International Seminar & Expo on Jamu 2010

Organized by :
Faculty of Pharmacy Universitas Padjadjaran

Herbal Medicines : Indigenous, Molecular Aspects, and Clinical Application

PROCEEDING

Faculty of Pharmacy, Universitas Padjadjaran

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Proceeding

The International Seminar and Expo on Jamu 2010 (ISEJ 2010)
"Herbal Medicines : Indigeneous, Molecular Aspects, and Clinical Application"

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Foreword from Dean of Faculty of Pharmacy Universitas Padjadjaran

Dear Delegates,

On behalf of the Conference Committees, I would like to thanks for your participation in The International Seminar and Expo 2010, which take place from November 5th-6th 2010, at Bandung, Indonesia. This seminar of "Herbal Medicines: Indigenous, Molecular Aspects, and Clinical Application" offer a comprehensive understanding of utilization of herbal medicines from various aspects, including those associated with their regulation, traditional use, chemical analysis, biological activity, mechanism of action, and clinical application.

This proceeding is consist of approximately 34 papers. We thanks to The President of Universitas Padjadjaran, Prof. Dr. Ganjar Kurnia, DEA.; The Dean of Faculty of Pharmacy of Universitas Padjadjaran, Prof. Dr. Anas Subarnas, M.Sc., Apt.; and all the authors that participated in this conference for all their support and contribution in publishing this proceeding.

As the organizing committee, we greatly appreciate your participation in The International Seminar and Expo 2010. We look forward to meeting you and welcoming you again in our next meeting.

Bandung, November 5th 2010.
Sincerely,

Prof. Dr. Anas Subarnas, M.Sc., Apt.
Dean of Faculty of Pharmacy
Universitas Padjadjaran

Content

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EFFECTS OF ETHANOLIC EXTRACTS FROM MENIRAN HERBS (*Phyllanthus niruri* L.) , PAPAYA LEAVES (*Carica papaya* L.), AND RED GUAVA LEAVES (*Psidium guajava* L.) AGAINST THE NUMBERS OF PLATELETS, ERYTHROCYTES, AND HEMATOCRYTES LEVEL ON FEMALE WHITE RATS (*Rattus novergicus*) BY USING HEPARIN INDUCTION METHOD

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Abstract

This research is about the effect of ethanol extract of meniran (Phyllantus niruri L.) , papaya leaves (Carica papaya L.), and red guava leaves (Psidium guajava L.) against the number of platelets, erythrocytes, and hematocrytes level on female white rats (Rattus novergicus) by using Heparin Induction Method. The meniran ethanol extract dosages used are 125, 250, 500mg/kg BW, the papaya leaves ethanol extract dosages used are 100, 200, 400mg/kg BW; and the red guava leaves ethanol extract dosages used are 250, 500, 1000mg/kg BW. Observation of changed parameters was done after 7 days. The result showed that the ethanol extract of meniran, papaya leaves, and red guava leaves caused a significant increase on the number of platelets, erythrocytes and hematocrytes level compared to the negative control. The result shows that the plant which has significant difference againts negative control on platelets number increasement is ethanol extract of meniran on 250 and 500mg/kg BW dosages, ethanol extract of papaya leaves on 200 and 400mg/kg BW and ethanol extract of red guava on 500 and 1000 mg/kgBW, otherwise the increasement of erytrocytes number and hematocryte's level which have significant difference againts negative control is ethanol extract of meniran on 125,250, 500mg/kgBW dosages, ethanol extract of papaya leaves on 200 and 400 mg/kgBW dosages, ethanol extract of red guava on 500 and 1000mg/kgBB dosages. The biggest effect which obtained from improvement the amount of platelets that is at dose 500 mg/kg BW (dose III meniran) with percentage 84%, improvement the amount of eritrocytes that is at dose 500 mg/kg BW (dose III meniran) with percentage 32,98%, while improvement rate of hematocrytes at dose 1000 mg/kg BW (dosis III daun jambu biji merah) dengan persentase 10,43%. From result of censorship of fitokimia obtained by compounds of metabolit secunder which implied in extract of ethanol meniran, leaf of papaya and red guava leaf. Ethanol extract of meniran consist of alkaloid, polifenol, tannin, saponin, flavonoid, monoterpen & seskuiterpen, triterpenoid and kuinon.. Ethanol extract of papaya leaf consist of alkaloid, polifenol, tannin, saponin, flavonoid and kuinon. Ethanol extract of guava leaf consist of polifenol, tanin, saponin, flavonoid, monoterpen & seskuiterpen, triterpenoid and kuinon.

Keyword : Meniran Herbs, Papaya Leaf, Red Guajava Leaf, Trombocyte, Eritrocyte, Hematocryte

INTRODUCTION

Dengue is a mosquito-borne infection that in recent decades has become a major international public health concern. Dengue is found in tropical and sub-tropical regions around the world, predominantly in urban and semi-urban areas. Dengue haemorrhagic fever (DHF), a potentially lethal complication, was first recognized in the 1950s during dengue epidemics in the Philippines and Thailand. Today DHF affects most Asian countries and has become a leading cause of hospitalization and death among