

REFERENCES

- Aptroot, A., Saipunkaew, W., Sipman, H. J. M., Sparrius, L. B., & Wolseley, P. A. (2007). New lichens from Thailand, mainly microlichens from Chaing Mai. *Fungal Diversity*, 24, 75-134.
- Arup, U. (2009). The *Caloplaca holocarpa* group in the Nordic countries, except Iceland. *The Lichenologist*, 41(2), 111-130.
- Arup, U., & Grube, M. (1998). Molecular systematics of *Lecanora* subgen. Placodium. *The Lichenologist*, 30(4-5), 415-425.
- Awasthi, D. D. (1991). A key to the Microlichens of India Nepal and Sri Lanka. *Bibliotheca Lichenologica*, 40, 1-337.
- Boonpragob, K., Homchantara, N., Coppins, J. B., McCarthy, M. P., & Wolseley, A. P. (1998). An introduction to the lichen flora of Khao Yai National Park. *Botanical Journal of Scotland*, 50(2), 209-219.
- Brodo, I. M., Culberson, W. L. & Culberson, C. F. (2008). *Haematomma* (Lecanoraceae) in North and Central America, including the West Indies. *The Bryologist*, 111(3), 363-423.
- Büdel, B., & Scheidegger, C. (1996). Thallus morphology and anatomy. In T. H. Nash III (Ed.), *Lichen biology* (pp. 37-64). Cambridge, United Kingdom: Cambridge University Press.
- Coppins, B. J. (1983). A taxonomic study of the lichen genus *Micarea* in Europe. *Bulletin of the British Museum (Natural History)*, 11(2), 18-214.

- Czarnota, P., & Coppins, B. J. (2006). A new *Bacidia* with long-necked pycnidia from Central Europe. *The Lichenologist*, 38(5), 407-410.
- Culberson, W. L., & Culberson, C. F. (1970). A phylogenetic view of chemical evolution in the lichens. *Bryologist*, 73, 1-31.
- Culberson, C. F., & Elix, J. A. (1989). Lichen substances. In P. M. Dey & J. B. Harborne (Eds.), *Methods in plant biochemistry* (Vol. 1, pp. 509-535). London: Academic Press.
- Ekman, S. (2004). *Bacidia*. In T. H. Nash III, B. D. Ryan, P. Diederich, C. Gries & F. Bungartz (Eds.), *Lichen flora of the greater Sonoran desert region* (Vol. 2, pp. 18-19). Dexter, MI: Thomson-Shore.
- Elix, J. A. (1992). Lichen chemistry. *Flora of Australia*, 54, 23-29.
- Elix, J. A. (1994). Lichen chemistry and simple products for its applications in the Parmeliaceae. *Flora of Australia*, 55, 2-3.
- Elix, J. A. (1996). Biochemistry and secondary metabolites. In T. H. Nash III (Ed.), *Lichen biology* (pp. 154-180). Cambridge, United Kingdom: Cambridge University Press.
- Elix, J. A. (2004). Haematommataceae. In P. M. McCarthy & K. Mallett (Eds.), *Flora of Australia* (Vol. 56A. Lichens 4, pp. 4-10). Melbourne, Australia: ABRS/CSIRO.
- Elix, J. A. (2004). *Ramboldia*. In P. M. McCarthy & K. Mallett (Eds.), *Flora of Australia* (Vol. 56A. Lichens 4, p. 63). Melbourne, Australia: ABRS/CSIRO.

- Elix, J. A., & Ernst-Russell, K. D. (1993). *A catalogue of standardised thin layer chromatographic data and biosynthetic relationships of lichen substances* (2nd ed). Canberra, Australia: Australian National University.
- Elix, J. A., & E. Stocker-Wörgötter. (2008). Biochemistry and secondary metabolites. In T. H. Nash III (Ed.), *Lichen biology* (pp. 104-133). Cambridge, United Kingdom: Cambridge University Press.
- Elix, J. A. (2009). Letrouitiaceae. In P. M. McCarthy (Ed.), *Flora of Australia* (Vol. 57. Lichens 5, pp. 483-493). Melbourne, Australia: ABRS/CSIRO.
- Elix, J. A. (2009). Brigantiaeaceae. In P. M. McCarthy (Ed.), *Flora of Australia* (Vol. 57. Lichens 5, pp. 602-605). Melbourne, Australia: ABRS/CSIRO.
- Feeya Ammatavivat. (1994). *Chemotaxonomy and chemistry of lichens in Southern Thailand*. Final report of Faculty of Science. Songkhla: Prince of Songkhla University.
- Feurerer, T. (2003). *Checklists of lichens and lichenicolous fungi of Washington (USA)*. Retrieved September 1, 2003, from <http://www.checklists.de>
- Feurerer, T. (2009). *Checklists of lichens and lichenicolous fungi*. Retrieved September 1, 2009, from <http://www.checklists.de>
- Filson, R. B. (1996). Checklist of Australian lichens and Allied Fungi. *Flora of Australia*, (Suppl. Series 7). Canberra, Australia: Australian Biological Resources Study.

- Fryday, A. M., & Coppins, B. J. (2007). *Micarea*. In T. H. Nash III, C. Gries & F. Bungartz (Eds.), *Lichen flora of the greater Sonoran desert region* (Vol. 3, p. 246). Tempe, AZ: Arizona State University.
- Fryday, A. M., & Lendemer, J. C. (2010). Reassessment of the genus *Catillochroma* (lichenized Ascomycota, Ramalinaceae). *The Lichenologist*, 42(5), 587-600.
- Galloway, D. J. (2007). *Flora of New Zealand lichens* (2nd ed.). Lincoln, New Zealand: Manaaki Whenua Press.
- Galun, M., & Illan, A. S. (1988). Secondary metabolic products. In M. Galun (Ed.), *CRC handbook of lichenology* (Vol. 3, p. 3). Boca Raton, FL: CRC Press.
- Galun, M., & Mukhtar, A. (1996). Checklist of the lichens of Israel. *Israel Journal of Plant Sciences*, 44, 195-218.
- Gardner, S., Sidisunthorn, P., & Anusarnsunthorn, V. (2000). *Field guide to forest trees of Northern Thailand*. Unpublished master's thesis, Chulalongkorn University, Bangkok.
- Gaya, E., Navarro-Rosinés, P., Llimona, X., Hladun, N., & Lutzoni, F. (2008). Phylogenetic reassessment of the Teloschistaceae (lichen-forming Ascomycota, Lecanoromycetes). *Mycological Research*, 112, 528-546.
- Guderley, R., & Lumbsch, H. T. (1998). *Lecanora flavopallida*, a species of *Lecanora sensu stricto* with almost biatorine apothecia (Lecanorale). *The Bryologist*, 101(1), 103-108.
- Hafellner, J. (1981). Elektronenoptische untersuchungen an arten der lechtengattung *Brigantiaea*. *Nova Hedwigia*, 35, 233-261.

- Hafellner, J. (1983). Two little-known or misunderstood *Brigantiaea* species from New Zealand. *The Lichenologist*, 15(3), 263-266.
- Hafellner, J. (1984). Studien in Richtung einer natürlicheren Gliederung der Sammelfamilien Lecanoraceae and Lecideaceae. *Beiheft zur Nova Hedwigia*, 79, 241-371.
- Hafellner, J. (1988). Principles of classification and main taxonomic groups. In M. Galun (Ed.), *CRC handbook of lichenology* (Vol. 3, pp. 41-52). Boca Raton, FL: CRC Press.
- Hale, M. E. (1983). *The biology of lichens*. London: Edward Arnold Maryland.
- Hale, M. E., Jr. (1984). An historical review of the Genus concept in Lichenology. *Beiheft zur Nova Hedwigia*, 79, 11-23.
- Inoue, M. (1997). Japanese species of *Lecidella* (Lichenes, Lecanoraceae) (I). *Bull. Natn. Sci. Mus., Tokyo, Ser. B*, 23(4), 127-136.
- Jahns, H. M. (1973). Anatomy, morphology and development. In V. Ahmadjian & M. E. Hale (Eds.), *The lichens* (pp. 3-58). New York: Academic Press.
- Jahns, H. M. (1988). The lichen thallus. In M. Galun (Ed.), *CRC handbook of lichenology* (pp. 95-143). Boca Raton, FL: CRC Press.
- Jüriado, I. (1998). A revision of the *Lecanora subfusca* group in Estonia. *Folia Cryptogamica Estonica*, 32, 15-20.
- Kalb, K. (1991). Lichenes Neotropici ausgegeben von Klaus Kalb. *Fascikel*, 20, 451-475.



- Kalb, K., & Elix, J. A. (2004). *Vainionora*. In T. H. Nash III, B. D. Ryan, P. Diederich, C. Gries & F. Bungartz (Eds.), *Lichen flora of the greater Sonoran desert region* (Vol. 2, pp. 556-557). Dexter, MI: Thomson-Shore.
- Kalb, K. (2007). New or otherwise interesting lichens. *Bibliotheca Lichenologica*, 95, 297-316.
- Kalb, K., Staiger, B., Elix, J. A., Lange, U., & Lumbsch, H. T. (2008). A new circumscription of the genus *Ramboldia* (Lecanoraceae, Ascomycota) based on morphological and molecular evidence. *Nova Hedwigia*, 86, 23-42.
- Kalb, K., Buaruang, K., Papong, K., & Boonpragob, K. (2009). New or otherwise interesting lichens from the tropics, including the lichen genus *Ramboldia* in Thailand. *Mycotaxon*, 110, 109-123.
- Kalb, K., Rivas Plata, E., & Lumbsch, H. T. (in press). The phylogenetic position of *Malmidea*, a new genus for the *Lecidea piperis*- and *Lecanora granifera*-groups (Lecanorales, Malmideaceae) inferred from nuclear and mitochondrial ribosomal DNA sequences with special reference to Thai species. *Bibliotheca Lichenologica*.
- Kantvilas, G. (1994). Additions to the family Megalosporaceae in Tasmania and Mainland Australia. *The Lichenologist*, 26(4), 349-366.
- Kantvilas, G. (2001). The lichen family Fuscideaceae in Tasmania. *Bibliotheca Lichenologica*, 78, 169-192.
- Kantvilas, G., & McCarthy, P. M. (2003). *Hueidea* (Fuscideaceae), a new lichen genus from alpine Australia. *Lichenologist*, 35(5-6), 397-407.

- Kantvilas, G. (2004). Fuscideaceae. In P. M. McCarthy & K. Mallett (Eds.), *Flora of Australia* (Vol. 56A. Lichens 4, pp. 173-184). Melbourne, Australia: ABRS/CSIRO.
- Kantvilas, G., & Elix, J. A. (2007). Observations on the genus *Maronina*. *Bibliotheca Lichenologica*, 96, 137-143.
- Kantvilas, G., & Elix, J. A. (2007). The genus *Ramboldia* (Lecanoraceae): a new species, key and notes. *The Lichenologist*, 38(2), 135-141.
- Kantvilas, G., & Elix, J. A. (2009). A new species of *Brigantiaea* (Brigantiaaceae: Lichenized Ascomycota) from Australia. *Nova Hedwigia*, 88(1-2), 133-137.
- Kantvilas, G., Papong, K., & Lumbsch, H. T. (2010). Further observations on the genus *Maronina*, with descriptions of two new taxa from Thailand. *The Lichenologist*, 42(5), 557-561.
- Kärnefelt, I. (1990). Isidiate taxa in the Teloschistales and their ecological and evolutionary significance. *The Lichenologist*, 22(3), 307-320.
- Kirk, P. M., Cannon, P. F., David, J. C., & Stalpers, J. A. (2001). *Ainsworth & Bisby's dictionary of fungi* (9th ed.). Wallingford, United Kingdom: CAB International.
- Knoph, J.-G., Garnitz, R., & Leuckert, C. (1999). Two new corticolous species of the genus *Lecidella* (Lecanoraceae, Lecanorales, Lichenized Ascomycotina). *Mycotaxon*, 71, 163-168.
- Knoph, J.-G., & Sipman, H. J. M. (1999). *Lecidella aegaea* sp. nov. (Lecanoraceae, Lecanorales, Lichenized Ascomycotina). *Mycotaxon*, 72, 73-78.

- Knoph, J.-G., & Leuckert, C. (2004). *Lecidella*. In T. H. Nash III, B. D. Ryan, P. Diederich, C. Gries & F. Bungartz (Eds.), *Lichen flora of the greater Sonoran desert region* (Vol. 2, pp. 309-320). Dexter, MI: Thomson-Shore.
- Kurokawa, S. (2003). *Checklist of Japanese lichens*. Retrieved May 24, 2006, from <http://home.hiroshima-u.ac.jp/lichen/cklist.htm>
- Lai, M. J. (2000). *Checklist of Taiwan*. Taichung, Taiwan: Tunghai University.
- Laundon, J. R. (2003). Six lichens of the *Lecanora varia* group. *Nova Hedwigia*, 76(1-2), 83-111.
- Lücking, R. (2008). Foliicolous Lichenized Fungi. *Flora neotropica monograph*, 103, 611-732.
- Lücking, R., Cáceres, M. E. S., & Sérusiaux, E. (2001). Studies in *Bacidia sensu lato* (Lichenized Ascomycetes: Lecanorales) (II). Six new combinations in *Fellhanera* Vezda. *The Lichenologist*, 33(3), 189-194.
- Lücking, R., Wang, Y. H., & Zhao, T. Z. (2009). Five lichens of the genus *Lecanora* new to China. *Mycotaxon*, 107, 391-396.
- Lumbsch, H. T. (2004). Lecanoraceae. In P. M. McCarthy & K. Mallett (Eds.), *Flora of Australia* (Vol. 56A. Lichens 4, pp. 11-12). Melbourne, Australia: ABRS/CSIRO.
- Lumbsch, H. T., & Guderley, R. (1996). A revision of some species in *Lecanora Sensu Stricto* with a dark hypothecium (Lecanorales, Ascomycotina). *The Bryologist*, 99(3), 269-291.

- Lumbsch, H. T., & Elix, J. A. (2004). *Lecanora*. In P. M. McCarthy & K. Mallett (Eds.), *Flora of Australia* (Vol. 56A. Lichens 4, pp. 12-62). Melbourne, Australia: ABRS/CSIRO.
- Lumbsch, H. T., & Huhndorf, S. M. (2007). Outline of Ascomycota-2007. *Myconet*, 13, 1-58.
- Lumbsch, H. T., Nelsen, M. P., & Lücking, R. (2008). The phylogenetic position of Haematommataceae (Lecanorales, Ascomycota), with notes on secondary chemistry and species delimitation. *Nova Hedwigia*, 86(1-2), 105-114.
- Lumbsch, H. T., & Huhndorf, S. M. (2010). Outline of Ascomycota-2009. *Myconet*, 14, 1-40.
- Malcolm, W. M., & Galloway, D. J. (1997). *New Zealand lichens checklist, Key and Glossary*. Wellington, New Zealand: Museum of New Zealand Te Papa Tongarewa.
- McCarthy, P. M. (2004). *Maronina*. In P. M. McCarthy & K. Mallett (Eds.), *Flora of Australia* (Vol. 56A. Lichens 4, p. 62). Melbourne, Australia: ABRS/CSIRO.
- Mongkolsuk, P., Boonpragob, K., & Homchantara, N. (1996). *Biodiversity of lichens at Queen Sirikit Botanic Garden, Mae Rim District, Chiangmai Province*. Final report of Biology Department, Ramkhamhaeng University presented to Queen Sirikit Botanic Garden, Bangkok.
- Mongkolsuk, P., Boonpragob, K., & Homchantara, N. (1997). *Collection and identification of lichens at Phuteen Suansai Forest, Nahaew District, Loei Province*. Final report of Biology Department, Ramkhamhaeng

University presented to National Center for Genetic Engineering and Biotechnology, Bangkok.

- Nash, T. H., & Ryan, B. D. (2007). In T. H. Nash III, C. Gries & F. Bungartz (Eds.), *Lichen flora of the greater Sonoran desert region* (Vol. 3, p. 244). Tempe, AZ: Arizona State University.
- Nayaka, S., Upreti, D. K., & Lumbsch, T. H. (2006). Two new *Lecanora* species from India. *The Lichenologist*, 38(5), 421-424.
- Nelsen, M. P., Lücking, R., Chaves, J. L., Sipman, H. J. M., Umana, L., & Navarro, E. (2006). A first assessment of the Ticolichen biodiversity inventory in Costa Rica: The genus *Haematomma* (Lecanorales: Lecanoraceae). *The Lichenologist*, 38(3), 251-162.
- Nimis, P. L. (1993). *The lichens of Italy. An annotated catalogue*. Torino, Italy: Museo regionale di scienze naturali.
- Nylander, W. (1860). *Synopsis methodica lichenum omnium hucusque cognitorum praemissa introductione lingua gallica tractata*. Paris: L. Martinet.
- Owe-Larsson, B., & Ryan, B. D. (2007). *Bellemerea*. In T. H. Nash III, C. Gries & F. Bungartz (Eds.), *Lichen flora of the greater Sonoran desert region* (Vol. 3, pp. 110-111). Tempe, AZ: Arizona State University.
- Papong, K., Boonpragob, K., & Lücking, R. (2007). New species and new records of foliicolous lichens from Thailand. *The Lichenologist*, 39(1), 47-56.

- Paulson, R. (1930). Lichen from Kaw Tao, an Island in the Gulf of Siam. *Journal of the Siam Society, National History*, 8(Suppl.), 99-101.
- Poelt, J. (1973). Classification. In V. Ahmadjian & M. E. Hale (Eds.), *The lichens* (pp. 599-631). New York: Academic press.
- Purvis, O. W., Coppins, B. J., & James, P. W. (1994). *Checklist of lichens of Great Britain and Ireland*. London: Natural History Museum, Cromwell Road.
- Rambold, G. (1989). A monograph of the saxicolous lecideoid lichens of Australia (excl. Tasmania). *Bibliotheca Lichenologica*, 34, 20.
- Ramkhamhaeng University, Faculty of Science, Department of Biology, Lichen Research Unit. (2004). *Biodiversity of lichens at Khao Yai National Park in Thailand*. Bangkok: Author.
- Rogers, R. W. (1982). The corticolous species of *Haematomma* in Australia. *The Lichenologist*, 14, 115-129.
- Rogers, R. W., & Bartlett, J. K. (1986). The lichen genus *Haematomma* in New Zealand. *The Lichenologist*, 18(3), 247-255.
- Santesson, R. (1952). Foliicolous lichens I: A revision of the taxonomy of the obligately foliicolous lichenized fungi. *Symbolae Botanicae Upsaliensis*, 12, 1-590.
- Sato, M. (1962). Lichens of Doi Inthanon and Doi Duthep Pui, Northwestern Thailand. In T. Kira & T. Umeaso (Eds.), *Nature and life in Southeast Asia 2* (pp. 1-4). Kyoto, Japan: Fauna and Flora Research Society.
- Søchting, U. (1997). Two major anthraquinone chemosyndromes in Teloschistaceae. *Bibliotheca Lichenologica*, 68, 135-144.

- Søchting, U., & Figueras, G. (2007). *Caloplaca lenae* sp. nov., and other *Caloplaca* species with caloploicin and vicanicin. *The Lichenologist*, 39(1), 7-14.
- Søchting, U., Lorentsen, L. B., & Arup, U. (2008). The lichen genus *Caloplaca* (Ascomycota, Lecanoromycetes) on Svalbard. *Nova Hedwigia*, 87(1-2), 69-96.
- Sipman, H. J. M. (1983). A monograph of the lichen family Megalosporaceae. *Bibliotheca Lichenologica*, 18, 1-241.
- Spribille, T., & Hauck, M. (2003). *Pyrrhospora gowardiana*, a new montane lichen from Western North America (Lecanoraceae, Lichenized Ascomycetes). *The Bryologist*, 106(4), 560-564.
- Staiger, B., & Kalb, K. (1995). Die flechtengattung *Haematomma*. *Bibliotheca Lichenologica*, 59, 1-198.
- Staiger, B., Kalb, K., & Ryan, B. D. (2004). *Haematomma*. In T. H. Nash III, B. D. Ryan, P. Diederich, C. Gries & F. Bungartz (Eds.), *Lichen flora of the greater Sonoran desert region* (Vol. 2, pp. 128-130). Dexter, MI: Thomson-Shore.
- 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. *Phytochem Rev*, 8, 561-569.
- Tehler, A. (1996). Systematics, phylogeny and classification. In T. H. Nash III (Ed.), *Lichen biology* (pp. 217-239). Cambridge, United Kingdom: Cambridge University Press.

- Tem Smitinand. (2001). *Thai plant names*. Bangkok: Royal Forest Department.
- Thawatchai Santisuk. (2007). *Pa mai khong pratet thai [Forest of Thailand]* (2nd ed.). Bangkok: n.p.
- Thrower, S. L. (1988). *Hong Kong lichens*. Hong Kong: The Urban Council.
- Tourism Authority of Thailand. (2000). *Phu Luang the Kingdom of plants*. Bangkok: Amarin printing and publishing.
- Tourist of Thailand. (2011). *Map of Loei*. Retrieved June 15, 2011, from [http://www. Loei.go.th/novabizz.com/map/16.htm](http://www.Loei.go.th/novabizz.com/map/16.htm)
- Untari, L. F. (2006). The lichen genus *Megalospora* in Java. *Mycotaxon*, 97, 129-143.
- Vainio, E. A. (1909). Flora of Koh Chang: Contributions to the knowledge of the vegetation in the Gulf of Siam. *Botanisk Tidsskrift*, 29, 104-152.
- Vainio, E. A. (1921). Lichens in summon monte Doi Suthep (Circ. 1675 m s.m.) in Siam boreali anno 1904 a D: Re c.c. Hosseo collect. *Annales Botanici Societatis Zoologicae-Botanicae Fennicae Vanamo*, 1(3), 33-55.
- Vänskä, H. (1986). *Lecanora vainioi* and *L. ahtii*, two new lichen species from Brazil, compared with five allied species. *Ann. Bot. Fennici*, 23, 121-141.
- Wetmore, C. M. (2007). *Caloplaca*. In T. H. Nash III, C. Gries & F. Bungartz (Eds.), *Lichen flora of the greater Sonoran desert region* (Vol. 3, pp. 179-220). Tempe, AZ: Arizona State University.

- White. F. J., & Jame, P. W. (1985). A new guide to microchemical technique for the identification of lichen substances. *British Lichen Society Bulletin*, 57, 1-41.
- Wolseley, P. A., Hudson, B. A., & Mccarthy, P. M. (2002). Catalogue of the lichens of Thailand. *Bulletin Natural History Museum of London*, 32(1), 13-59.
- Zahlbruckner, A. (1926). Lichenes (Flechten). B. Spezieller Teil. In A. Engler (Ed.), *Die natürlichen Pflanzenfamilien 2. Aufl. 2* (pp. 61-270). Leipzig, Germany: Bornträger.

VITAE

Name	Mrs. Varaporn Sriprang
Date of Birth	December 26, 1973
Place of Birth	Sakonnakorn
Previous Studies	1985-1991 High School, Wangpithayakom School 1994-2001 Bachelor of Biology of Science Ramkhamhaeng University
Present Position	Assistant research of Assoc. Prof. Pachara Mongkolsuk Department of Biology, Faculty of Science Ramkhamhaeng University

Her research outputs are listed as follows:

- Sriprang, V., Mongkolsuk, P., Vongshewarat, K., Buaruang K., & Doodurm, C. (2009). Discolichens at Phu Luang Wildlife Sanctuary, Loei Province. 35th *Congress on Science and Technology of Thailand*, 50.
- Sriprang, V., & Mongkolsuk, P. (2010). Taxonomy of discolichens at Phu Luang Wildlife Sanctuary, Loei Province, Thailand. *Thai Journal of Botany* 2 (Special Issue): 47-53.
- Sriprang, V., Mongkolsuk, P., Manoch, L., Papong, K., & Kalb, K. (2010). Lecanoraceae at Phu Luang Wildlife Sanctuary (PLWS), Loei Province, Thailand. *The 5th Thai Mycological Conference, Bangkok*, 36.



Sriprang, V., Mongkolsuk, P., Manoch, L., Papong., K & Kalb, K. (2010).

Taxonomy of discolichens at Phu Luang Wildlife Sanctuary, Loei Province, Thailand. *36th Congress on Science and Technology of Thailand*, 55.

