

Indonesian Journal of Cancer Chemoprevention

Editor in Chief

Dr. Arief Nurrochmad, M.Si., M.Sc., Apt.

Vice

Dr. Agung Endro Nugroho, M.Si., Apt.

Secretary

Dr.rer.nat. Rr. Endang Lukitaningsih, M.Si., Apt.

Editors

Dr.Med.dr. Indwiani Astuti

Dr. Erna Prawita Setyowati, M.Si., Apt.

Dr. Muhammad Da'i, M.Si., Apt.

Board Reviewing Editors

Prof. Dr. Edy Meiyanto, M.Si., Apt.

(Cancer Chemoprevention Research Center, Faculty of Pharmacy Universitas Gadjah Mada, Yogyakarta)

Prof. drg. Ferry Sandra, D.D.S., Ph.D., L.F.I.B.A.

(Stem Cell and Cancer Institute, Jakarta, Indonesia)

Prof. Dr. Sugiyanto, SU., Apt.

(Faculty of Pharmacy, Universitas Gadjah Mada, Yogyakarta)

Prof. Dr. Sukardiman, SU., Apt.

(Faculty of Pharmacy, Universitas Airlangga, Surabaya)

Prof. Dr. Adek Zamrud Adnan, M.Sc., Apt.

(Faculty of Pharmacy, Universitas Andalas, Padang)

Prof. Dr. Sismindari, SU., Apt.

(Faculty of Pharmacy, Universitas Gadjah Mada, Yogyakarta)

Prof. Masashi Kawaichi, MD., PhD.

(Laboratory of Gene Function in Animals, Graduate School of Biological Sciences, Nara Institute of Science and Technology, Nara, Japan)

Prof. Hiroshi Itoh, Pharmacist., PhD.

(Laboratory of Signal Transduction, Graduate School of Biological Sciences, Nara Institute of Science and Technology, Nara, Japan)

Business Manager

Adam Hermawan, M.Sc., Apt.

Muthi Ikawati, M.Sc., Apt.

Lay outer and setting

Gatot Sadewo, AMd.

Editorial Office

Faculty of Pharmacy, Universitas Gadjah Mada Yogyakarta

Sekip Utara, Yogyakarta, Indonesia 55281

Telp. (+62-274) 6492662, Fax. (+62-274) 543120

Email : isc2010@ymail.com

Bank : Bank BNI

Branch : Cabang UGM, Yogyakarta

Account No. : 0205640096

Account Name : Muthi Ikawati

Published by

Indonesian Society for Cancer Chemoprevention (ISCC)

Cover Picture :

“SEM micrograph of hair ...”

(see Helen et al., p 159-168)

INDONESIAN JOURNAL OF CANCER CHEMOPREVENTION

ARTICLES

<i>Taraxacum Officinale</i> Leaves Ethanolic Extract As Immunostimulatory Agent for Reducing Side Effect of Doxorubicin in Sprague Dawley Rats (Sri Kasianningsih, Erlina Rivanti, Ratih Hardika Pratama, Nanda Resa Pratama, Muthi' Ikawati and Edy Meiyanto)	135-140
Free Radical Scavenging Activity of Ethanolic Leaves Extract and Its Different Solvent Fractions of <i>piper betle</i> L. <i>in vitro</i> (Chandra Risdian, Wahyu Widowati, Tjandrawati Mozef, Teresa Liliana Wargasetia and Khie Khiong)	141-145
Antioxidant-free Radical Scavenging of some Euphorbiaceae Herbs (Titik Sunarni and Fransiska Leviana)	146-140
Banana Peels (<i>Musa paradisiaca</i> L.) Extract as Phytoestrogen on Ovariectomized Mice Mammary Gland Development by Inducing c-Myc Expression (Nanda Resa Pratama, Yurista Gilang, Rita Riata, Adam Hermawan, Muthi' Ikawati and Edy Meiyanto)	151-159
Effect of Various Concentration of Vegetable Protein in Hair Mask on The Hair Texture (Ivony Helen, Idajani Hadinoto, Lannie Hadisoewignyo and Lisa Soegianto)	159-168
Anti-Inflammatory Activity of The Extract of Guava Leaves (<i>Psidium Guajava</i> L) In The Rat (<i>Rattus norvegicus</i> L) (Linda Weni, Harliansyah and Etty Widayanti)	169-172
An Extract of <i>Zingiber Officinale</i> and <i>Piper Retrofractum</i> Combination and Its Effect to Cancer Cell Line (Heny Ekowati, Septiyaningsih and Harwoko)	173-181
Cytotoxicity Assay From Fractions of <i>Hedyotis corymbosa</i> Extract Against Breast Cancer Cell Line T47D (Rina Andriyani, Chandra Risdian and Zalinar Udin)	182-186
Lymphocyte Proliferation Activity MTT -Test of Ethanolic Extract of Pasak Bumi Root (<i>Eurycoma longifolia</i> Jack) on Induced 7,12-Dimethylbenz[a] Antracene (DMBA) Female Sprague Dawley Rat (Lily Noor Falah and Sapto Yuliani)	187-192
Phytochemical Screening and Toxicological Evaluation Using Brine Shrimp Lethality Test (BSLT) of Some Fractions of Prasman Leaves (<i>Eupatorium triplinerve</i> V) Extract (Shirly Kumala and Dwi Windi Sapitri)	193-197

Preface

Indonesian Journal of Cancer Chemoprevention (IJCC) established in 2010 is a peer reviewed journal publishing original articles, reports, and reviews on all aspects cancer chemoprevention, including experimental and clinical pharmacology, especially concerning anti-oxidants, anti-aging, anti-inflammation, anti-angiogenesis, and anti-carcinogenesis, cancer detection and also applications of stem cell technology, immunology research especially on immunomodulation, *in vitro* and *in silico* exploration on chemoprevention mechanism, screening of natural and synthetic chemopreventive agents, cancer biology, pharmacology and toxicology of cancer, and cancer therapeutic that published in English by Indonesian Society for Cancer Chemoprevention.

The current issue is contains ten articles selected from International Seminar on Chemoprevention for Health Promotion and Beauty. Kasianningsih et al studied *Taraxacum officinale* leaves ethanolic extract as immunostimulatory agent in doxorubicin induced sprague dawley rats to reduce its side effect. Risdian et al investigated effect of antioxidant of ethanolic leaves extract and its different solvent fractions of *Piper betle* L. *in vitro* using DPPH method. In addition Sunanrni and Leviana also examine the antioxidant activity of some Euphorbiaceae herbs. Pratama et al demonstrated the estrogenic effect of Banana Peels (*Musa paradisiaca* L.) extract as phytoestrogen on ovariectomized mice mammary gland development by inducing c-Myc expression. Helen et al examined the effect of various concentration of vegetable protein in hair mask on the hair texture. Weni et al examine the anti-inflammatory activity of the extract of guava leaves (*Psidium guajava* L) in rats. Ekowati et al reported that *Zingiber officinale* cv. *Rubrum* contains terpenoids, while *Piper retrofractum* contains alkaloids substance. The mixture showed cytotoxic activity against HeLa and T47D cell. Andriani et al studied the cytotoxicity assay from fractions of *Hedyotis corymbosa* extract against breast cancer cell line T47D. Falah and Yuliani reported lymphocyte proliferation activity of ethanolic extract of pasak bumi root (*Eurycoma longifolia* Jack) on induced 7,12-dimethylbenz[a] antracene (DMBA) female Sprague Dawley rat. Kumala and Sapitri examined the pytochemical screening and toxicological evaluation of some fractions of Prasman Leaves (*Eupatorium triplinerve* V) extract.

We wish to thank the authors who contributed to this issue. We are grateful to the Organizing Committee and to our Sponsors for their contribution to meeting. We would like to express our special thanks to Prof. Edy Meiyanto, the President of the Indonesian Society for Cancer Chemoprevention for his encouragement and support needed to organize the meeting and support to this journal. Publication of this issue of the Indonesian Journal of Cancer Chemoprevention was financed by Indonesian Society for Cancer Chemoprevention.

Editor in Chief,

Arief Nurrochmad, Ph.D