REFERENCES

Abd-Alla, M. H. and Omar, S. A. 1998. Wheat straw and cellulolytic fungi application increases nodulation, nodule efficiency and growth of fenugreek (*Trigonella foenum-graceum* L.) grown in saline soil. **Biology and Fertility of Soils.** 26 : 58-65.

Badr EL-Din, S. M. S., Attia, M., and Abo-Sedera, S. A. 2000. Field assessment of composts produced by highly effective cellulolytic microorganisms. **Biology and Fertility of Soils**. 32 : 35–40.

Bangkok Metropolitan Administration (BMA) report. 2005.

Bayoudh, A., Gharsallah, N., Chamkha, M., Dhouib, A., Ammar, S. and Nasri, M. 2000. Purification and characterization of an alkaline protease from *Pseudomonas aeruginosa* MN1. **Journal of Industrial Microbiology and Biotechnology**. 24: 291-295.

Becker, P., Abu-Reesh, I., Markossian, S. *et al.* 1997. Determination of the kinetic parameters during continuous cultivation of the lipase-producing themophile bacillus sp. IHI-91 on olive oil. **Applied Microbiology and Biotechnology**. 48 : 184-190.

Chantawannakul, P., Oncharoen, A., Klanbut, K., Chukeatirote, E. and Lumyong, S. 2002. Characterization of proteases of *Bacillus subtilis* strain 38 isolates from traditionally fermented soybean in Northern Thailand. **Science Asia**. 28: 241-245.

Chen, P.J., Wei, T.C., Chang, Y.T. and Lin, L.P. 2004. Purification and characterization of carboxymethyl cellulase from *Sinorhizobium fredii*. **Botanical Bulletin of Academia Sinica**. 45: 111-118.

Cline, J., and Rodd, V. 2000. Rural Composting Model for Organics Diversion: Community and Farmer Partnership model for sustainable soils and a farm revenue stream. **Material Flow Analysis of Integrated Bio-Systems**. March-October 2000.

Dharmsthiti, S. and Kuhasuntisuk, B. 1998. Lipase from *Pseudomonas aeruginosa* LP602: biochemical properties and application for wastewater treatment. **Journal of Industrial Microbiology and Biotechnology**. 21: 75-80.

Dharmsthiti, S. and Luchai, S. 1999. Production, purification and characterization of thermophilic lipase from *Bacillus* sp. THL027. **FEMS Microbiology Letters**. 1-6.

Eberle, W. M. 1997. Guide for Community Yard Waste Composting in Kansas: In: **Environment and Pollution Control**, Issued in furtherance of Cooperative Extension Work, acts of May 8 and June 30, 1914.

Ghose, T.K. 1987. Measurement of cellulase activities. **Pure and Applied Chemistry**. Vol. 59:2. pp. 257-268.

Haba, E., Bresco, O., Ferrer, C., Marque's, A., Busquets, M. and Manresa, A. 2000. Isolation of lipase-secreting bacteria by deploying used frying oil as selective substrate. **Enzyme and Microbial Technology**. 26: 40-44.

Hankin and anangnostakis. 1977. Solid media containing carboxymethylcellulose to detect Cx cellulase activity of microorganisms. **The Journal of General Microbiology.** 98: 109-115.

Hashimoto, H., Iwaasa, T. and Yokotsuka, T. 1972. Thermostable acid protease produced by *Penicillium duponti* K1014, a true thermophilic fungus newly isolated from compost. **Applied Microbiology**. 24: 986-992.

Holmer, R. J., Gabutin, L. B., and Scnitzler, W. H. 1997. Organic Fertilizer production from City Waste : A Model Approach in a Southeast-Asia Urban Environment. **Kasetsart Journal (natural science)** 32: 50-53.

Insam, H., Riddech, N. and Klammer, S. (Eds.). 2002. **Microbiology of Composting**. Springer-Verlag Berlin Heidelberg.

Kim, S. S., Kim, Y. J. and Rhee, I. K. 2001. Purification and characterization of a novel extracellular protease from *Bacillus cereus* KCTC 3674. **Archives of Microbiology**. 175: 458-461.

Ko, W. H., Wang, I. T. and Ann, P. J. 2005. A simple method for detection of lipolytic microorganisms in soils. **Soil Biology and Biochemistry**. Article in press.

Kouker, G. and Jaeger, K.E., 1987. Specific and Sensitive plate assay for bacterial lipases. **Applied and Environmental Microbiology**. Jan. p. 211-213.

Krishna, C. 1999. Production of bacterial cellulases by solid state bioprocessing of banana wastes. **Bioresource Technology**. 69: 231-239.

Limtong, P., Vangnai, S., Sunanthapongsuk, V., and Piriyaprin, S. 1990. Isolation and Selection of Thermophilic Cellulolytic microorganisms for Compost Production in Thailand. **Kasetsart Journal (natural science)** 24: 108-115.

Maneechote, N. 2001. Genetic diversity of *Bacillus subtilis* byrandomly amplified polymorphic DNA. **Master's Thesis**, Chulalongkorn University. 99 p. (in Thai).

Markossian, S., Backer, P., Markl, H. and Antranikian, G. 2000. Isolation and characterization of lipid-degrading *Bacillus thermoleovorans* IHI-91 from an Icelandic hot spring. **Extremophiles.** 4: 365-371.

Mongkolthanaruk, W. and Dharmsthiti, S. 2002. Biodegradation of lipid-rich wastewater by a mixed bacterial consortium. **International Biodeterioration and Biodegradation**. 50: 101-105.

Moungkaew, K. 2001. Compost quality improvement using cellulolytic and nitrogen fixing microorganisms. **Master's Thesis**, Chulalongkorn University. 157 p. (in Thai).

Pedraza-Reyes, M. and Gutierrez-Corona, F. 1997. The bifunctional enzyme chitosanase-cellulase produced by the gram-negative microorganism *Myxobacter* sp. A-1 is highly similar to *Bacillus subtilis* endoglucanases. **Archives of Microbiology**. 168 : 321-327.

Polprasert, C. 1989. **Organic waste recycling**. John Willey and Sons Ltd., Chichester, United Kingdom. p 67.

Satsanakit, S. 2001. **Biofertilizer**. Biotechnology division. Thailand Institute of Scientifics and Technological Research (TISTR).

Singh, J., Batra, N. and Sobti, R. C. 2001. Serine alkaline protease from a newly isolated *Bacillus* sp. SSR1. **Process Biochemistry**. 36: 781-785.

Singh, J., Batra, N. and Sobti, R. C. 2004. Purification and characterization of alkaline cellulase produced by a novel isolate, *Bacillus sphaericus* JS1. **Journal of Industrial Microbiology and Biotechnology**. 31: 51-56.

Smartivutikoon, K. 2003. Detection of genesencoding nitrite reductase in denitrifying bacteria by PCR-RFLP technique. **Master's Thesis**, Chulalongkorn University. 119 p. (in Thai).

Stoffella, P. J. and Kahn, B. A. (eds.). 2000. **Compost utilization in horticultural cropping systems**. Lewis publishers. Washington, D.C.

Sztajer, H. and Maliszewska, I. 1988. Production of exogenous lipases by bacteria, fungi, and actinomycetes. **Enzyme and Microbial Technology**. 10: August. 492-497.

Thailand Environment Monitor. 2003. Department of Public cleaning, Bangkok Metropolitan Administration.

Thayer D. W. 1978. Carboxymethylcellulase produced by facultative bacteria from the hind-gut of the termite Reticulitermes hesperus. **The Journal of General Microbiology**. 106: 13-18.

Yang, J. K., Shih, I. L., Tzeng, Y. M. and Wang, S. L. 2000. Production and purification of protease from a Bacillus subtilis that can deproteinize crustacean wastes. **Enzyme and Microbial Technology**. 26; 406-413.

BIOGRAPHY

Miss Rungtiwa Piamtongkam was born on April 25, 1979, Bangkok, Thailand. She finished her secondary school at Suksanari School, Bangkok in 1996. She got a Bachelor's Degree of Science in Biochemistry, Faculty of Science, Chulalongkorn University in 2000. Then, she studied in Program of Biotechnology, Faculty of Science, Chulalongkorn University since 2001.