

REFERENCES

REFERENCES

- Athukorala, Y., Mazza, G. and Oomah, B.D. (2009). Extraction, purification and characterization of wax from flax (*Linum usitatissimum*) straw. **European Journal of Lipid Science and Technology**, 111(7), 705-714.
- Bai, N., He, K., Roller, M., Zheng, B., Chen, X., Shao, Z., et al. (2008). Active compounds from *Lagerstroemia speciosa*, insulin-like glucose uptake-stimulatory/ inhibitory and adipocyte differentiation-inhibitory activities in 3T3-L1 cells. **Journal of Agricultural and Food Chemistry**, 56(24), 11668-11674.
- Boonphong, S., Mopoung, S., Maneerunroj, C., Yannalarp, P. and Udeye, V. (2003). **Bioactivity screening of Lagerstroemia**. Phitsanulok, Thailand: Faculty of Science, Naresuan University.
- Choi, H.J., Bae, E. Y., Song, J.H., Baek, S.H. and Kwon, D.H. (2010). Inhibitory effects of orobol 7-O-D-glucoside from banaba (*Lagerstroemia speciosa* L.) on human rhinoviruses replication. **Letters in Applied Microbiology**, 51(1), 1-5.
- Christie, W.W. (2012). **Waxes: Structure, composition, occurrence and analysis**. **The Lipid Library**. Retrieved February 17, 2014, from <http://lipidlibrary.aocs.org/Lipids/waxes/file.pdf>
- Dou, H., Zhang, R., Lou, X., Jia, J., Zhou, C. and Zhao, Y. (2005). Constituents of three species of lagerstroemia. **Biochemical Systematics and Ecology**, 33(6), 639-642.
- EFSA. (2012). **Scientific opinion on the re-evaluation of carnauba wax (E 903) as a food additive**. Retrieved March 1, 2014, from <http://www.efsa.europa.eu>
- Ferris, J.P., Briner, R.C. and Boyce, C.B. (1971). Lythraceae alkaloids. IX. The isolation and structure elucidation of the alkaloids of *Lagerstroemia indica* L. **Journal of the American Chemical Society**, 93(12), 2958-2962.

- Filho, A.A.S., Resende, D.O., Fukui, M.J., Santos, F.F., Pauletti, P.M., Cunha, W.R., et al. (2009). In vitro antileishmanial, antiplasmodial and cytotoxic activities of phenolics and triterpenoids from *Baccharis dracunculifolia* D.C. (Asteraceae). **Fitoterapia**, 80, 478-482.
- Gohari, A.R., Saeidnia, S., Shahverdi, A.R., Yassa, N., Malmir, M., Mollazade, K., et al. (2009). Phytochemistry and antimicrobial compounds of *Hymenocrater calycinus*. **EurAsian Journal of BioSciences**, 3(9), 64-68.
- Hashem, F.A., Sengab, A.E., Shabana, M.H. and Khaled, S. (2012). Antioxidant activity of *Mayodendron igneum* Kurz and the cytotoxicity of the isolated terpenoids. **Journal of Medicinally Active Plants**, 1(3), 88-97.
- Hattori, K., Sukenobu, N., Sasaki, T., Takasuga, S., Hayashi, T., Kasai, R., et al. (2003). Activation of insulin receptors by lagerstroemin. **Journal of Pharmacological Sciences**, 93(1), 69-73.
- Hayashi, T., Maruyama, H., Kasai, R., Hattori, K., Takasuga, S., Hazeki, O., et al. (2002). Ellagitannins from *Lagerstroemia speciosa* as activators of glucose transport in fat cells. **Planta medicinal**, 68(2), 173-175.
- Hou, W., Li, Y., Zhang, Q., Wei, X., Peng, A., Chen, L., et al. (2009). Triterpene acids isolated from *Lagerstroemia speciosa* leaves as α -glucosidase inhibitors. **Phytotherapy Research**, 23(5), 614-618.
- Huanbutta, V. (1999). **Mai-ton-pradap No.2** (2nd ed.). Bangkok: Ban Lae Suan.
- Huang, G.H., Zhan, Q., Li, J.L., Chen, C., Huang, D.D., Chen, W.S., et al. (2013). Chemical constituents from leaves of *Lagerstroemia speciosa* L. **Biochemical Systematics and Ecology**, 51, 109-112.
- Inarkar, M.B. and Lele, S.S. (2012). **Extraction and characterization of sugarcane peel wax**. N.P.: n.p.
- JECFA. (2005). **Chemical and Technical Assessment 65th JECFA**. Retrieved March 1, 2014, from http://www.fao.org/fileadmin/templates/agns/pdf/jecfa/cta/65/candelilla_wax.pdf.
- Judy, W.V., Hari, S.P., Stogsdill, W.W., Judy, J.S., Naguib, Y.M. and Passwater, R. (2003). Antidiabetic activity of a standardized extract (glucosol) from *Lagerstroemia speciosa* leaves in type II diabetics. A dose-dependence study. **Journal Ethnopharmacol**, 87, 115-117.

- Kashiwada, Y., Nagao, T., Hashimoto, A., Ikeshiro, Y., Okabe, H., Cosentino, L.M., et al. (2000). Anti-AIDS agents 38. Anti-HIV activity of 3-*O*-acyl ursolic acid derivatives. **Journal of Natural Products**, 63, 1619-1622.
- Khoo, G.M. (2011). **Bioactive plant foods**. Doctoral dissertation, Ph.D., Aarhus University, Aarhus.
- Kim, H.J., Lee, I.S., Youn, U., Chen, Q.C., Ngoc, T.M., Ha, D.T., et al. (2009). Biphenyl quinolizidine alkaloids from *Lagerstroemia indica*. **Journal of Natural Products**, 72(4), 749-752.
- Liu, J. (1995). Pharmacology of oleanolic acid and ursolic acid. **Journal of Ethnopharmacology**, 49, 57-68.
- Liu, X., Kim, J., Li, Y., Li, J., Liu, F. and Chen, X. (2005). Tannic acid stimulates glucose transport and inhibits adipocyte differentiation in 3T3-L1 cells. **Journal of Nutrition**, 135(2), 165-171.
- Malaisree, M., Srisomang, R. and Boonphong, S. (2006). Chemical constituents of *Lagerstroemia loudonii* flower and their antioxidant activities. **Naresuan University Science Journal**, 2(2), 231-240.
- Muhit, A., Tareq, S.M., Apu, A.S., Basak, D. and Islam, M.S. (2010). Isolation and identification of compounds from the leaf extract of *Dillenia indica* Linn. **Bangladesh Pharmaceutical Journal**, 13(1), 49-53.
- Murakami, C., Myoga, K., Kasai, R., Ohtani, K., Kurokawa, T., Ishibashi, S., et al. (1993). Screening of plant constituents for effect on glucose transport activity on Ehrlich ascites tumor cells. **Chemical and Pharmaceutical Bulletin**, 41(2), 2129-2131.
- Nutan, Modi, M., Goel, T., Das, T., Malik, S. and Suri S. (2013). Ellagic acid and gallic acid from *Lagerstroemia speciosa* L. inhibit HIV-1 infection through inhibition of HIV-1 protease & reverse transcriptase activity. **Indian Journal of Medical Research**, 137(3), 540-548.
- Okada, Y., Omae, A. and Okuyama, T. (2003). A new triterpenoid isolated from *Lagerstroemia speciosa* (L.) Pers. **Chemical and Pharmaceutical Bulletin**, 51(4), 452-454.
- Pouchert, C. and Behnke, J. (1993). **Aldrich Library of ¹³C and ¹H FT-NMR Spectra volume I-III**. USA: Wisconsin, Aldrich Chemical.

- Prasitpan, N., Tivakornpannarai, S., Tantivanich, A., Pongumpai, S. and Likittammanit, P. (1988). Survey of alkaloids from *Lagerstroemia*. **Kasetsart Journal: Natural Science**, 22(3), 207-212.
- Punyaprabhasara, N. and Chokchaicharoenphon, O. (2000). **Traditional herbs (5)**. Bangkok: Prachachon Co.
- Ragasa, C.Y. and Lim, K. (2005). Secondary metabolites from *Schefflera odorata* Blanco. **Philippine Journal of Science**, 134(1), 63-67.
- Ragasa, C.Y., Ngo, H.T. and Rideout, J.A. (2005). Terpenoids and sterols from *Lagerstroemia speciosa*. **Journal of Asian Natural Products Research**, 7(1), 7-12.
- Sairafianpour, M., Bahreininejad, B., Witt, M., Ziegler, H.L., Jaroszewski, J.W. and Staerk, D. (2003). Terpenoids of *Salvia hydrangea*: Two new, rearranged 20-norabietanes and the effect of oleanolic acid on erythrocyte membrane. **Planta Medica**, 69, 846-850.
- Sato, J., Goto, K., Nanjo, F., Kawai, S. and Murata, K. (2000). Antifungal activity of plant extracts against *Arthrinium sacchari* and *Chaetomium funicola*. **Journal of Bioscience and Bioengineering**, 90(4), 442-446.
- Sato, T. and Ueda, J. (1990). Component of the cultivated *Lagerstroemia indica* L. with red flower. **Annual Report of the Tohoku College of Pharmacy**, 37, 125-128.
- Sharma, P., Farooqi, H., Khan, H.N., Akhtar, P. and Ali, M. (2010). Phytochemical investigation of fruits of *Corylus colurna* Linn. **Journal of Phytology**, 2(3), 89-100.
- Silva, G.N.S., Maria, N.R.G., Schuck, D.C., Cruz, L.N., Moraes, M.S., Nakabashi, M., et al. (2013). Two series of new semisynthetic triterpene derivatives: Differences in anti-malarial activity, cytotoxicity and mechanism of action. **Malaria Journal**, 12(89), 1-7.
- Smitinand, T. (2001). **Thai plant names** (2nd ed.). Bangkok: The Forest Herbarium, Royal Forest Department.

- Suzuki, Y., Unno, T., Ushitani, M., Hayashi, K. and Kakuda, T. (1999). Antiobesity activity of extracts from *Lagerstroemia speciosa* L. leaves on female KK-Ay mice. **Journal Nutritional Science Vitaminology**, 45(6), 791-795.
- Takagi, S., Masaki, M., Matsuda, K., Inoue, K. and Kase, Y. (1979). Studies on the purgative drugs (V). On the constituents of the fruits of *Prunes japonica* Thunb. **Yakugaku Zasshi**, 99(4), 439-442.
- Tanachatchairatana, T., Bremner, J.B., Chokchaisiri, R. and Suksamrarn, A. (2008). Antimycobacterial activity of cinnamate-based esters of the triterpenes betulinic, oleanolic and ursolic acids. **Chemical and Pharmaceutical Bulletin**, 56(2), 194-198.
- Tanaka, T., Tong, H. H., Xu, Y., Ishimaru, K., Nonaka, G. and Nishioka, I. (1992). Tannins and related compounds. CXVII. Isolation and characterization of three new ellagitannins, lagerstannins A, B and C, having a gluconic acid core, from *Lagerstroemia speciosa* (L.) Pers. **Chemical and Pharmaceutical Bulletin**, 40(11), 2975-2980.
- Unno, T., Sugimoto, A. and Kakuda, T. (2004). Xanthine oxidase inhibitors from the leaves of *Lagerstroemia speciosa* (L.) Pers. **Journal of Ethnopharmacology**, 93, 391-395.
- Urbanova, K., Vrkoslav, V., Valterova, I., Hakova, M. and Cvacka, J. (2012). Structural characterization of wax esters by electron ionization mass spectrometry. **Journal of Lipid Research**, 53(1), 204-213.
- Wang, X., Ye, X.L., Liu, R., Chen, H.L., Bai, H., Liang, X., et al. (2010). Antioxidant activities of oleanolic acid in vitro: Possible role of Nrf2 and MAP kinases. **Chemico-Biological Interactions**, 184(3), 328-337.
- Watanabe, K., Kubota, T., Shinzato, T., Ito, J., Mikami, Y. and Kobayashi, J. (2007). Sarusubine A, a new dimeric Lythraceae alkaloid from *Lagerstroemia subcostata*. **Tetrahedron Letters**, 48(42), 7502-7504.
- Xi, J., Tang, H.Y. and Zheng, Y. (2009). Oral dosage forms of oleanolic acid and their pharmacokinetics. **Chinese Journal of New Drugs**, 18, 507-515.

BIOGRAPHY

BIOGRAPHY

Name – Surname	Ketkan Sirimethawong
Date of Birth	December, 31, 1982
Address	111/2 Moo. 1 Buengphra, Muang Phitsanulok Province Thailand 65000
Work Place	Naresuan University Secondary Demonstration School
Position	Lecturer
Education Background	
2006	B.Sc. (Chemistry), Chiangmai University, Chiangmai