

INTERNATIONAL CONFERENCE ON ANTIOXIDANTS & DEGENERATIVE DISEASES (ICADD 2015)



“From Molecules to Human”

June 3 - 4, 2015

ISTANA HOTEL | KUALA LUMPUR, MALAYSIA

Organised by:
Antioxidants, Ageing and Degenerative Diseases Research Group
Universiti Kebangsaan Malaysia

www.icadd.org.my



INTERNATIONAL CONFERENCE ON ANTIOXIDANTS & DEGENERATIVE DISEASES (ICADD 2015)



“From Molecules to Human”

June 3 - 4, 2015

ISTANA HOTEL | KUALA LUMPUR, MALAYSIA

Organised by:
Antioxidants, Ageing and Degenerative Diseases Research Group
Universiti Kebangsaan Malaysia

www.icadd.org.my



"*[Signature]*"
Tutik Wicakanti
KL, Malaysia



**1st INTERNATIONAL CONFERENCE ON ANTIOXIDANTS AND
DEGENERATIVE DISEASES**

3-4 JUNE 2015

**ISTANA HOTEL
KUALA LUMPUR
MALAYSIA**

Organising Committee

Patron	: Prof. Dato' Dr. Noor Azlan Ghazali
Advisor	: Prof. Dato' Dr. Raymond Azman Ali
Chairman	: Dr. Mohd Hanafi Ahmad Damanhuri
Co-Chairman	: Prof. Dr. Suzana Makpol
Scientific Committee	: Prof. Dato' Dr. Wan Zurinah Wan Ngah Prof. Dr. Yasmin Anum Mohd. Yusof Prof. Dr. Suzana Makpol Assoc. Prof. Dr. Norzana Abdul Ghafar
Secretary	: Dr. Khaizurin Tajul Arifin Ms. Nur Fathiah Abdul Sani Mrs. Nurul Syafiqah Mohd Sahman
Treasurer	: Assoc. Prof. Dr. Zakiah Jubri Mr. Wan Junizam Wan Yusof
Secretariat Committee	: Dr. Khaizurin Tajul Arifin Ms. Nur Fathiah Abdul Sani Dr. Goon Jo Aan Dr. Noor Akmal Shareela Ismail
Technical Committee	: Dr. Ekram Alias Mr. Ahmad Fais Abdul Rasid Mr. Mohd. Nabil Saufi Husin
Programme Committee	: Assoc. Prof. Dr. Azman Abdullah Dr. Norwahidah Abdul Karim Mrs. Nor Zazarina Maarof Mrs. Siti Nor Asyikin Zakaria Ms. Noor Baitee Abdul Rahim Mrs. Nazirah Abdul Rani Mrs. Geetha Gunasekaran

4 June 2015

0845-1025

No.	Presentation
1	Antioxidant and Anti-Cholinesterase Activities from Different Varieties of Thai Local Chilies <u>Nantakornsuttanan N</u> , Charoenkiatkul S, Temviriyankul P, Chupeerach C, and Suttisansanee U Mahidol University, Thailand
2	Tocotrienol-Rich Fraction Modulates the Expression of SIRT1 and Genes Involved in the Regulation of Cell Cycle and Apoptosis <u>Jaafar F</u> , Mohd Yusof YA, Wan Ngah WZ, Makpol S Universiti Kebangsaan Malaysia, Malaysia
3	Gastroprotective Effect of Vitex Pubescens Leaf Ethanol Extract against Ethanol-Induced Gastric Mucosal Injuries in Sprague-Dawley Rats <u>AL-Wajeeh NS</u> , Abdulla MA, Mohd Noor S, Halabi MF University of Malaya, Malaysia
4	Gene Expression Profiles of α-Tocopherol- and N-Acetyl-cysteine-treated Senescent Human Skeletal Muscle Myoblasts <u>Khor SC</u> , Abdul Karim N, Wan Ngah WZ, Makpol S Universiti Kebangsaan Malaysia, Malaysia
5	Carica Papaya Leaves Aqueous and Methanol Extracts Inhibit Platelet Functions Stimulated by Various Agonists <u>Abdelrahim LM</u> , Zain ZNM, Abdul Jalil SNS, Abu Seman Z, Mansur FAF Universiti Sains Islam Malaysia, Malaysia
6	Antioxidant Superoxide Dismutase Increased in The Tissue of Experimental Diabetic Rats under Ethanol Swietenia mahagoni Seed Extract Treatment <u>Wresdiyati T</u> , Sa'diah S, Winarto A Bogor Agricultural University, Indonesia
7	Differentially Expressed Proteins in Glioma-Bearing Mice Derived from Rcas/Tva System Treated with Tocotrienol-Rich Fraction as Identified by Quantitative Proteomic Analysis <u>Daun K</u> , Makpol S, Abdul Sani NF, Harun R, Mohd Mokhtar N, Abdul Jamal AR, Wan Ngah WZ Universiti Kebangsaan Malaysia, Malaysia
8	Effects of Vitamin C and Omega-3 Fatty Acids on Inflammation in Hypertensive and/or Diabetic Obese Adults: A Randomized, Controlled Trial <u>Ellulu M</u> , Rahmat A, Ismail P, Khaza'ai H, Abed Y Universiti Putra Malaysia, Malaysia
9	Differential Gene Expression of Senescent Human Skeletal Muscle Myoblasts by TRF Treatment <u>Lim JJ</u> , Wan Ngah WZ, Mouly V, Abdul Karim N Universiti Kebangsaan Malaysia, Malaysia
10	Synergistic Cytotoxic Effects of GLYKEN C-Coded EBN and Tamoxifen on Human Breast Cells MCF-7: In Vitro Study <u>Tay SY</u> , Shak PS, Chua KH Universiti Kebangsaan Malaysia, Malaysia

AO-06

Antioxidant Superoxide Dismutase Increased in The Tissue of Experimental Diabetic Rats under Ethanol Swietenia mahagoni Seed Extract Treatment**Wresdiyati T, Sa'diah S, Winarto A**

Department of Anatomy, Physiology, and Pharmacology, Faculty of Veterinary Medicine, Bogor Agricultural University, Jl. Agathis IPB Dramaga Campus, Bogor, Indonesia.

Background: Diabetes is a common metabolic disease characterized by abnormally high plasma glucose levels or hyperglycemia, leading to major complications, such as diabetic neuropathy, retinopathy, and cardiovascular diseases. It was reported that antioxidant status decreased in diabetic condition. The objective of this study was to observe the profile of antioxidant Cu,Zn-SOD in the pancreatic, testicular, liver and kidney tissues of experimental diabetic rats treated with ethanol Swietenia mahagoni seed extract.

Methods: A total of 25 male Sprague-Dawley rats were divided into five groups ; (a) negative control group, (b) positive control group (diabetes mellitus/DM), (c) DM group that was treated with Swietenia mahagoni seed extract, (d) DM group that was treated with acarbose, and (e) non DM group that was treated with Swietenia mahagoni seed extract. Diabetic condition was obtained by alloxan induction. The extract was orally administrated to diabetic rats for 28 days. The content of antioxidant Cu,Zn-SOD in the pancreatic and testicular tissues was analyzed using immunohistochemical technique. The activity of antioxidant SOD in the liver and kidney was measured using spectrophotometer.

Results: The content of antioxidant Cu,Zn-SOD in pancreatic and testicular tissues of DM group treated with ethanol Swietenia mahagoni seed extract showed highest than that of positive control group (DM). The activity of antioxidant SOD in liver tissues of DM group treated with ethanol Swietenia mahagoni seed extract also showed highest than that of positive control group (DM), but not in kidney tissues. These effects in the present study may caused by flavonoid content in the extract (Wresdiyati et al., 2014).

Conclusion: The results concluded that ethanol Swietenia mahagoni seed extract increased the antioxidant Cu,Zn-SOD content in the pancreatic and testicular tissues, as well as antioxidant SOD activity in liver tissues of experimental diabetic rats.

Keywords: Antioxidant SOD, swietenia mahagoni, diabetic, pancreas, testis