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PREFACE FROM THE EDITORS

The proceeding was produced based on paper and posters presented at the International Conference on Drug Development from Resourses (ICDDNR) that was held in Jambuluwuk Malioboro Boutique Hotel, Yogyakarta, in June 30th, 2012.

This proceeding contains of research from various field in pharmacy including natural product chemistry, analytical chemistry, drug synthesis, drug formulation, pharmacology, clinical pharmacy and social pharmacy.

Hopefully, this proceeding will be useful for natural drug development and drug development in general. I would like to give appreciation for all member of editors that have been working hard to collect and review the manuscrip.

WELCOME SPEECH FROM COMITTE

The trend back to nature made large impact on development of drug from natural resources. The development of drug from natural resources were addressed to prevention, diagnosis, therapy, as well as rehabilitation.

On the other hand, collaboration involving researchers, pharmacist, physician and other health professionals have many benefit in increasing the drug development and also application in health improvement.

Faculty of Pharmacy in celebrating 16th anniversary, successfully held an International Joint Conference "International Conference on Drug Development from Natural Resources (ICDDNR)". ICDDNR will be organized every 2 years in rotation by three universities (University of Ahmad Dahlan, University of Muhammadiyyah Malang and Guangxi Medical University.

We would like to express our gratitude and appreciation to all the writers in this proceeding, keynotes speakers, presenters, participants, member of steering committees and technical committees, as well as all of our colleagues for the invaluable contributions in this conference. We wish all participants will find this conference intellectually beneficial as well as fascinating.

Sincerelly, Dr. Nurkhasanah, M.Si, Apt

REMARK OF THE DEAN OF PHARMACY FACULTY AHMAD DAHLAN UNIVERSITY

Assalamu'alaikum wr wb

Alhamdulillahirrabilamin,

This kind day, on behalf of Faculty of Pharmacy Ahmad Dahlan University, I would like to come all of you in Yogyakarta. I am very pleased and grateful of your attention and participation in International Conference of Drug Discovery From Natural Resources.

This conference is organized by collaboration among Ahmad Dahlan University, Muhammadiyah Malang University and Guangxi University. This conference is also held to celebrate the 16th Anniversary of Pharmacy Faculty Ahmad Dahlan University. As part as of university collaboration, this conference will be held continually every year in Muhammadiyah Malang University and Guangxi University.

Drug discovery of the natural resources is announced as the major theme of this conference. As the second biodiversity in the world, Indonesia is favorable for natural product development especially in drug discovery. The Asian natural drug discoveries have been developed long years ago by empirical usage. This time, the development of the natural drug discovery showed a high acceleration, in line with the progress of science and technology. This is indicated by a lot of researches in discovery of bioactive compounds and natural product formulations that were produced by universities and research institutions. Even today natural medicine became a mainstay commodity for some countries in Asia. Communication and discussion of all the researchers from various fields related to the development of natural resources is a must in order to accelerate the discovery of natural medicines. Our expectation, this conference to be involved of that part.

Special thanks to the plenary speakers from Indonesia, Malaysia and China. Thanks you very much for your attendance and experiences that will be shared. I also appreciate the participation of both oral and poster speakers or other participants who wish to know the development of the discovery of natural medicines.

By attending this conference, I hope there will be many collaboration in the future, especially among the universities to develop the evidence based drug from the natural resources. Please, make networking during the whole day of conference.

Finally, my high appreciation to the committee which has organized this event and to all the participants, have a nice conference. Thanks you very much

Wassalamu'alaikum wr wb

SPEECH OF THE DEAN OF HEALTH SCIENCE FACULTY OF UNIVERSITY OF MUHAMMADIYAH MALANG

Bismillahinahmanirrahim

The Honorable,

Rector and Academic staffs of Ahmad Dahlan University, Indonesia

Rector and Academic staffs of Guangxi Medical University Nanning China.

Rector and Academic staffs of University of Muhammadiyah Malang, Indonesia

Ladies and gentlemen, all the conference participants

Assalamu'alaikum Warahmatullahi Wabarakatuh

We must say thankful to Allah SWT, that we have been given a chance to attend this International Conference of Drug Development from Natural Resources (ICDDNR) in Ahmad Dahlan Universi6,, and on behalf of the steering committe, I welcome you to the beautiful ci5, of Yogyakarta, Indonesia.

This year's meeting is a very good moment to infoduce the biodiversif of Indonesia and its potential as natural drug resources. This is also a great time for both, researchers and practitioners; especially in the field of natural drug resources, to share and stengthen their knowledge in purpose to give a meaningful contribution for health and humanity. We really hope that at the end of this conference, there will be new ideas and latest technologr of pharmacy and natural medicine that could be introduced to the world. Furthermore, those ideas are not only written on the paper but can also be put into practice of health and medical.

Ladies and gentlemen,

The Universities of Muhammadiyah are built in Indonesia as a commitment of the Organisation of Muhammadiyah to play a part in the development of science and technology. As the member of this conference's committe, along with Ahmad Dahlan University and GuangXi Medical University China, University of Muhammadiyah Malang is committed to firlfil this purpose.

We sincerely thank the university representatives and all the participants for their valuable contributions to. this conference. In addition to the outstanding scientific program, we also hope that you can enjoy the pulture and beautiful sights of Yoryakarta, Indonesia. May all of you have a great and memorable time in Indonesia.

Billahi fi sabilil haq, fastabiqul khairat

Wassalamu'alaikum warahmatullahi wabarakatuh

Yogyakarta, June 30th 2012 Dean of Faculty of Health Science University of Muhammadiyah Malang

Ker

Tri Lestari Hadayani, M.Kep, Sp. Mat