

บรรณานุกรม

- Ahmadjian, V. (1993). *The Lichen Symbiosis*. New York: John Wiley & Sons.
- Ahmadjian, V., & Jacobs, J. B. (1983). Algal-fungal relationships in lichens: recognition, synthesis, and development. In: L. J. Goff (Ed.), *Algal Symbiosis* (pp. 147-172). New York: Cambridge University Press.
- Asahina, Y., & Shibata, S. (1954). *Chemistry of Lichen Substances*. Ueno, Tokyo: Society for the Promotion of Sciences.
- Armstrong, R. A. (1990). Dispersal, establishment and survival of soredia and fragments of the lichen, *Hypogymnia physodes* (L.) Nyl. *New Phytologist*, 114(2), 239-245.
- Bachmann, H., & Portmann, P. (1981). Agent for oxidative dyeing of hair. Ger.Offen. DE 2939303. 18.
- Backor, E., & Fahselt, D. (2005). Tetrazolium reduction as an indicator of environmental stress in lichens and isolated bionts. *Environmental and Experimental Botany*, 53, 125-133.
- Bastian, K. (1984). *The production of usnic acid and the changes in the developmental morphology of the synthetic lichens Cladonia cristatella Tuck. When grow under field condition*. Unpublished master's thesis, Clark University, Worcester, Massachusetts.

- Choi, J. S, Chung, H.Y., Jung, H. A., Park, H. J., & Yokozawa, T. (2000). Comparative evaluation of antioxidant potential of alaternin (2-hydroxyemodin) and emodin. *Journal of Agricultural and Food Chemistry*, 48, 6347–6351.
- Crittenden, P. D., & Porter, N. (1991). Lichen-forming fungi: Potential sources of novel metabolites. *Trends in Biotechnology*, 9, 409-414.
- Crittenden, P. D., David, J. C., Hawksworth, D. L., & Cambell, F. S. (1995). Attempted isolation and success in the culturing of a broad spectrum of lichen-forming and lichenicolous fungi. *New Phytologist*, 130, 267-297.
- Culberson, W. L., Culberson, C. F., & Johnson, A. (1983). Genetic and environmental effects on growth and production of secondary compounds in *Cladonia cristatella*. *Biochemical Systematics and Ecology*, 11, 77-84.
- Culberson, C. F. (1969). *Chemical and botanical guide to lichen products*. Chapel Hill, North Carolina, University of North Carolina Press.
- Dembitsky, V. M., & Tolstikov, G. A. (2005). *Organic Metabolites of Lichens*, 135. Novosibirsk, Publishing House of SB RAS.
- Elix, J. A., & Stocker-Wörgötter, E. (2008). Biochemistry and secondary metabolites, In: Nash III, T. H., *Lichen Biology 2nd Edition* (104-133). Cambridge, Cambridge University Press.

- Emmerichet, R., Giez, I., Lange, O. L., & Proksch, P. (1993). Toxicity and antifeedant activity of lichen compounds against the polyphagous herbivorous insect *Spodoptera littoralis*. *Phytochemistry*, 33, 1389–1394.
- Fahselt, D. (1994). Carbon metabolism in lichen. *Symbiosis*, 17, 127-182.
- Fröberg, L., Baur, A., & Baur, B. (1993). Differential herbivore damage to calcicolous lichens by snails. *The Lichenologist*, 25, 83-95.
- Gauslaa, Y., Ohlson, M., Solhaug, K. A., Bilger, W., & Nybakken, L. (2001). Aspect-dependent high irradiance damage in two transplanted foliose forest lichens, *Lobaria pulmonaria* and *Parmelia sulcata*. *Canadian Journal of Forest Research*, 31, 1639-1649.
- Gauslaa, Y., & Solhaug, K. A. (2001). Fungal melanins as a sun screen for symbiotic green algae in the lichen *Lobaria pulmonaria*. *Oecologia*, 126, 462-471.
- Hamada, N. (1996). Introduction of production of lichens substances by non-metabolites. *Bryologist*, 99(1), 68-70.
- Hamada, N., Miyagawa, H., Miyawaki, H., & Inoue, M. (1996). Lichen substances in mycobionts of crustose lichens cultured on media with extra sucrose. *Bryologist*, 99(1), 71-74.
- Hamada, N., Tanahashi, T., Miyagawa, H., & Miyawaki, H. (2001). Characteristics of secondary metabolites from isolated lichen mycobionts. *Symbiosis*, 31, 23-33.

- Hidalgo, M. E., Fernández, E., Quilhot, W., & Lissi, E. (1994). Antioxidant activity of depsides and depsidones. *Phytochemistry*, 37(6), 1585-1587.
- Huneck, S. (1999). The significance of lichens and their metabolites. *Naturwissenschaften*, 86, 559-570.
- Huneck, S., & Yoshimura, I. (1996). *Identification of Lichen Substances*. Berlin, Springer Verlag.
- Huovinen, K., Ahti, T., & Stenroos, S. (1989). The composition and contents of aromatic Lichen substances in *Cladonia*, section *Cocciferae*. *Annales Botanici Fennici*, 26, 133-148.
- Ichinose, T., Miller, M., & Shibamoto, T. (1994). Inhibition of malondialdehyde formation from liver microsomes by a lichen constituent. *Food and Chemical Toxicology*, 32(12), 1167-1168.
- Kashiwada, Y., Nagao, T., Hashimoto, A., Ikeshiro, Y., Okabe, H., Cosentino, L.M., & Lee, K.,H. (2000). Anti-AIDS agents 38. Anti-HIV. Activity of 3-O-acyl ursolic acid derivatives. *Journal Natural Product*, 63, 1619-1622.
- Kilius, H. (1987). Protein characters as a taxonomic tool in lichen systematics. In E. Peveling (Ed.), *Progress and Problems in Lichenology in the Eighties. Bibliotheca Lichenologica No.25* (pp. 445-455). Germany, J. Cramer.
- Kirk, P. M., Cannon, P. F., Minter, D. W., & Stalpers, J.A. (2008). *Ainsworth & Bisby's Dictionary of the Fungi* (10th Ed.). Wallingford, Oxon, UK: CAB International.

- Kofler, L. (1970). A method to use lichen spores in quantitative studies on germination. *The Bryologist*, 73, 602-606.
- Lawrey, J. D. (1984). *Biology of Lichenized Fungi*. New York: Praeger Publishers.
- Lawrey, J. D. (1986). Biological role of lichen substances. *Bryologist*, 89, 111-122.
- Marx, J. (2001). Anti-inflammatories inhibit cancer growth - but how?. *Science*, 291, 581-582.
- Mosbach, K. (1969). Biosynthesis of lichen substances, products of a symbiotic association. *Angewandte Chemie International Edition*, 8, 240-250.
- Molina, M. C., & Crespo, A. (2000). Comparison of development of axenic cultures of five species of lichen-forming fungi. *Mycological research*, 104(5), 595-602.
- Nash III., T. H. (2008). Introduction. In: Nash III, T. H., *Lichen Biology* (2nd Ed.). New York: Cambridge University Press.
- Neamati, H., Hong, H., Mazumder, A., Wang, S., Sunder, S., Nicklaus, M.C., Milne, G. W., Proksa, B., & Pommier, Y. (1997). Depsides and depsidones as inhibitors of HIV-1 integrase: Discovery of novel inhibitors through 3D database searching. *Journal of Medicinal Chemistry*, 40, 942-951.
- Nybakken, L., Solhaug, K. A., Bilger, W., & Gauslaa, Y. (2004). The lichens *Xanthoria elegans* and *Cetraria islandica* maintain a high protection against UV-B radiation in Arctic habitats. *Oecologia*, 140, 211-216.

- Nylander, W. (1866). Circa novum in studio Lichenum criterium chemicum. *Flora (Regensburg) Flora*, 49, 198-201.
- Ostrofsky, A., & Denison, W. C. (1980). Ascospore discharge and germination in *Xanthoria polycarpa*. *Mycologia*, 72, 1171-1179.
- Petrini, O., Hake, U., & Dreyfuss, M. M. (1990). An analysis of fungal communities isolated from fruticose lichens. *Mycologia*, 82(4), 444-451.
- Purvis, W. (2000). *Lichens*. London: The Natural History Museum.
- Rikkinen, J. (1995). What's behind the pretty colours? A study on the photobiology of lichens. *Bryobrothera*, 4, 1-239.
- Romagni, J. G., & Dayan, F. E. (2002). Structural diversity of lichen metabolites and their potential for use. In: Upadhyaya, (Ed), *Advances in Microbial Toxin Research and its Biotechnological Exploration* (pp. 151-169). New York: Kluwer Academic/Plenum Publisher.
- Sanchez, M. L., Bats, J. P., & Moulines, J., (1997). Thermal hydrolysis of the main depsides and depsidones contained in the lichens used in perfumery. *Riv.Ital.EPPOS*, 100-104.
- Sangvichien, E. (2005). *Studies on tropical mycobionts*. Doctor of Philosophy Thesis. Liverpool John Moores University. UK.
- Sanglarpcharonekit, M., & Sangvichien, E. (2006). Growth and antimicrobial activity of some lichen mycobiont from Thailand. Proceedings of the 32nd Congress on Science and Technology of Thailand, Thailand, 10-12 October 2006. pp. 96-97.

- Schulz, H., & Albroscheit, G. (1989). Characterization of oakmoss products used in perfumery by high-performance liquid chromatography. *Journal of Chromatography A*, 466, 301-306.
- Shukla, V., Joshi, G. P., & Rawat, M. S. M. (2010). Lichens as a potential natural source of bioactive compounds: a review. *Phytochemistry Review*, 9, 303-314.
- Solhaug, K. A., & Gauslaa, Y. (1996). Parietin, a photoprotective secondary product of the lichen *Xanthoria parietina*. *Oecologia*, 108, 412-418.
- Sipman, H. J. M., & Aptroot, A. (2001). Where are the missing lichens? *Mycological Research*, 105, 1433-1439.
- Stocker-Wörgötter, E. (2001). Experimental Lichenology and Microbiology of Lichens: Culture Experiments, Secondary Chemistry of Cultured Mycobionts, Resynthesis, and Thallus Morphogenesis. *The Bryologist*, 104(4), 576-581.
- Stocker-Wörgötter, E., & Elix, J. A. (2002). Secondary chemistry of cultured mycobionts: formation of a complete chemosyndrome by the lichen fungus of *Lobaria spathulata*. *The Lichenologist*, 34, 351-359.
- Stocker-Wörgötter, E., Elix, J. A., & Grube, M. (2004). Secondary Chemistry of Lichen-Forming Fungi: Chemosyndromic Variation and DNA-Analyses of Cultures and Chemotypes in the *Ramalina farinacea* Complex. *The Bryologist*, 107, 152-162.

- Stocker-Wörgötter, E., Hager, A., & Elix, J. A. (2009). Intraspecific chemical variation within the crustose lichen genus *Haematomma*: anthraquinone production in selected cultured mycobionts as a response to stress and nutrient supply. *Phytochemistry Review*, 8, 561-569.
- Yamamoto, Y., Miura, Y., Kinoshita, Y., Higuchi, M., Yamada, Y., Murakami, A., Ohigashi, H., & Koshimizu, K. (1995). Screening of tissue cultures and thalli of lichens and some of their active constituents for inhibition of tumor promoter-induced Epstein-Barr virus activation. *Chemical and Pharmaceutical Bulletin*, 43, 1390-1390.
- Yamamoto, Y., Kinoshita, Y., & Fujita, M. (1998). Do lichen mycobiont grow in liquid culture?. *Lichen*, 11, 6-7.
- Yamamoto, Y., Yoshimura, I., and Yamada, Y. (1987). Cultures of Usneaceae species and growth factors in their cultured tissues. *Bibliotheca Lichenologica*, 25, 163-165.

ประวัติผู้เขียน

ชื่อ ชื่อสกุล	นายมนตรี แสงตากเจริญกิจ
วัน เดือน ปีเกิด	5 มิถุนายน 2518
สถานที่เกิด	จังหวัดสมุทรปราการ
วุฒิการศึกษา	สำเร็จการศึกษาระดับมัธยมศึกษาตอนปลายจากโรงเรียน สมุทรปราการ จังหวัดสมุทรปราการ ปีการศึกษา 2536 สำเร็จการศึกษาระดับปริญญาตรีวิทยาศาสตร์บัณฑิต (ชีววิทยา) จากมหาวิทยาลัยรามคำแหง ปีการศึกษา 2548
ตำแหน่งหน้าที่ การทำงานปัจจุบัน	ผู้ช่วยวิจัยของผู้ช่วยศาสตราจารย์ ดร. เอก แสงวิเชียร หน่วยวิจัยไลเคน ภาควิชาชีววิทยา คณะวิทยาศาสตร์ มหาวิทยาลัยรามคำแหง ผู้ช่วยสอนของผู้ช่วยศาสตราจารย์ ดร. เอก แสงวิเชียร วิชาจุลชีววิทยาอุตสาหกรรม ภาควิชาชีววิทยา คณะวิทยาศาสตร์ มหาวิทยาลัยรามคำแหง

งานวิจัย;

Buaruang, K., Boonprakob, K., Mongkolsuk, P., Homchantara, N., Vongshewarat, K.,
Sujaritturagan, J., Papong, K., Osathanon, N., & Sanglarpcharonekit, M.
(2005). Some common lichens inhabited Kram Island and Samaesarn Island
[Abstract]. The 31nd Congress on Science and Technology of Thailand,
Thailand, 18-20 October 2005. p. 111.

Sanglarpcharonekit, M., & Sangvichien, E. (2006). Growth and antimicrobial activity
of some lichen mycobiont from Thailand. Proceedings of the 32nd Congress
on Science and Technology of Thailand, Thailand, 10-12 October 2006. pp.
96-97.

- Sangvichien, E., Sanglarpcharonekit, M., & Whalley, A. J. S. (2007) Studies of ascospore germination from tropical lichens [Abstract]. The 24th annual conference the microscopy society of Thailand, Bangkok, Thailand, 14-16 February 2007. pp. 202-203.
- Sanglarpcharonekit, M., Kumansit, O., & Sangvichien, E. (2008). Survival of mycobiont in an efficiency preservation method. Proceedings of the 34nd Congress on Science and Technology of Thailand, Thailand, 31 October -2 November 2008. p. 74.
- Sanglarpcharonekit, M., Sangvichien, E., & Chokchaisiri, R. (2010). Secondary metabolites produced by the culturing of mycobiont in stir-culture condition. Proceedings of the 36nd Congress on Science and Technology of Thailand, Thailand, 26-28 October 2010. p. 73.
- Sangvichien, E., Sanglarpcharonekit, M., Polyiam, W., Mongkolsuk, P., Buaruang, K., Luangsuphabool, T., Piepukiew, J., & Boonpragob, K. (2010). Tropical lichens mycobionts: after a decade of studied [Abstract]. The 5th Thai Mycological Conference, Bangkok, Thailand, 7 December 2010. p. 37.
- Sangvichien, E., & Sanglarpcharonekit, M. (2011). Some Conditions for Cultivation of Tropical Lichen Mycobionts [Abstract]. Asian Mycological Congress 2011 & 12th International Marine and Freshwater Mycology Symposium. Incheon, Korea, 7-11 August, 2011. p. 315.
- Sanglarpcharoenkit, M., Chokchaisiri, R., Suksamrarn, A., Whalley, A., & Sangvichien, E. (2012). Optimization for secondary metabolites production from tropical lichen mycobionts [Abstract]. The 7th Symposium International Association for Lichenology. Bangkok, Thailand, 9-13 January 2012. p. 140.

- Luangsuphabool T., Sangvichien E., Sanglarpcharoenkit M., & Piapukiew J. (2012).
Antimicrobial activity of lichen-forming fungi from genus *Trypethelium*
[Abstract]. The 7th Symposium International Association for Lichenology,
Bangkok, Thailand, 9-13 January 2012. p. 143.
- Sanglarpcharonekit, M., & Sangvichien, E. (2012). Comparison of mycobionts
cultured on various of malt extract [Abstract]. The 6th Thai Mycological
Conference, Bangkok, Thailand, 6 March 2012. p. 37
- Luangsuphabool, T., Sanglarpcharonekit, M., Piepukiew, J., & Sangvichien, E.
Antioxidant activity of some Thai lichen-forming fungal extracts [Abstract].
The 6th Thai Mycological Conference, Bangkok, Thailand, 6 March 2012. p.
42.



