Chromatography Atlas*. Springer Science & Business Media, hal. 188–196.
- Watanabe, T., Mazumder, T.K., Yamamoto, A., Nagai, S., dan Terabe, S., 2000. Separation and determination of curcuminoids in turmeric samples by micellar electrokinetic chromatography with a high molecular mass surfactant. *Nippon Shokuhin Kagaku Kogaku Kaishi = Journal of the Japanese Society for Food Science and Technology*, **47**: 780–786.
- Wichitnithad, W., Jongaroonngamsang, N., Pummangura, S., dan Rojsitthisak, P., 2009. A simple isocratic HPLC method for the simultaneous determination of curcuminoids in commercial turmeric extracts. *Phytochemical analysis: PCA*, **20**: 314–319.
- Zhang, J.S., Guan, J., Yang, F.Q., Liu, H.G., Cheng, X.J., dan Li, S.P., 2008. Qualitative and quantitative analysis of four species of *Curcuma* rhizomes using twice development thin layer chromatography. *Journal of Pharmaceutical and Biomedical Analysis*, **48**: 1024–1028.