

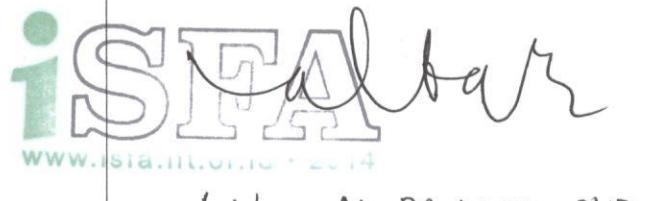
SURAT PERNYATAAN  
PENGALIHAN HAK PUBLIKASI

Menyatakan bahwa makalah berjudul “**ANTIDIABETIC ACTIVITY OF DURIAN (*Durio zibethinus* Murr.) AND RAMBUTAN (*Nephelium lappaceum* L.) FRUIT PEELS IN ALLOXAN DIABETIC RATS**” Karya Muhtadi, Alfiani Urilia Primarianti, dan Tanti Azizah Sujono dari Fakultas Farmasi Universitas Muhammadiyah Surakarta telah dipresentasikan pada **International Symposium on Food and Agro-biodiversity (ISFA) 2014**, yang diselenggarakan oleh Fakultas Peternakan dan Pertanian Universitas Diponegoro Semarang di Hotel Patra Jasa Semarang pada tanggal 16 - 17 September 2014.

Kami menyetujui hak publikasi pengelektronikannya kepada Lembaga Penelitian dan Pengabdian kepada Masyarakat (LPPM) Universitas Muhammadiyah Surakarta.

Semarang, 16 September 2014

Panitia Pelaksana  
*International Symposium on Food and Agro-biodiversity (ISFA) 2014,*





## SURAT TUGAS

No. 360/A.3-III/LPPM/IX/2014

Bismillahirrohmanirrohim

Ketua Lembaga Penelitian dan Pengabdian pada Masyarakat Universitas Muhammadiyah Surakarta menugaskan kepada:

N a m a : **Dr. Muhtadi, M.Si**  
NIK : 761  
NIDN : 0609096902  
Golongan/Pangkat : IV-a / Pembina  
Jabatan Fungsional : Lektor Kepala  
Fakultas/Prodi : Farmasi / Farmasi  
Universitas Muhammadiyah Surakarta  
Alamat Kantor : Jl. A. Yani Pabelan Kartasura, Surakarta 57102  
Telp. 0271-717417 Fax. 0271-715448

Bentuk Tugas/Kegiatan : Sebagai penyaji pada kegiatan: International Symposium on Food and Agro-biodiversity (ISFA) 2014 dengan Tema : Managing Biosafety and Biodiversity of Food from Local to Global Industries

Judul Makalah : Antidiabetic Activity of Durian (*Durio zibethinus murr.*) and Rambutan (*Nephelium lappaceum L.*) Fruit Peels in Alloxan Diabetic Rats

Tempat Kegiatan : Patra Jasa Convention Hotel

Hari/Tanggal Kegiatan : Selasa dan Rabu, 16-17 September 2014

Penyelenggara Kegiatan : Fakultas Peternakan dan Pertanian Universitas Diponegoro (UNDIP) Semarang

Demikian harap dilaksanakan sebaik-baiknya.



TANGGAL DATANG	
TANGGAL KEMBALI	
Mengetahui: Panitia Pelaksana <i>Al-Baari</i> TAN AL BAARI PHD www.isfa.itc.id • 2014	

**ANTIDIABETIC ACTIVITY OF DURIAN (*Durio zibethinus* Murr.)  
AND RAMBUTAN (*Nephelium lappaceum* L.) FRUIT PEELS  
IN ALLOXAN DIABETIC RATS**

**Muhtadi, Alfiani Urilia Primarianti, Tanti Azizah Sujono**

Pharmacy Faculty, Universitas Muhammadiyah Surakarta  
Jl. A. Yani Tromol Pos I, Pabelan, Kartasura, Surakarta 57102  
E-mail: muhtadi@ums.ac.id

**ABSTRACT**

*Durian (Durio zibethinus Murr.) and rambutan (Nephelium lappaceum L.) fruit peels had been reported contain flavonoids that allegedly had antidiabetic activity. This study aims to determine the antidiabetic activity of the ethanolic extract of durian and rambutan fruit peels in alloxan diabetic rats. The research method is pre and post control group design. Forty white male rats of Wistar strain were divided into 8 treatment groups. Group I (negative control) were given solution of CMC-Na 0.5%, group II (positive control) were given Glibenclamide 0.45 mg/kgb.w., group III, IV, and V were treated with ethanol extract of durian fruit peel with consecutive doses 125, 250, and 500 mg/kgb.w. Groups VI, VII, and VIII were treated with ethanol extract of rambutan fruit peel with successive doses 125, 250, and 500 mg/kgb.w. Previously the rats induced alloxan intraperitoneally with dose 150 mg/kgb.w. On the fourth day the rats with blood glucose levels  $\pm$  200 mg/dL is used for research, and considered as diabetic rats. Treatment of animal testing for 11 days with 3 times taking blood in day 0, 4, and 11. The results showed the ethanolic extract of the durian and rambutan fruit peels with each doses 125, 250, and 500 mg/kgb.w. have antidiabetic activity in alloxan diabetic rats. The percentage reduction in blood glucose levels of ethanol extract of durian and rambutan fruit peels with each doses 125, 250, and 500 mg/kgb.w. are  $16.55\pm2.99\%$ ,  $35.09\pm3.84\%$ ,  $50.19\pm3.66\%$ ,  $22.65\pm2.10\%$ ,  $49.05\pm3.22\%$ ,  $61.76\pm4.26\%$ , respectively.*

**Keywords :** Antidiabetic, *Durio zibethinus* Murr., *Nephelium lappaceum* L., Blood Glucose, Alloxan