

**International Symposium on Mycotoxicology in Bangkok
- New Strategies for Mycotoxin Research in Asia -
<ISMYCO Bangkok' 06>**

**December 12-15, 2006
Kasetsart University Veterinary Teaching Hospital,
Conference Room, Bangkok**

**Under auspices of
Japanese Association of Mycotoxicology
Faculty of Veterinary Medicine, Kasetsart University**

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- 13:30-15:15 **Session 2:** Workshop: Analytical Methods for Mycotoxins
 Chairpersons: M. Nakajima (Japan) & A. Poapolathep (Thailand)
- 13:30-13:45 **S2-1:** Yokogawa Analytical Systems Inc.
 Analysis of mycotoxins by LC/TOF-MS
- 13:45-14:00 **S2-2:** Charm Sciences Inc.
 Rapid methods for mycotoxin detection
- 14:00-14:15 **S2-3:** Romer Labs.
 Determination of patulin in apple and hawthorn beverages using rapid Mycosep clean-up
 and HPLC-UV
- 14:15-14:30 **S2-4:** R-Biopharm AG
 Worldwide Mycotoxin Regulations and Analytical Challenges
- 14:30-14:45 **S2-5:** Neogen Corporation
 Neogen's food safety solutions
- 14:45-15:00 **S2-6:** VICAM
 Two highly sensitive and quantitative immunoaffinity column clean up methods for
 measuring aflatoxin M1 in milk and citrinin in corn
- 15:00-15:15 **S2-7:** Shimadzu Corporation
 Improving productivity for mycotoxin analysis
- 15:15-15:35 **Break**
- 15:35-17:50 **Session 3:** Risks to Human and Animal Health
 Chairpersons: Y. Sugita-Konishi (Japan) & K. Imsilp (Thailand)
- 15:35-16:00 **S3-1:** Y. Sugita-Konishi (Japan)
 Subclonic feeding study with nivalenol
- 16:00-16:25 **S3-2:** J. Shinozuka (Japan)
 Hepatotoxicity of T-2 toxin, trichothecene mycotoxin
- 16:25-16:50 **S3-3:** K. A. Voss (USA)
 Fetotoxicity and neural tube defects in CD1 mice exposed to the mycotoxin fumonisin B₁
- 16:50-17:10 **Break**
- 17:10-17:35 **S3-4:** H. Njapau (U.S.A)
 The acute jaundice outbreaks in Kenya and aflatoxin

17:35-17:50 **S3-5:** K. Imsilp (Thailand)
Risk assessment of mycotoxins

18:30-20:30 **Welcome Party** (Maruay Garden Hotel)

December 14 (Thu.)

9:00-11:50 **Session 4:** Contamination and Regulation in Food and Feed
Chairpersons: T. Goto (Japan) & M. Suttajit (Thailand)

9:00-9:25 **S4-1:** M. Suttajit (Thailand)
A perspective review of aflatoxin research in Thailand

9:25-9:50 **S4-2:** T. Goto (Japan)
Method validation for mycotoxin analysis

9:50-10:15 **S4-3:** F. Othman, C. C. Keat (Malaysia)
Situation of mycotoxins contamination in food and regulation on mycotoxin in Malaysia

10:15-10:35 **Break**

10:35-11:00 **S4-4:** Y.-C. Shih (Taiwan)
Surveys of mycotoxin contamination in foods in Taiwan during the recent decade

11:00-11:25 **S4-5:** D. Suprasert, V. Yurauart (Thailand)
Survey of patulin contamination in fruit juice in Thailand

11:25-11:50 **S4-6:** S. Tabata (Japan)
Mycotoxin contamination in foods and foodstuffs in Japan

11:50-13:00 **Lunch**

13:00-15:00 **Poster Session**

15:00-17:50 **Session 5:** Control of Mycotoxin Contamination
Chairpersons: S. Sakuda (Japan) & A. Chinaphuti (Thailand)

15:00-15:25 **S5-1:** K. Yabe (Japan)
Mechanism of aflatoxin biosynthesis

15:25-15:50 **S5-2:** S. Sakuda (Japan)
Studies on specific inhibitors for mycotoxin production

15:50-16:15 **S5-3:** T. Nakajima (Japan)
Epidemiology and control of *Fusarium* head blight disease and mycotoxin contamination

16:15-16:35 **Break**

16:35-17:00 **S5-4:** M. Kimura (Japan)
Biotechnology for *Fusarium* resistance and mycotoxin decontamination in cereal grains

17:00-17:25 **S5-5:** G. Schatzmayr (Austria)
The potential of certain microorganisms to reduce the negative impact of mycotoxins on animals

17:25-17:50 **S5-6:** A. Chinaphuti (Thailand)
Mycotoxin management in food and feed: Prevention and control

17:50-18:10 **Closing Ceremony**
Awarding Ceremony of Poster Prize (Yoshizawa Award)
Remark: K. Takatori (Japan)

18:30-20:30 **Farewell Party** (Faculty of Veterinary Medicine, Kasetsart University)

December 15 (Fri.)

10:00-12:00 Excursion:
Study visit to Laboratory Center of Food and Agricultural Product (LCFA) in Bangkok
(Kasetsart University)

Poster Presentation

Session 1: Distribution of mycotoxigenic fungi in Asia

PS1-1 Occurrence of *Aspergillus flavus* and storage fungi in nutmeg
M. Ichinoe, H. Takahashi, N. Ikeda, Y. Kanai, Y. Kiraku

PS1-2 Utilization of DNA sequences for identifying *Fusarium* species isolated from rice
A. Sakai, Y. Ozeki, Y. Sasaki, M. Aihara, Y. Kikuchi, K. Takatori

PS1-3 Occurrence of toxin producing from soil, plant and food commodity
L. Manoch, O. Jeamjitt, T. Dethoup, J. Kokaew

Session 2: Analytical methods for mycotoxins

PS2-1 Lateral flow quantitative method for the detection of mycotoxins

R. Markovsky

PS2-2 Rapid strip test kit for the detection of aflatoxin in corn using ethanol extraction method

M. Z. Zheng, K. S. Tong, J. Binder, C. Brewé

PS2-3 Analytical method of aflatoxin M₁

Y. Sato, N. Takahashi, M. Kanbashi, M. Endo

PS2-4 Validation of aflatoxins analysis by IAC-post column photochemical reaction

P. Kavisarasai, S. Phiriyayon, M. Patamasunthorn

PS2-5 Immunochromatography using colloidal gold-antibody probe for the detection of aflatoxin B₁ in grain and feed

T. Jiratpong, W. B. Shim, Z. Y. Yang, D. H. Chung

PS2-6 FAPAS proficiency testing of aflatoxin analysis in food and feed using DOA-aflatoxin ELISA test kit

A. Chinaphuti

PS2-7 Determination of aflatoxins in animal feeds by multifunctional column clean-up and HPLC

N. Ali, N. Hashim, B. Y. Chew, B. Saad

PS2-8 Production of polyclonal antibody against fumonisin B₁ and detection by ELISA in Thailand

A. Chinaphuti, A. Wongurai

PS2-9 Development of immunoassays for the detection of zearalenon

T. Thongrussamee, W. B. Shim, N. Kuzmina, T. Jiratpong, D. H. Chung

PS2-10 Rapid fluorescence polarization immunoassay for the determination of zearalenone in maize

H.-J. Chang, E. H. Choi, S. A. Eremin, H. J. Kim, D.-H. Chung, H. S. Chun

PS2-11 Determination of ochratoxin A in roasted coffee and corn by immunoaffinity column cleanup with high performance thin layer chromatography

S. Chompurat, K. Sato, W. Mahakarnchanakul, J. Sirison, S. Kladpan

PS2-12 Determination of zearalenone and its metabolites in beer and malt using liquid chromatography and tandem mass spectrometry

K. Mizutani, Y. Kitagawa, N. Mochizuki

PS2-13 Occurrence of mycotoxin in Asia feed samples – Summary of the Biomin mycotoxin survey program –

L.-J. Chin, E.-M. Binder, L.-M. Tan

Session 3: Risks to human and animal health

PS3-1 Characteristic of aflatoxin B₁ metabolism in pig and other animals species

P. Tulayakul, K. S. Dong, S. Kumagai

PS3-2 Effects of low level aflatoxin B₁ on hepatic enzyme activities and white blood cell parameters in Nile tilapia (*Oreochromis niloticus*)

B. Bunsatra, A. Bintvihok

PS3-3 Fate and systematic availability of fusarenon-X in ducks

A. Poapolathep, S. Poapolathep, K. Imsilp, C. Sinthusing, U. Jermnak, N. Klangkaew, Y. Sugita-Kinishi, S. Kumagai

PS3-4 Toxicokinetics of fusarenon-X, a mycotoxin, in broilers

A. Poapolathep, S. Poapolathep, K. Imsilp, T. Tassanawat, N. Kusujarit, Y. Sugita-Kinishi, S. Kumagai

PS3-5 Sphinganine 1-phosphate as a predictive biomarker for fumonisin exposure and toxicity in mice

D.-H. Kim, H.-W. Shin, Y.-S. Lee, J.-M. Yoo, Y.-M. Lee, S. Jang, S. Oh, H.-S. Yoo

PS3-6 Elevation of ceramide and sphingoid bases 1-phosphate in liver of fumonisin B₁-exposed mouse

D.-H. Kim, H.-W. Shin, Y.-S. Lee, J.-M. Yoo, Y.-M. Lee, S. Jang, S. Oh, H.-S. Yoo

PS3-7 *In vitro* induction of mitochondrial swelling by mycotoxins

A. Kitagawa, M. Hiratsuka, K. Kawai

Session 4: Contamination and regulation in food and feed

PS4-1 The survey of aflatoxins contamination and management approach to reduce aflatoxins in peanuts and products and dried chili in Thailand in 2004

S. Kladpan, W. Mahakarnchanakul, V. Yongmanitchai, M. Boonyaratanakornkit, A. Chinabuti

PS4-2 Aflatoxin and zearalenone contamination of cassava to be used for feedstuffs in Thailand

P. Tangmunkhong, U. Kuntho, S. Jatupornpong, S. Kumagai

PS4-3 Ochratoxin A monitoring in rice and barley in Korea

S. Lee, J. Joo, S. Han, J. Choi, G. Ryu, K. Lee, T. Thongrussamee, F. Yao, D. Chung

PS4-4 Analysis of beauvericin and enniatins H, I, and MK1688 by *Fusarium* species isolated from potato

H.-H. Song, K.-A. Kim, H.-S. Lee, C. Lee

PS4-5 Analysis of beauvercin and unusual enniatins co-produced by *Fusarium oxysporum* FB1501
H.-H. Song, K.-A. Kim, H.-S. Lee, C. Lee

PS4-6 Mycotoxins from *Alternaria porri*
J. Rangsang, P. Phuwapraisirisan, P. Siripong, S. Tip-Pyang

Session 5: Control of mycotoxin contamination

PS5-1 *Lactobacillus brevis* alcohol dehydrogenase catalyzes the same reaction involved in aflatoxin biosynthesis
E. Sakuno, K. Yabe, H. Nakajima

PS5-2 Selection of common edible herbs which inhibit aflatoxin production or fungal growth
A. Chinaphuti, S. Aukkasarakul

PS5-3 Dioctain A is a strong inhibitor of aflatoxin production by *Aspergillus parasiticus*
T. Yoshinari, T. Akiyama, K. Nakamura, Y. Takahashi, Y. Muraoka, Y. Nonomura, H. Nagasawa, S. Sakuda

PS5-4 Efficacy of yeast cell wall on detoxification of aflatoxin B₁ in diet of tilapia fish, *Oreochromis* sp.
B. Tengjaroenkul, U. Tengjaroenkul, K. Pimpukdee

PS5-5 Isothermal adsorption of aflatoxin B₁ on Hectorite clay
K. Pimpukdee, U. Tengjaroenkul, B. Tengjaroenkul

PS5-6 Adsorption study for the detoxification of aflatoxin B₁ by using the different clay minerals in Thailand
U. Tengjaroenkul, K. Pimpukdee, B. Tengjaroenkul

PS5-7 Protection of deoxynivalenol contamination with specific inhibitors for its production
A. Yaguchi, H. Takahashi, T. Nakajima, Y. Sugita-Konishi, H. Nagasawa, S. Sakuda

PS5-8 Sorting of deoxynivalenol and nivalenol contaminated wheat grains by sorting machine which near infrared rays
Y. Itoh, H. Takahashi