



ZALEHA MD TOHA

PKTAAB RESEARCH OFFICER PROFILE



RESEARCH PROFILE

- Scopus ID : 57207032723
- Researcher ID: DXZ-8667-2022
- ORCID : 000-0003-2201-8335
- Google Scholar ID : FU3WYx0AAAAJ



EXPERTISE

- Biological sciences
- Bioinformatics



RESEARCH INTEREST

- Herbal medicine
- Cell biology and molecular
- Transcriptomic and bioinformatic



RESEARCH GRANT

1. USM STGQ. Transcriptomic analysis of the *Clinacanthus nutans* dichloromethane leaves extracts on breast cancer cell lines (2021-2024). Principal Investigator.
2. Incentive grant USM. Identification of *Mitragyna speciosa*, *Phaleria macrocarpa*, *Peperomia pellucida*, *Psidium guajava* Linn and *Murraya koenigii* plants. (2010-2011). Principal Investigator.
3. FRGS. Elucidating the wound healing mechanisms of biosynthesized silver nanoparticles by *Sacha Inchi* oil using cell line and rat model (2024-2027). Co-researcher.
4. Bridging grant. Exploring the anticancer potential of standardise *Clinacanthus nutans* extract by using ncRNAs AI-driven bioinformatics in breast cancer cell lines (2025-2026). Co-researcher.
5. Matching grant industry (BJIM) and External agency (Industry-DTD). Investigating the chemopreventive effects of atheminTM, a nano curcumin formulation, on human prostate, cervical and breast cancer cell lines (2024). Co-researcher.



SKILLS

- Cell culture
- Plant herbarium
- RNA extraction and transcriptomic analysis
- Quality Assurance OECD GLP



QUALIFICATION

MASTER OF SCIENCE (MEDICAL RESEARCH)

Universiti Sains Malaysia (2008)

BACHELOR OF SCIENCE (BIOHEALTH SCIENCE)

Universiti Malaya (2006)



CONTACT

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TOP 10 RESEARCH PUBLICATIONS

1. **Zaleha Md Toha** et al., 2026. Transcriptomic profile and gene expression of human breast cancer cell lines treated with herbal extract of *Clinacanthus nutans* leaves. Journal of Asian Natural Products Research, 1-21.
2. KS Pey Adum, **Zaleha Md Toha** et al. 2025. Transcriptome analysis and molecular docking reveal the activation of FOXO4, TNFSF15 and CASP9 in HeLa cells treated with DCM fraction from *Clinacanthus nutans*. Journal of Asian Natural Products Research, 27(10), 1486-1495.
3. **Zaleha Md Toha** et al., 2023. *Clinacanthus* leaves different solvent extracts effects on phytochemical screening, antioxidant activity and GCMS study. Malaysian Journal of analytical Sciences.
4. **Zaleha Md Toha** et., al. 2022. Exploring DCM extract of CN antiproliferative effects induced metastasis through apoptosis and cell cycle against MCF-7 cell lines. Future Journal of Pharmaceutical Science, 8(49). 1-16.
5. Noor Zafirah Ismail, **Zaleha Md Toha** et., al. 2022. The antiproliferative and apoptotic potential CN against MCF-7 through target apoptosis pathway. Environmental Science and Pollution Research, 29. 81685-81702.
6. Noor Zafirah Ismail, **Zaleha Md Toha** et al., 2020. Antioxidant effects, antiproliferative effects and molecular docking of *Clinacanthus nutans* leaf extract. Molecules. MDPI, 25(9). 2067.1-18.
7. **Zaleha Md Toha** et al. 2020. Antioxidant, antiproliferative activities and chemical profile of *Clinacanthus nutans* leaf extracts processed using two different pre-extraction drying methods. Medicinal and aromatic plants. 9(6). 1-8.
8. Nor Hasyimah Haron, **Zaleha Md Toha** et al. 2019. In vitro cytotoxicity activity of *Clinacanthus nutans* leaf extracts against HeLa cells. Asian Pacific Journal of Cancer Prevention. 20(2). 601-609.
9. **Zaleha Md Toha** et al., 2018. Antiproliferative effect of the methanol extract of *Goniolthalamus umbrosus* leaves on HeLa cells. Journal of Biological Scientific Opinion. 6(2). 17-22.
10. **Zaleha Md Toha**. 2025. Herba dan harapan baharu dalam rawatan kanser payudara. Majalah kosmik, Disember 2025.