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***Tabernaemontana pandacqui* Poir ethanolic leaf extract's Phytochemical analysis and *In vitro* effect on adult *Caenorhabditis elegans***

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The study aims to identify the metabolites of the ethanolic leaf extract of *Tabernaemontana pandacqui* Poir by phytochemical screening and to determine the *in vitro* effect of ethanolic leaf extract of *Tabernaemontana pandacqui* Poir on adult *Caenorhabditis elegans*. 2 kilos of *Tabernaemontana pandacqui* Poir young leaves were collected by manual picking. Authentication of the leaves was also done. The leaves were air dried for 5 days and subjected to overnight incubation in oven. The selected leaves were then soaked in 2600 mL of solvent (70% ethanol) with dilution ratio of 1:6. The mixture was allowed to stand in room temperature overnight and was filtered for phytochemical analysis. *Caenorhabditis elegans* N2 strain were grown in Nematode Growth Medium Agar. Adult worms in the final culture were particularly used in the research. The ethanolic extract of *Tabernaemontana pandacqui* Poir was positive for carbohydrates, flavonoids and tannins, with tannins as a proven antihelminthic. Lower survival rates were seen following longer exposure (24 hours vs. 48 hours) at concentrations 250 ug/mL and 1000 ug/mL. There is statistically significant difference between length of exposure at 24 hrs and baseline ( $p < 0.001$ ), 48 hrs and baseline ( $p < 0.000$ ) and no statistically significant difference between 24 hrs and 48 hrs. The efficacy of the ethanolic extract of *Tabernaemontana pandacqui* Poir can be shown at lengths of exposure at 24 hrs and 48 hrs. Ethanolic extract of *Tabernaemontana pandacqui* Poir can have a potential antihelminthic efficacy against *in vitro* culture of adult *Caenorhabditis elegans* at lengths of exposure of 24 and 48 hours. This pioneer study can be used as a basis for potential antihelminthic drug development against nematodes. We used a natural extract which has lower side effects and is effective.

**Biography**

Joshua Angelo H Mandanas is a High School Valedictorian in 2009 and obtained his Degree of Bachelor of Science in Medical Technology in 2014 (Magna Cum Laude) in University of Perpetual Help System Laguna. He is also a Registered Medical Technologist. He then finished his Master's in Public Health Major in Tropical Medicine last year (2017) in University of the Philippines, Manila. Currently, he is one of the Philippines' youngest national Lecturers of Parasitology and Immunology. He is also a Post-graduate student in the College of Medicine of University of the Philippines, Manila taking up certificate in Biochemistry.

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