




Research Area

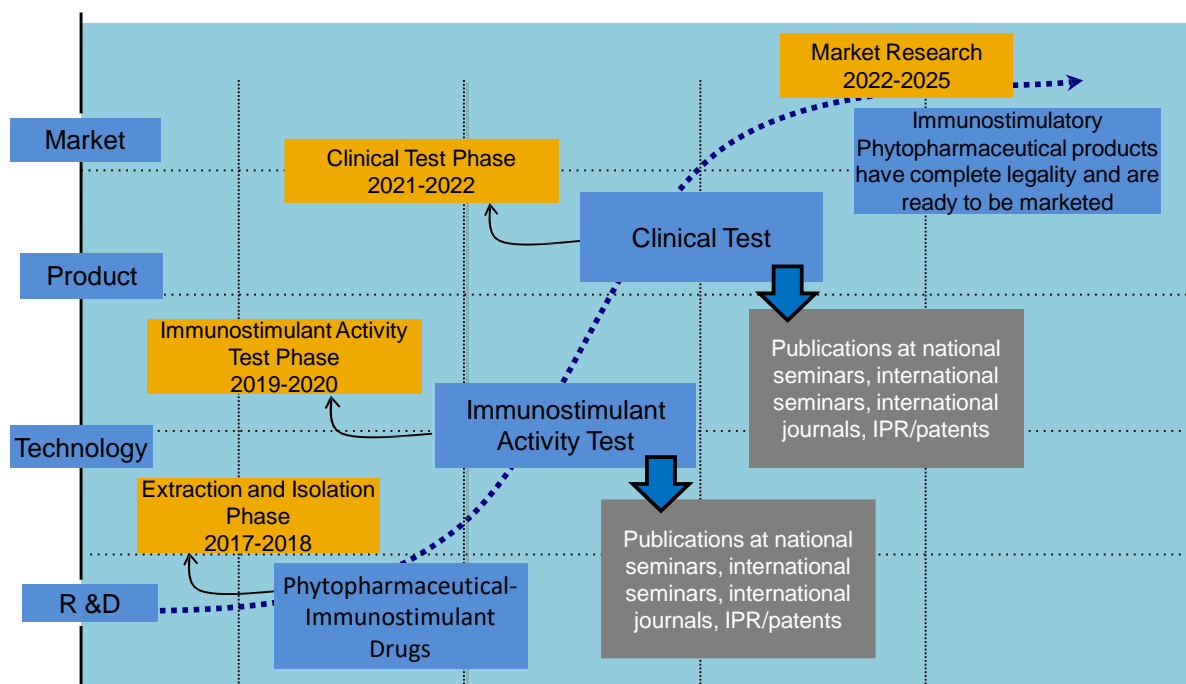
Natural Product Chemistry

Phytopharmaceutical-Immunostimulant Drugs

This research is focused on Natural Product Chemistry which are applied in the health sector, especially utilization as medicinal plants derived from the exploration of active compounds of Indonesian plants. The phytochemical methods used include the isolation and determination of the structure of organic molecules with various instruments such as UV, IR, NMR and HR-ESI-MS which will later be applied as bioassay applications such as antioxidants, anti-inflammatory, anticancer, and other tropical diseases.

Personnel		
Research Team: Area Chemistry of Natural Product: Phytopharmaceutical-Immunostimulant Drugs		
	Prof. Dr. Suyatno, M.Si.	Research Area: Research Area: Natural Product Chemistry Bioassay: Phytopharmaceutical-Immunostimulant Drugs
	Prof. Dr. Tukiran, M.Si.	Research Area: Natural Product Chemistry Bioassay: Phytopharmaceutical-Immunostimulant Drugs
	Dr. Ratih Dewi Saputri, M.Si.	Research Area: Natural Product Chemistry, (Phytochemistry and Active compounds for tropical diseases)

ROADMAP OF RESEARCH CHEMICAL NATURAL MATERIALS PHYTOPHARMACEUTICAL-IMMUNOSTIMULANT DRUGS



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Research Project:

1. Looking for the Optimum Composition of Secang (*Caesalpinia Sappan* L.) and Red Ginger (*Zingiber Ofale* Roxb.) Extracts which are Effective as Anti-Arthritis Agents (2021, DRPM)
2. Efficacy of Protein-Multivitamin Supplement Drinks Made of Local Ingredients to Boost Immunity During the Covid-19 Pandemic for the Elderly (2021, DRPM)
3. Synthesis of Silver Nanoparticles Using *Nephrolepis Radicans* Fern Extract Bioreducers as Antioxidants (2020, PNBP UNESA)
4. Looking for the Optimum Composition of Secang (*Caesalpinia Sappan* L.) and Red Ginger (*Zingiber Ofale* Roxb.) Extracts which are Effective as Anti-Arthritis Agents (2020, DRPM)

Patent/Intellectual Property Rights:

1. Method of Preparation of Silver Nanoparticles Using Bioreductor Methanol Extract of Nephrolepis Radicans Fern Extract (2021, ID: P00202103479)
2. Method Of Preparation of Silver Nanoparticles Using Bioreductor Methanol Extract Nephrolepis radicans (2021, ID: P00202103479)
3. Synthesis Of Organic Chemistry (2020, Hak Cipta, Ec00202013685)
4. The Process of Making Protein-Multivitamin Drinks from Raw Almond Filtrate and Tempeh Filtrate as Health Supplements for The Elderly (2020, ID: P002002009035)
5. The Process of Making Probiotic Food from Shrimp Waste for Laying Ducks (2018, ID: P00201803107)
6. Method Of Isolation Gallic Acid Compounds From Stem Bark "Gowok" (Syzygium Polycephalum) (2018, ID: P00201802291)
7. Methods In Individual-Based Independent Lectures (2018, ID: P00201806031)
8. Partial Synthesis of Farrerol as Antibronehitis Agent from Matteucinol Isolated from The Fern Chingia Sakayensis Using Hydrobomic Acid Reagent (2017, ID: C00201702814)
9. Flavonoids From Indonesian Silver Fern (Pityrogramma Calomelanos) And Their Cytotoxicity Against Marine Leukemia P-388cells (2017, ID: C00201702749)
10. Determination of Molecular Structure of Organic Compounds (2017, ID: C00201602718)
11. Determination of the Molecular Structure of Organic Compounds (2016, ID: C00201602718)
12. The Process of Making Farrerol Compounds with Matteucinol as The Initial Material Isolated from Chinga Sakayensis (2016, ID: P00201604795)
13. The Process of Making Instant Herbal "Keji Beling" (2016, ID: P00201604804)

Publication

No.	Year	Title	Name of Journal	Quartil	Category	URL/DOI
1	2018	An Ellagic Acid Derivative and Its Antioxidant Activity of Chloroform Extract of Stem Bark of <i>Syzygium polycephalum</i> Miq. (Myrtaceae)	Indonesian Journal of Chemistry Volume 18 No. 1	Q3	Journal	https://jurnal.ugm.ac.id/ijc/article/view/25467
2	2018	The Effect of rGO Mass Composition on The Performance of Activated Carbon/rGO Supercapacitor Electrode Based on Coconut Shell (<i>Cocos nucifera</i>)	Journal of Physics: Conference Series, volume 1108, article number 012045	Q4	Conference Proceedings	https://iopscience.iop.org/article/10.1088/1742-6596/1108/1/012045
3	2018	<i>Thunbergia erecta</i> L. Flower as an Alternative Acidbase Natural Indicators	Rasayan Journal of Chemistry Volume 11 No. 2	Q3	Journal	https://rasayanjournal.co.in/admin/php/upload/410_pdf.pdf
4	2018	Risk Analysis Characterization of Benzene and Demographic Factors toward Immunoglobulin A	Open Access Macedonian Journal of Medical Science 2018 Dec 20 volume 6 issue 12	Q3	Journal	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6311471
5	2019	Chemical components and antioxidant activities of methanol extract of <i>Syzygium polycephalum</i> Miq. stem bark (Myrtaceae)	Indian Journal of Natural Products and Resources Volume 10 No. 2	Q4	Journal	http://op.niscair.res.in/index.php/IJNPR/article/view/20797
6	2019	Specific capacitance of composite electrode activated carbon/rGO of coconut shell (<i>Cocos nucifera</i>) as supercapacitor electrode	Journal of Physics: Conference Series, volume 1171, article number 012036	Q4	Conference Proceedings	https://iopscience.iop.org/article/10.1088/1742-6596/1171/1/012036
7	2019	Immunostimulant activity of steroid compound from the Indonesian silver fern (<i>P. calomelanos</i>)	Journal of Physics: Conference Series 1317(1)	Q4	Conference Proceedings	https://iopscience.iop.org/article/10.1088/1742-6596/1317/1/012040/pdf

No.	Year	Title	Name of Journal	Quartil	Category	URL/DOI
8	2021	Alkaloid and benzopyran compounds of <i>Melicope latifolia</i> fruit exhibit anti-hepatitis C virus activities	BMC Complementary Medicine and Therapies	Q1	Journal	DOI: 10.1186/s12906-021-03202-8
9	2021	Cytotoxicity evaluation of two new chalcones from the leaves of <i>Flemingia macrophylla</i> (Willd.) Merr	Phytochemistry Letters	Q2	Journal	https://doi.org/10.1016/j.phytol.2021.06.006
10	2021	Three novel quinolinone alkaloids from the leaves of <i>Melicope denhamii</i>	Natural Product Research	Q2	Journal	DOI: 10.1080/14786419.2021.1960524
11	2021	Macasiamenene v, a new stilbenoid from the leaves of <i>macaranga inermis</i>	Natural Product Science	Q3	Journal	DOI:10.20307/nps.2021.27.1.45
12	2021	Calodioscurins A and B, two new isoprenylated xanthenes from the stem bark of <i>Calophyllum dioscurii</i> P.F. Stevens	Natural Product Research	Q2	Journal	DOI: 10.1080/14786419.2021.19643864
13	2021	Two novel coumarins bearing an acetophenone derivative from the leaves of <i>Melicope Quercifolia</i>	Natural Product Research	Q2	Journal	DOI:10.1080/14786419.2019.1644634
14	2021	Calotetrapterins A-C, three new pyranoxanthenes and their cytotoxicity from the stem bark of <i>Calophyllum tetrapterum</i> Miq	Natural Product Research	Q2	Journal	DOI: 10.1080/14786419.2019.1634714
15	2020	Two new 2-arylbenzofurans from <i>Sesbania grandiflora</i> L. and their cytotoxicity towards cancer cell	Natural Product Research	Q2	Journal	DOI: 10.1080/14786419.2020.1821016
16	2020	Two new pyranoxanthenes from the stem bark of <i>Calophyllum pseudomolle</i> P.F. Stevens	Natural Product Research	Q2	Journal	DOI: 10.1080/14786419.2020.1808638
17	2020	A new cinnamyl acid derivative from the roots of <i>willughbeia coriacea</i> wall	Natural Product Science	Q3	Journal	DOI:10.20307/nps.2020.26.1.79