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**Position:**

1. **Associate Professor/ Lecturer** at Genetics Department  
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**Education background:**

B.Sc. (Plant Pathology) Kasetsart University, Bangkok, Thailand	1975-1978
M.Sc. (Microbiology) Kasetsart University, Bangkok, Thailand	1978-1981
Ph D. (Virology) Australian National, Canberra, Australia	1988-1991

**Courses taught:**

01416311	Principle of Genetics
01416312	Laboratory in Genetics
01416511	Intensive Genetics
01416553	Molecular Genetics
01416524	Genetic Manipulation of Plant Cells
01416591	Research Techniques in Genetics
01416691	Research Methods in Genetics

**Research interests:**

Plant Genetic Engineering in Orchids  
Molecular Cloning and Proteomics in Orchids

**Funding/Grant:**

1. Transformation of Scent Genes of Orange Jessamine and Kaffir Lime to Arabidopsis, Petunia and Orchid (2011-2013)
2. Characterization of Bio-Molecules in Orchids Affecting Cancer Cell Activities (2011-2013)
3. Evaluation of Genetics Diversity in Sesames using DNA Marker Specific to Genes Involving Fatty acid and Lignan Synthesis (2012-2013)
4. Use of antisense and RNAi technology to inhibit cymbidium mosaic virus (2009-2011)
5. Use of antisense and RNAi technology to inhibit ethylene biosynthesis for long vase life of orchid flowers (2009-2010)

**Publications:**

**Submitting**

1. Lekkamlue N., Witcha Treesuwan, Pattana Srifah Huehne. 2012. Investigation of ethylene-sensitive properties from iron binding site of Vanda 1-aminocyclopropane-1-carboxylate oxidase by molecular modeling. Journal of Molecular Graphics and Modelling (submitted) 3/08/2012

2. Lokkamlue, N., Huehne, P. S. 2012. Molecular Biology of Vanda Miss Joaquim 1-aminocyclopropane-1-carboxylate oxidase gene from the most ethylene-sensitive orchid flower. Maejo International Journal of Science and Technology. (submitted) 08/11/12
3. Lokkamlue, N., Huehne, P.S. 2012. Sequence Analysis of Ethylene Response Sensor Gene isolated from Vanda Miss Joaquim Flower, the Most Ethylene-sensitive Orchid. Kasetsart Journal: Natural Science (submitted) KUJ: 55-10-12: 26/10/12
4. Bhinija K, Srisomsap C, Chokchaichamnankit D, Svasti J, Mongkolsuk S, Huehne PS (2012) High resolution proteomic profiles generated from polysaccharide rich tissues of orchids. Planta (submitted) 15/11/12: pattana: huehne362722: PLAA-D-12-00022
5. Udornporn Petchthai, Du Peng, and Pattana Srifah Hunhne. 2012. High throughput Sequencing analysis of small RNAs from *Dendrobium* and *Ascocenda* orchids under stress of Cymbidium Mosaic Virus Infection. Planta (submitted) 18/11/12: pattana: huehne362722

### Publication

1. Jantasuriyarat, C, Ritchuay, S., Pattarawat, P, Huehne, P.S., Kate-Ngam, S., 2012. Development and transferability of EST-SSR and transferability of genomic SSR markers for genetic diversity assessment of *Doritis*. *Biochemical Systematics and Ecology* 45: 57-65.
2. Huehne, P. S., Bhinija, K. 2012. Application of cryoprotectants to improve low temperature storage survival of orchid seeds. *Scientia Horticulturae* 135, 186-193.
3. Wongkhamprai, B., Sangsavang, K., Sriboonlert, A., Huehne, P. S. 2011. Efficiency of Agrobacterium transformation of pinene synthase gene isolated from kaffir lime in *Arabidopsis thaliana*. *Thai Journal of Genetics* 4(2): 85-93.
4. Mohamad, Z.A., Chokchaichamnankit, D., Bhinija, K., Paricharttanakul, N. M., Svasti, J., Huehne, P. S., Srisomsap, C. 2011. Proteomic analysis of Chinese kale (*B. alboglabra*) leaves during growth. *Journal of Integrated Omics* 1, 102-107
5. Lertwiriyawong, B., Bhinija, K., Huehne, P.S., 2011. Sequence Analysis of the *16SrRNA-rps12* Inverted Repeat Region in Chloroplast DNA of *Dendrobium* orchids. *Kasetsart Journal - Natural Science* 45, 461-72.
6. Lertwiriyawong, B., Pinthong, K., Chanpaisaeng, J., Saksoong, P., Huehne, P.S., 2010. Analysis of the insecticidal crystal gene type 1 of *Bacillus thuringiensis* Thai isolates affecting lepidopterans. *ScienceAsia* 36, 271–279. doi: 10.2306/scienceasia1513-1874.2010.36.271
7. Phetkhong J. Srifah Huehne P. and Ngernsiri L. 2010. Cloning and sequencing analysis of alpha-amylase gene from black tiger prawn (*Penaeus monodon*). *The Proceeding of 48th Kasetsart University Annual Conference* 3-5 February 2010. p 336-343.
8. Sangsavang, K. and Srifah Hunhne, P. 2009. Molecular cloning of germacrene-D-synthase gene involving volatile fragrances of Kaffir lime. *Proceedings of the 16th National Genetics Conference*. pp. 185-189. 25-27 March 2009, Thammasart University, Rungsit, Pathumthani.

9. Soubsawwong, O and *Srifah Huehne, P.* 2009. Molecular cloning of terpene synthase gene involving floral scent of orang Jessamine. *Proceedings of the 16th National Genetics Conference*. pp. 275-280. 25-27 March 2009, Thammasart University, Rungsit, Pathumthani.
  10. Sintuprapa, W., Theeragool, G., Yongmanitchai, W., *Huehne, P.S.*, Matsushita, K., 2008 Molecular taxonomy of acetobacter syzygii SKU19 and characterization of its acetic acid adapted strains. *Kasetsart Journal - Natural Science* 42, 701-14.
  11. Suwanaketchanatit, C., Piluek, J., Peyachoknagul, S., *Huehne, P.S.*, 2007. High efficiency of stable genetic transformation in *Dendrobium* orchid via microprojectile bombardment. *Biologia Plantarum* 51, 720-727.
- Huehne, P.S.**, P. Eurjirapongpun and C. Jampatong. 2006. Transformation of chitinase gene in Thai sweet corn inbred lines using particle bombardment and *Agrobacterium*. *Agriculture Sci. J.* 37(4): 375-384.
- Bhinija, K., S. Ruengverayut, S. Loprasert and **P.S. Huehne**. 2004. Development of a minimal medium to prolong the subculturing period of *Vanda*, *dendrobium* and *Coelogyne* orchids *in vitro*. *Agriculture Sci. J.* 35(3-4): 97-103.
- Arayaskul, N, **P. Srifah** and C. Piluek. 2003. Detection of potexvirus and tobamovirus causing diseases in orchids. *Agriculture Sci. J.* 33(4-5): 173-186.

### Presentation

1. Petchthai, U., Peng, Du., Ding, Sho-wei, *Huehne, P. S.* 2012. MicroRNAs Expression of *Ascocenda* Orchid under Stress of Cymbidium Mosaic Virus Infection. *Proceedings of 2<sup>nd</sup> World Congress on Virology, Track 11: Agriculture & Plant Virology on August 20-22, 2012, at Embassy Suites Las Vegas, USA.* (<http://22dx.doi.org/10.4172/1948-5964.S1.O13>)
  2. Wongkhamprai, B., Chatree, T., Roytrakul, S., *Huehne, P.S.* 2012. Identification of proteins from complex tissue of Cattleya flower by LC-MS. The 7<sup>th</sup> International symposium of the protein society of Thailand. 29-31 August 2012. Chulabhorn Research Institute Convention Center, Bangkok, Thailand.
  3. Bhinija, K., Chokchaichamnankit, D., Srisomsap, C., Svasti, J., *Huehne, P.S.* (2012). The Identification of Mannose-Binding Lectins from Thai wild orchid, *Bulbophyllum blepharistes* Rchb.f. The 7<sup>th</sup> International symposium of the protein society of Thailand. 29-31 August 2012. Chulabhorn Research Institute Convention Center, Bangkok, Thailand.
- Huehne, P.S.**, S. Boonma, K. Phinij and J. Piluek. 2006. Odontoglossum ringspot virus-coat protein gene transformation into *Dendrobium* orchids. The proceeding of 44<sup>th</sup> Kasetsart University Annual Conference. 30 January-2 February, 2006. pp 109-116.
- Peyachoknagul, S., C. Mongkolsiiwatana, **P.S. Huehne**, N. Limsalukpet, S. Wannapinpong and E. Hitakomate. 2005. DNA typing of *dendrobium* samples by PCR-RFLP. The 14<sup>th</sup> National Genetic Conference, 11-13 March, 2005. Pp 408-413.
- Lertwiriawong, B., P. Saksoong, J. Chanpaiseang, and **P.S. Huehne** . 2005. Cloning of *cryIE(a)* gene effecting *Spodoptera exigua* in Thailand. The 14<sup>th</sup> National Genetic Conference, 11-13 March, 2005. Pp 426-431.

- Ketsuwan, U., S. Pasiri, J. Piluek, S. Peyachoknagul and **P.S. Huehne**. 2005. GFP gene transformation in *Dendrobium* orchid via particle bombardment. The 14<sup>th</sup> National Genetic Conference, 11-13 March, 2005. Pp 419-425.
- Ruengverayut S., K. Bhinija, S. Loprasert and **P.S. Huehne**. 2005. Effect of cytokinin on multiple shoots induction in *Coelogyne*, *Dendrobium* and *Vanda* orchids. In The Proceedings of 43<sup>rd</sup> Kasetsart University Annual Conference (Subject:Plants), 1-4 February 2005, Bangkok