Name Anchalee Sirikhachornkit

Position Lecturer

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Educational background

B.A. in Biological Sciences, with honors, University of Chicago, Chicago, Illinois, 1997-2001

Ph. D. in Microbiology, University of California-Berkeley, Berkeley, California, 2001-2007

Postdoctoral Researcher, University of California-Berkeley, Berkeley, California, 2007-2009

Courses taught

Laboratory in Genetics

Genetic Engineering

Laboratory in Genetic Engineering

Molecular Aspects of Stress Responses

Advanced Molecular Genetics

Research Interests

Biodiesel production from microalgae

Analysis of symbiotic algae related to coral bleaching

Algal biotechnology

Molecular genetics and genetic engineering of microalgae

Funding/Grants

2010 Preproposal Research Fund (PRF), Faculty of Science, Kasetsart University

Publications

Sirikhachornkit, A., & Niyogi, K. (2010). Antioxidants and Photo-Oxidative Stress Responses in Plants and Algae. In C. A. Rebeiz, C. Benning, H.J. Bohnert, H. Daniell, J.K. Hoober, H.K. Lichtenthaler, A.R. Portis & B.C. Tripathy (Eds.), *The Chloroplast: Basics and Applications*. Dordrecht, The Netherlands: Springer

Sirikhachornkit, A., J. Shin, I. Baroli, and K. Niyogi. 2009. Replacement of α-tocopherol by β-tocopherol enhances resistance to photo-oxidative stress in a xanthophyll-deficient

strain of *Chlamydomonas reinhardtii*. Eukaryotic Cell 11: 1648-57

Zuther, E., S. Huang, J. Jelenska, H. Eilenberg, E. M. Arnold, X. Su, **A. Sirikhachornkit**, J. Podkowinski, A. Zilberstein, R. Haselkorn, and P. Gornicki. 2004. Complex nested promoters control tissue-specific expression of acetyl-CoA carboxylase genes in wheat. Proc Natl Acad Sci U S A 101:1403-1408.

Podkowinski, J., J. Jelenska, **A. Sirikhachornkit**, E. Zuther, R. Haselkorn, and P. Gornicki. 2003. Expression of cytosolic and plastid acetyl-coenzyme A carboxylase genes in young wheat plants. Plant Physiol 131:763-772.

Jelenska, J., **A. Sirikhachornkit**, R. Haselkorn, and P. Gornicki. 2002. The carboxyltransferase activity of the apicoplast acetyl-CoA carboxylase of *Toxoplasma gondii* is the target of aryloxyphenoxypropionate inhibitors. J Biol Chem 277:23208-23215.

Huang, S.*, **A. Sirikhachornkit***, X. J. Su, J. Faris, B. Gill, R. Haselkorn, and P. Gornicki. 2002. Genes encoding plastid acetyl-CoA carboxylase and 3-phosphoglycerate kinase of the *Triticum*/*Aegilops* complex and the evolutionary history of polyploid wheat. Proc Natl Acad Sci U S A 99:8133-8138. (* equal contribution)

Huang, S. X., **A. Sirikhachornkit**, J. D. Faris, X. J. Su, B. S. Gill, R. Haselkorn, and P. Gornicki. 2002. Phylogenetic analysis of the acetyl-CoA carboxylase and 3-phosphoglycerate kinase loci in wheat and other grasses. Plant Mol Biol 48:805-820.

Faris, J., **A. Sirikhachornkit**, R. Haselkorn, B. Gill, and P. Gornicki. 2001. Chromosome mapping and phylogenetic analysis of the cytosolic acetyl-CoA carboxylase loci in wheat. Mol Biol Evol 18:1720-1733.