

## **Dr. Prayook Srivilai**, Ph.D.

Dr. Prayook Srivilai is one of our advisor and a member of our research team in Faculty of Science, Maharakham University. He has expertise in Genetics and Culture.

### **Education Background:**

1. BS (Biology, Maharakham University, Thailand, 1993.)
2. MS (Genetics, Chulalongkorn University, Thailand, 1997.)
3. Ph.D. (Genetics, Gerog-August-University of Goettingen, Germany,)

### **Research Publications:**

- Liu Y., Srivilai P., Loos S., Aebi M., and K?es U. (2006). An essential gene for fruiting body initiation in the basidiomycete *Coprinopsis cinerea* is homologous to bacterial cyclopropane fatty acid synthase genes. *Genetics*. (Available online)
- James T.Y., Srivilai P., K?es U., Vilgalys, R. Evolution of the bipolar mating system of the mushroom *Coprinellus disseminatus* from its tetrapolar ancestors involves loss of mating-type-specific pheromone receptor function. (Accepted by *Genetics*)
- Srivilai P., Muraguchi M., and K?es, U. Construction of co-isogenic strains of *Coprinopsis cinerea* homokaryon AmutBmut with different wild type mating type specificities. (In preparation for submission)
- Srivilai P., James T. Y., Vilgalys R., Chaisaena W., and K?es U. (2005). Genetic analysis of *Coprinopsis cinerea* mutants with defects in fruiting body development. In: Proc. "Genetics and Cellular Biology of Basidiomycetes VI." Pamplona, 3-6 June 2005, Spain. (In press)
- Srivilai P., James T. Y., Vilgalys R., Chaisaena W., and K?es U. (2005). Heterologous expression of mating type genes in basidiomycetes. In: Proc. "Genetics and Cellular Biology of Basidiomycetes VI." Pamplona, 3-6 June 2005, Spain. (In press)
- Clergeot, P.-H., Ruprich-Robert, G., Liu, Y., Loos, S., Srivilai, P., Velagapudi, R., G?bel, S., K?nzler, M., Aebi, M. and K?es, U., (2003). Mutants in initiation of fruiting body development of the basidiomycetes *Coprinus cinereus*. *Fungal genetics Newsletter*, Supplement-50, p. 68.

### **Conference Contributions:**

- Srivilai P., Chaiseana W., and K?es, U. Expression of mating type genes in heterologous basidiomycetes. In Conference book: Molecular biology of fungi 7th VAAM-Conference "Molekularbiologie der Pilze" 3.-7 September 2005, Bochum, Germany.
- Srivilai P., Chaiseana W., and K?es, U. Mutants of *Coprinopsis cinerea* with defects in fruiting body development. In Conference book: Molecular biology of fungi 7th VAAM-Conference "Molekularbiologie der Pilze" 3-7 September 2005, Bochum, Germany.
- Pemmasani J. K, Frederic H., Srivilai P., Liu Y., Loos S., Aebi M., and K?es U. An essential gene for fruiting body initiation in the basidiomycete *Coprinopsis cinerea* is homologous to bacterial cyclopropane fatty acid synthase genes. In Conference book: Molecular biology of fungi 7th VAAM-Conference "Molekularbiologie der Pilze" 3-7 September 2005, Bochum, Germany.
- Srivilai P., James T.Y., Vilgalys R., Chaisaena W., and K?es U. Heterologous expression of mating type genes in basidiomycetes. *Genetics and Cellular Biology of Basidiomycetes VI*. Pamplona, 3-6 June 2005, Spain (Poster).

- Srivilai P., Chaiseana W., and K?es, U. (2005). Genetic analysis of Coprinopsis cinerea mutants with defects in fruiting body development. Genetics and Cellular Biology of Basidiomycetes VI. Pamplona, 3-6 June 2005, Spain (Poster).
- Srivilai P., Chaisaena W., and K?es U. Classical genetics in fruiting body development of Coprinopsis cinerea. 24th Fungal Genetics Conference 2005, Asilomar, USA (Poster).
- Velagapudi R., Kilaru S., Hoegger P.J., Dwivedi R.C., Srivilai P., Peddireddi S., Navarro-Gonz?lez M., Pemmasani L.K., Zomorodi M., Lange K., Majcherczyk A., and K?es U., Multi-gene families in the basidiomycete Coprinopsis cinerea. Gordon Research Conferences, 20-25 June 2004, Plymouth, USA (Poster).
- Navarro-Gonz?lez M. , Srivilai P. , Majcherczyk A., and K?es U. Initiation of fruiting body development in the basidiomycete Coprinopsis cinerea, VAAM 2004, Sonderausgabe, Braunschweig. March 28-31, 2004. Braunschweig, Germany (Poster). Abstract: Biospektrum Sonderausgabe, 2004, ISSN-0947-0867. p.154.
- Srivilai P., James T.Y., Vilgalys R., and K?es U. Mating type genes in basidiomycetes, 2<sup>nd</sup> International Ustilago maydis Meeting, 25-29 August 2004, Rauschholzhausen, Germany (Poster). and VAAM Workshop, Stoffwechsel der Pilze, Fachhochschule Lausitz 16-18 September 2004, Senftenberg, German (Poster).
- Srivilai P., James T.Y., Vilgalys R., and K?es U. Mating type genes in basidiomycetes, Ustilago maydis Meeting, 25-29 August 2004, Marburg, Germany (Poster).
- Clergeot P.H., Ruprich-Robert G., Liu Y., Loos S., Srivilai P., Velagapudi R., G?bel S., K?nzler M., Aebi M., and K?es U. (2003). Mutants in initiation of fruiting body development of the basidiomycete Coprinus cinereus. 22nd Fungal Genetics Conference on 18-23 March, 2003 at Pacific Grove, California, USA (Poster).
- G?bel S., Clergeot P.H., Ruprich-Robert G., Liu Y., Loos S., Srivilai P., Velagapudi R., K?nzler M., Aebi M., and K?es U. Mutants in initiation of fruiting body development of the basidiomycete Coprinus cinereus. In: Conference book: Molecular biology of fungi 6<sup>th</sup> VAAM-Conference "Molekularbiologie der Pilze" 3-5 September 2003, Goettingen, Germany (U. K?es, ed.), Wissenschaftlicher Fachverlag Dr. Peter Fleck, Langg?ns (Niederkleen), Germany, p.110.
- Srivilai P., Liu Y., Loos S., G?bel S., Aebi M., and K?es U. A fruiting-defective mutant of the basidiomycete Coprinus cinereus is blocked in secondary hyphal knot formation by a defect in a cyclopropane fatty acid synthase gene. In: Conference book: Molecular biology of fungi 6th VAAM-Conference "Molekularbiologie der pilze" 3.-5 September 2003, Goettingen, Germany (U. K?es, ed.), Wissenschaftlicher Fachverlag Dr. Peter Fleck, Langg?ns (Niederkleen), Germany, p.111.

#### **Oral Presentations:**

- Expression of mating type genes and heterologous in heterologous basidiomycetes. At the 'Molecular biology of fungi 7th VAAM-Conference', 3-7 September, 2005, Bochum, Germany.
- Analysis of cyclopropane fatty acid synthase (cfs1) gene in fruiting body in Coprinopsis cinerea. 7, June, 2005. At Institute of Forest Botany, Georg-August University of Goettingen, Germany.
- Protein structure and Protein data bank. 14, July, 2004. In Ph.D. program at Georg-August University of Goettingen, Germany.

- Classical genetics in *Coprinopsis cinerea*. 5, Jan, 2004. At Institute of Forest Botany, Georg-August University of Goettingen, Germany.
- Gene transformations in plant. 14, July, 2003. In Ph.D program at Georg-August University of Goettingen, Germany.
- Genes in initiation fruiting body in basidiomycetes *Coprinopsis cinerea*. 14, July, 2002. In Ph.D program at Georg-August University of Goettingen, Germany.
- Molecular analysis of genes in initiation fruiting body development in basidiomycetes (*Coprinopsis cinerea*) (Ph.D work) 11, Jan, 2006. In Ph.D. program at Georg-August University of Goettingen, Germany.

**Research Techniques:**

- PCR, Rapid PCR, Electrophoresis, Southern blot, DNA and RNA extraction, Protein purification, Gene cloning, Gene annotation, Bioinformatics, Techniques in classical genetics, Gene mapping, Gene mutational analysis.