

# Dr. Salomo Hutahaean, M.Si

Dosen Program Studi S2 Biologi  
Fakultas Matematika Dan Ilmu Pengetahuan Alam  
Universitas Sumatera Utara

✉ salomo@usu.ac.id

🏢 Fakultas Matematika dan Ilmu Pengetahuan Alam

🌐 [fmipa.usu.ac.id/id/dosen/salomo-hutahaean](http://fmipa.usu.ac.id/id/dosen/salomo-hutahaean)

*Dr. Salomo Hutahaean, M.Si dilahirkan di Laguboti pada tanggal 11 Oktober 1965. Beliau merupakan seorang dosen Biologi di Universitas Sumatera Utara. Beliau menyelesaikan pendidikan terakhirnya pada jenjang Doktor (S3) Biologi di Universitas Gadjah Mada pada tahun 2010.*

## Publications

---

2018

Prosiding seminar internasional

**Quantity and quality of guinea pig (*cavia porcellus*) spermatozoa after administration of methanol extract of bitter melon (*momordica charantia*) seed and depot medroxy progesterone acetate (DMPA)**

SALOMO HUTAHAEAN , NURSAL , SYAFRUDDIN ILYAS

2020

Jurnal internasional bereputasi

**Ethanol extract of pirdot (*Saurauia vulcani korth*) as immunostimulant in rats (*rattus norvegicus*)**

SALOMO HUTAHAEAN

2015

Jurnal nasional terakreditasi

**Uji Antihiperqlikemia Ekstrak Etanol Daun Kembang Bulan (*Tithonia diversifolia*) Pada Mencit (*Mus musculus*) Yang Diinduksi Diabetes Dengan Aloksan**

SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN

2018

Jurnal internasional bereputasi

**The effect of *Saurauia vulcani* Korth. leaves extract on penile corpus cavernosa microstructure and the quality of sperm in alloxan-induced diabetic mice**

SALOMO HUTAHAEAN

2021

Jurnal internasional bereputasi

**Diabetic wound healing in fgf expression by nano herbal of *rhodomyrtus tomentosa* l. And *zanthoxylum acanthopodium* fruits**

SALOMO HUTAHAEAN

2020

Jurnal internasional bereputasi

**Effectiveness of Administration Extract Haramounting Leaf (*Rhodomyrtus tomentosa* (Aiton) Hassk) as Antioxidant in Preventing Special Liver Values SGOT/SGPT Mice (*Mus musculus* L&Atilde;f&Atilde;š&Atilde;A &#8230;**

SALOMO HUTAHAEAN

2014

Jurnal internasional

## **Study of the extract activities of buas buas leaves (*Premna pubescens*) as immunostimulant on rats (*Rattus novegicus*)**

SALOMO HUTAHAEAN

2018

Prosiding seminar internasional

### **The effect of *Saurauia vulcani* Korth. leaves extract on penile corpus cavernosa microstructure and the quality of sperm in alloxan-induced diabetic mice**

SYAFRUDDIN ILYAS , EMITA SABRI , SALOMO HUTAHAEAN

2020

Jurnal internasional bereputasi

### **Effects of nanoherbal haramonting (*Rhodomyrtus tomentosa*) and extra virgin olive oil on histology of liver and kidney of preeclamptic rats**

SALOMO HUTAHAEAN

2014

Jurnal internasional

### **Study of the extract activities of Buas buas leaves (*Premna pubescens*) as imunostimulant on rats (*Rattus novegicus*)**

SALOMO HUTAHAEAN

2025

Jurnal internasional

### **Biwa (*Eriobotrya japonica*) Leaf Nanoherbal for Diabetes Therapy: In Silico and In Vivo Study on Blood Glucose and Pancreatic Histology**

SALOMO HUTAHAEAN

2021

Jurnal internasional bereputasi

### **Histological changes in placental rat apoptosis via FasL and cytochrome c by the nano-herbal *Zanthoxylum acanthopodium***

ROSIDAH , SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

2019

Jurnal nasional terakreditasi

### **Synthetic Peptides as Immunogen in the Production of IgY Anti-C-Myc Antibody in Local Chicken (*Gallus Gallus*)**

SALOMO HUTAHAEAN

2020

Jurnal internasional bereputasi

### **Acute toxicity test and histological description of organs after giving nano herbal andaliman (*Zanthoxylum acanthopodium*)**

SALOMO HUTAHAEAN

2014

Jurnal nasional

### **PENGARUH EKSTRAK ETANOL BANGUNBANGUN (*Coleus ambonicus* L) TERHADAP TITER ANTIBODI HUMORAL DAN BERAT BADAN TIKUS PUTIH (*Rattus norvegicus*)**

SALOMO HUTAHAEAN

2019

Prosiding seminar internasional

### **Effect of Turmeric Rhizome Extract (*Curcuma longa* L.) on Kidney Histology of Preeclampsia Rats (*Rattus norvegicus* L.)**

SALOMO HUTAHAEAN

2020

Jurnal internasional bereputasi

### **Placental histological on preeclamptic rats (*Rattus norvegicus*) after administration of nanoherbal haramonting (*Rhodomyrtus tomentosa*)**

SALOMO HUTAHAEAN

2004

Jurnal nasional

## **Gambaran Histologi Transdiferensiasi Epitel Palatum Sekunder Mencit (Mus musculus)**

SALOMO HUTAHAEAN

2021

Jurnal internasional bereputasi

## **Components and acute toxicity of nanoherbal haramonting (*Rhodomyrtus tomentosa*)**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , ROSIDAH

2020

Jurnal internasional bereputasi

## **Effects of Nanoherbal Haramonting (*Rhodomyrtus tomentosa*) and Extra Virgin Olive Oil on Histology of Liver and Kidney of Preeclamptic Rats.**

SALOMO HUTAHAEAN

2019

Jurnal internasional bereputasi

## **Effect of Turmeric Rhizome Extract (*Curcuma longa* L.) on Liver Histology of Preeclampsia Rat (*Rattus norvegicus* L.)**

SALOMO HUTAHAEAN

2025

Jurnal nasional terakreditasi

## **The Effect Of Areca Nut (*Areca catechu* L.) Ethanol Extract On The Morphology and Histology Of Alloxan Induced Rat (*Rattus norvegicus* L.) Testis**

SALOMO HUTAHAEAN

2015

Jurnal internasional

## **Levels of apigenin and immunostimulatory activity of leaf extracts of bangunbangun (*Plectranthus amboinicus* Lour)**

SALOMO HUTAHAEAN

2018

Jurnal internasional bereputasi

## **RELATIONSHIP BETWEEN BCL-2 EXPRESSION AND APOPTOSIS INDEX ON RAT (*RATTUS NORVEGICUS*) MODEL OF PREECLAMPSIA AFTER ADMINISTRATION OF EVOO**

ROSIDAH , SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

2018

Jurnal internasional bereputasi

## **Quantity and quality of guinea pig (*cavia porcellus*) spermatozoa after administration of methanol extract of bitter melon (*momordica charantia*) seed and depot medroxy progesterone acetate (DMPA)**

SALOMO HUTAHAEAN

2013

Jurnal nasional

## **Kelainan Perkembangan Kraniofacial Fetus Mencit (*Mus musculus* L.) Strain DDW Setelah Pemberian Ekstrak N-Heksan Buah Andaliman (*Zanthoxylum acanthopodium* DC.)**

SALOMO HUTAHAEAN

2014

Jurnal nasional

## **PENGARUH EKSTRAK ETANOL BANGUNBANGUN (*Coleus ambonicus* L) TERHADAP TITER ANTIBODI HUMORAL DAN BERAT BADAN TIKUS PUTIH (*Rattus n...***

SALOMO HUTAHAEAN

2002  
Jurnal internasional bereputasi

## **Interleukin-10 levels in Epstein-Barr virus-associated nasopharyngeal carcinoma.**

SALOMO HUTAHAEAN

2019  
Prosiding seminar internasional

## **Immunostimulatory Activity from Pirdot Leaves Ethanolic Extract (*Saurauia vulcani* Korth.) in Rats (*Rattus norvegicus*)**

SALOMO HUTAHAEAN

2024  
Jurnal internasional bereputasi

## **Bischofia javanica and Phaleria macrocarpa nano herbal combination on blood and liverkidney biochemistry in Oral Squamous Cell Carcinoma-induced rats**

CHERYL GRACE PATIWI RUMAHORBO RUMAHORBO , SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , CUT FATIMAH ZUHRA

2015  
Jurnal internasional bereputasi

## **Image Segmentation with K-Means Clustering in Poultry Egg Antibody Production Process**

SALOMO HUTAHAEAN

2026  
Jurnal internasional

## **Test Antihyperglycemia Ethanol Leaf Extract Kembang Bulan (*Tithonia diversifolia*) in Mice (*Mus musculus*) The Induced Diabetes With alloxan**

SALOMO HUTAHAEAN

2013  
Jurnal nasional

## **Kelainan Perkembangan Kraniofacial Fetus Mencit (*Mus musculus* L.) Strain DDW Setelah Pemberian Ekstrak N-Heksan Buah Andaliman (*Zanthoxylum acanthopo...***

SALOMO HUTAHAEAN

2025  
Jurnal nasional terakreditasi

## **Uji Aktivitas Hepatoprotektor pada Tikus Model Kanker Payudara yang Diinduksi Benzo(A)Piren Setelah Pemberian Ekstrak Metanol Daun Biwa (*Eriobotrya japonica* Lindl)**

FEBRY RAHMADHANI HASIBUAN , SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN , FITRI ELIZABRTH BR HASIBUAN , WIDYA SYAHFITRI

2013  
Jurnal nasional

## **Pengaruh pemberian vitamin C dan E terhadap gambaran histologis hepar mencit (*Mus musculus* L.) yang dipajankan Monosodium Glutamat (MSG)**

SALOMO HUTAHAEAN

2023  
Jurnal internasional bereputasi

## **Immunomodulatory effects of probiotics isolated from traditionalfermented foods and beverages of Sumatra (Indonesia) and synbiotics in mice**

ERMAN MUNIR , SALOMO HUTAHAEAN

2018  
Jurnal internasional

## **Transforming growth factor expression (TGF- $\beta$ ;) correlate with serum level of malondialdehyde (MDA) after EVOO administration in preclinical rat models of preeclampsia**

SALOMO HUTAHAEAN

2015  
Jurnal internasional

# PRODUCTION OF ANTIBODY IgY ANTI-c-Myc IN CHICKEN EGGS

SALOMO HUTAHAEAN

2008

Buku lainnya

## Hak dan atau Kewajiban Tenaga Kerja dan Pengusaha / Pengurus yang Ditetapkan dalam Peraturan Perundangan Keselamatan dan Kesehatan Kerja

GERRY SILABAN , SALOMO HUTAHAEAN

2019

Jurnal internasional

## Effect of Combination of Nano Herbal Andaliman (*Zanthoxylum acanthopodium* DC.) and Extra Virgin Olive Oil (EVOO) to Kidney Histology of Preeclampsia Rats

SALOMO HUTAHAEAN

2021

Jurnal internasional

## Effectivity of Nano herbal Andaliman (*Zanthoxylum acanthopodium*) to the Vascular Endothelial Growth Factor (VEGF) expression in burn wound in diabetic rats

SALOMO HUTAHAEAN

2018

Jurnal internasional bereputasi

## INFLUENCE OF PIRDOT LEAF (*SAURAUIA VULCANI*, KORTH.) EXTRACT ON THE BLOOD GLUCOSE RATE AND HISTOLOGIC DESCRIPTION OF THE RETINA OF MALE MICE (*MUS MUSCULUS* STRAIN DDW)

SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN

2019

Jurnal internasional bereputasi

## Effect of Nanoherbal Andaliman (*Zanthoxylum Acanthopodium*) and Extra Virgin Olive Oil Combination on Preeclamptic Rats Liver Histology. Open Access Maced J Med Sci. 2019 Jul 30

SALOMO HUTAHAEAN

2024

Prosiding seminar internasional

## Advancing Sustainable Herbal Medicine: Synthesizing Nanoparticles from Medicinal Plants

CHERYL GRACE PATIWI RUMAHORBO RUMAHORBO , SALOMO HUTAHAEAN , CUT FATIMAH ZUHRA , SYAFRUDDIN ILYAS

2015

Jurnal nasional

## Kualitas Spermatozoa Sapi Limousin Dalam Pengencer Two-Step Extender Dengan Suplementasi Kuning Telur Bebek Selama Penyimpanan Pada Refrigerator

SALOMO HUTAHAEAN

2011

Jurnal nasional

## Critical Periods for TCDD-Induced Cleft Palate in Mice (*Mus musculus* L.)

SALOMO HUTAHAEAN

2020

Jurnal internasional bereputasi

## The Study of extract ethanol of Pirdot (*Saurauria Vulcani* Korth.) as immunostimulant in Rats (*Rattus norvegicus*)

SALOMO HUTAHAEAN

2025

Jurnal nasional terakreditasi

## UJI EFEK NEFROPROTEKTIF EKSTRAK ETANOL DAUN BIWA (*Eriobotrya japonica* Lindl) TERHADAP KADAR KREATININ TIKUS MODEL KANKER

## **PAYUDARA YANG DIINDUKSI Benzo(a)Pyrene**

SALOMO HUTAHAEAN

2013

Jurnal nasional

### **Pengaruh pemberian vitamin C dan E terhadap gambaran histologis ginjal mencit (*Mus musculus L.*) yang dipajankan monosodium glutamat (MSG)**

SALOMO HUTAHAEAN

2013

Jurnal nasional

### **Gambaran Histologis Pulmo Mencit Jantan (*Mus musculus L.*) Setelah Dipapari Asap Rokok Elektrik**

SALOMO HUTAHAEAN

2021

Prosiding seminar internasional

### **The effect of sikkam (*Bischofia javanica*) leaf extract on blood sugar levels and islet of langerhans in alloxan-induced diabetic rats**

SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN

2018

Jurnal nasional

### **PENGARUH EKSTRAK ETANOL DAUN PIRDOT (*Saurauria vulcani* Korth) TERHADAP LIMPA, TROMBOSIT, dan LIMFOSIT TIKUS PUTIH yang DIINDUKSI SDMD.**

SALOMO HUTAHAEAN

2026

Jurnal nasional

### **Ekspresi Protein S&#8208;100 di Jaringan Palatum Embrio Mencit (*Mus Musculus L.*)**

SALOMO HUTAHAEAN

2019

Jurnal internasional

### **Antioxidant Activity of Haramounting Leaf Ethanol Extract (*Rhodomytrus tomentosa*) in Preventing Heart Damage of Mice (*Mus musculus L.*) after exposure to Electronic Cigarette**

SALOMO HUTAHAEAN

2022

Prosiding seminar internasional

### **Bioactivity compound prediction of *Saurauia vulcani* as immunostimulant: An in silico approach**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , PANAL SITORUS

2021

Jurnal internasional bereputasi

### **Effect of Nano Herbal Andaliman (*Zanthoxylum acanthopodium*) Fruits in NOTCH1 and Hes1 Expressions to Human Placental Trophoblasts**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , ROSIDAH

2021

Jurnal internasional bereputasi

### **Antidiabetic Activity and Immunostimulant Potential of Bosibosi (*Timonius flavescens* (Jacq) Baker) Leaves Ethanol Extract in Alloxan-Induced Diabetic Rats**

ADRIANA YULINDA DUMARIA LBN.GA , SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN , HERBERT SIPAHUTAR

2023

Prosiding seminar internasional

### **Oral acute toxicity study of nano herbal Sikkam leaves (*Bischofia javanica*)**

SALOMO HUTAHAEAN , CHERYL GRACE PATIWI RUMAHORBO RUMAHORBO

2019  
Jurnal internasional bereputasi

**Study of Combination of Nanoherbal Andaliman (*Zanthoxylum acanthopodium*) and Extra Virgin Olive Oil (EVOO) Effects in the Expression of Malondialdehyde (MDA), Heat Shock Protein-70 (HSP70) and Placental Histology of Preeclamptic Rats**

SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN

2019  
Jurnal internasional bereputasi

**The Effect of Haramounting Leaf Ethanol Extract (*Rhodomyrtus tomentosa* (Aiton) Hassk.) on the Number of Leukocyte Type and Histology of Mice Pulmo (*Mus Musculus L.*) Exposed to Electronic Cigarette**

SALOMO HUTAHAEAN

2020  
Jurnal internasional bereputasi

**Phytochemical screening, antioxidant activity and thin-layer chromatography test of methanol extract and simplicia leaves of loquat (*Eriobotrya japonica* Lindl)**

SALOMO HUTAHAEAN

2020  
Jurnal internasional bereputasi

**Effects of Nanoherbal Haramounting (*Rhodomyrtus tomentosa*) and Extra Virgin Olive Oil on Histology of Liver and Kidney of Preeclamptic Rats.**

SALOMO HUTAHAEAN

2020  
Jurnal internasional

**Histological Change of Pancreatic Islands Following Administration of *Saurauia vulcani* Korth Leaves Extract in Alloxan-induced Diabetic Mice**

SALOMO HUTAHAEAN

2019  
Prosiding seminar internasional

**The Effect of Ethanol Extract of Okra (*Abelmoschus esculentus* L.) Moench) on Tumor Growth in Breast Cancer Rats Model Induced by Benzo-a-Pyrene**

SYARIFAH RISKA MELA PUTRI , SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , WIDYA SYAHFITRI , FITRI ELIZABRTH BR HASIBUAN

2025  
Jurnal internasional bereputasi

**Biwa (*Eriobotrya japonica*) Leaf Nanoherbal for Diabetes Therapy: In Silico and In Vivo Study on Blood Glucose and Pancreatic Histology.**

SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN

2013  
Jurnal nasional

**Pengaruh pemberian vitamin c dan e terhadap gambaran histologis testis mencit (*Mus musculus L.*) yang dipajankan monosodium glutamat (MSG)**

SALOMO HUTAHAEAN

2023  
Jurnal nasional terakreditasi

**Organoleptic evaluation and chemical tests of various formulations of kencur drink (*Kaempferia galanga* L.): efforts to find the best formulation to increase body immunity**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

2011  
Jurnal nasional terakreditasi

**Kerentanan Palatogenesis Mencit (*Mus musculus L.*) terhadap Induksi Cleft Palate TCDD**

SALOMO HUTAHAEAN

2021  
Jurnal internasional bereputasi

## **Insulin expression and insulitis degree of diabetic rats after giving sikkam leaves (*Bischofia javanica* Blume)**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

2021  
Jurnal internasional bereputasi

## **Apoptosis via cytochrome c in aortic tissue of diabetes mellitus after giving sikkam leaves (*Bischofia javanica* Blume)**

SALOMO HUTAHAEAN

2021  
Jurnal internasional

## **Effect of Andaliman Fruit Extract on Cervical Cancer Rat's Histology**

SALOMO HUTAHAEAN

2018  
Jurnal internasional bereputasi

## **TRANSFORMING GROWTH FACTOR BETA OF TESTIS GERMINAL CELL IN GUINEA PIG (*CAVIA PORCELLUS*) AFTER EXPOSURE TO METHANOL EXTRACT OF THE SEEDS OF BITTER MELON (*MOMORDICA CHARANTIA*) AND DEPOT MEDROXYPROGESTERONE ACETATE**

NURSAL , SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

2020  
Buku referensi

## **Cegah Dini Kanker Serviks**

ROSTIME HERMAYERNI SIMANULLANG , SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN

2021  
Jurnal internasional bereputasi

## **Effect of Andaliman (*Zanthoxylum acanthopodium* DC.) Methanol Extract on Rata€™s Kidney and Liver Histology Induced by Benzopyrene**

ROSIDAH , SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN

## **Researches**

2021  
Penelitian Unggulan Perguruan Tinggi

## **Antihiperqlikemia Ekstrak Etanol Daun Pirdot (*Sarauia vulcani* Korth.) pada Mencit Model Diabetes Tipe-2**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

2014  
Penelitian Fundamental

## **Produksi Antibodi Coturnix Anti-Chicken Berlabel Enzim Horseradish Peroxidase (H**

SALOMO HUTAHAEAN , ADE CANDRA

2020  
Penelitian Unggulan Perguruan Tinggi

## **Efek Ekstrak Etanol Daun Sikkam (*Bischofia javanica*) Terhadap Organ Genitalia dan Non Genitalia Tikus Jantan Model Hiperqlikemi**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

2019  
Pendidikan Magister Doktor Sarjana Unggul

## **Studi Tranduksi Sinyal Molekuler Nanoherbal Andaliman (*Zanthoxylum acanthopodium*) dan Extra Virgin Olive Oil (EVOO) Terhadap Tikus (*Rattus Novergius*) Preeklampsia**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , ROSIDAH , PUTRI CAHAYA SITUMORANG

2021  
Penelitian Fundamental

## **Analysis of Cytochrome c Expression on Liver Histology of Hepatitis Rats after Administration of Tin and Olive Leaf Ethanol Extract**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

2015  
Penelitian Fundamental

## **Produksi Antibodi Coturnix Anti-Chicken Berlabel Enzim Horseradish Peroxidase (H**

SALOMO HUTAHAEAN , ADE CANDRA

2020  
Penelitian Disertasi Doktor

## **ANALISIS EFEKTIFITAS NANOHERBAL BUAH ANDALIMAN (*Zanthoxylum acanthopodium*) DAN/ATAU NANOHERBAL DAUN HARAMOUNTING (*Rhodomyrtus tomentosa*) TERHADAP LUKA BAKAR TIKUS (*Rattus norvegicus* L.) DIABETES MELLITUS**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , ROSIDAH , RISMA DUMIRI MANURUNG

2023  
Penelitian Dana Lokal Perguruan Tinggi

## **PEMANFAATAN LUMUT HATI *Marchantia paleacea* Bertol. SUMATERA UTARA SEBAGAI ANTI INFLAMASI**

SALOMO HUTAHAEAN , NURSAHARA PASARIBU , ETTI SARTINA SIREGAR

2017  
Penelitian Unggulan Strategis Nasional

## **Regenerasi Sel $\beta$ dan Pola Ekspresi Protein c-Myc, NF- $\kappa$ B, dan Insulin pada Pankreas Mencit Diabetes Setelah Pemberian Ekstrak Daun Pirdot (*Saurauia vulcani* Korth.)**

SALOMO HUTAHAEAN , SUCI RAHAYU

2021

## **Effectivity of Nano herbal Andaliman (*Zanthoxylum acanthopodium*) to the Vascular Endothelial Growth Factor (VEGF) expression in burn wound in diabetic rats**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , ROSTIME HERMAYERNI SIMANULLANG , RISMA DUMIRI MANURUNG , Syafruddin Ilyas , Salomo Hutahaean , Putri Cahaya Situmorang , Risma Dumiri Manurung

2018  
Pendidikan Magister Doktor Sarjana Unggul

## **Studi Tranduksi Sinyal Molekuler Nanoherbal Andaliman (*Zanthoxylum acanthopodium*) dan Extra Virgin Olive Oil (EVOO) Terhadap Tikus (*Rattus Novergius*) Preeklampsia**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , ROSIDAH , PUTRI CAHAYA SITUMORANG

2019  
Penelitian Disertasi Doktor

## **ANALISIS EFEKTIFITAS NANOHERBAL BUAH ANDALIMAN (*Zanthoxylum acanthopodium*) DAN/ATAU NANOHERBAL DAUN HARAMOUNTING (*Rhodomyrtus tomentosa*) TERHADAP LUKA BAKAR TIKUS (*Rattus norvegicus* L.) DIABETES MELLITUS**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , ROSIDAH , RISMA DUMIRI MANURUNG

2019

## **Effect of Andaliman (*Zanthoxylum acanthopodium* DC.) Methanol Extract on Rat's Kidney and Liver Histology Induced by Benzopyrene**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , ROSTIME HERMAYERNI SIMANULLANG

2021  
Penelitian Fundamental

## **Efek Ekstrak Etanol Daun Sikkam (*Bischofia javanica*) Terhadap Organ Genitalia dan Non Genitalia Tikus Jantan Model Hiperglikemi**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

---

2020

Penelitian Tim Pasca Sarjana

### **Efek Ekstrak Daun Bischofia javanica terhadap Kadar GulaDarah, Ekspresi Protein Insulin, dan Histopatologi Pankreas Tikus yang Diinduksi Diabetes dengan Aloksan**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , CHERYL GRACE PRATIWI RUMAHORBO

---

2020

Penelitian Unggulan Perguruan Tinggi

### **Antihiperqlikemia Ekstrak Etanol Daun Pirdot (Sarauia vulcani Korth.) pada Mencit Model Diabetes Tipe-2**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

---

2020

Pendidikan Magister Doktor Sarjana Unggul

### **Studi Tranduksi Sinyal Molekuler Nanoherbal Andaliman (Zanthoxylum acanthopodium) dan Extra Virgin Olive Oil (EVOO) Terhadap Tikus (Rattus Novergius) Preeklampsia**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , ROSIDAH , PUTRI CAHAYA SITUMORANG

---

2020

Penelitian Strategis Nasional

### **Studi Andaliman (Zanthoxylum acanthopodium) Terhadap Sel Kanker Serviks Tikus (Rattus Novergius)**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

---

2018

Penelitian Strategis Nasional

### **Regenerasi Sel $\beta$ dan Pola Ekspresi Protein c-Myc, NF- $\kappa$ B, dan Insulin pada Pankreas Mencit Diabetes Setelah Pemberian Ekstrak Daun Pirdot (Saurauia vulcani Korth.)**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

---

2013

Penelitian Fundamental

### **Produksi Antibodi Poliklonal IgY Chicken Anti-c-Myc dan Uji Aktivasnya Pada Im**

SALOMO HUTAHAEAN

---

2022

Biomedik

### **Studi Tranduksi Sinyal Molekuler Nanoherbal Daun Sikkam (Bischofia javanica) dan Ekstra buah Mahkota Dewa (Phaleria macrocarpa) terhadap Karsinoma Sel Skuamosa Rongga Mulut**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS , CHERYL GRACE PATIWI RUMAHORBO RUMAHORBO

---

## **Community Services**

---

2019

### **Pemanfaatan Limbah Sisik Ikan untuk Pembuatan Kerajinan**

SALOMO HUTAHAEAN , MIZAWARTI , HESTI WAHYUNINGSIH

---

2020

Ipteks Bagi Masyarakat

### **PENINGKATAN SWAMEDIKASI DAN PEMBERDAYAAN IBU-IBU RUMAH TANGGA DALAM MERACIK JAMU: UPAYA PENCEGAHAN PENYEBARAN COVID-19 DENGAN PENINGKATAN IMUNOMODULATOR**

SALOMO HUTAHAEAN , SYAFRUDDIN ILYAS

---

## **Intellectual Property Rights**

---

2021

Paten nasional

**EKSTRAK ETANOL 96% DAUN SIKKAM (BISCHOFIA JAVANICA) UNTUK  
MEMPERBAIKI HISTOLOGIS GINJAL (SINDROM NEFROTIK)**

SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN

---

2021

Hak cipta nasional

**Cegah Dini Kanker Serviks**

SYAFRUDDIN ILYAS , ROSTIME HERMAYERNI SIMANULLANG , SALOMO HUTAHAEAN

---

2021

Hak cipta nasional

**Effect of Andaliman (Zanthoxylum acanthopodium DC.) Methanol Extract on  
Rats' Kidney and Liver Histology Induced by Benzopyrene**

ROSTIME HERMAYERNI SIMANULLANG , SYAFRUDDIN ILYAS , SALOMO HUTAHAEAN

---