



New Compound Anti *Mycobacterium tuberculosis* from Methanolic Fraction of Bangle Rhizome (*Zingiber cassumunar* Roxb.)

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Abstract : Tuberculosis (TB) remains a major global health problem, responsible for ill health among millions of people each year. One of the main problem of TB treatment is the resistance of *Mycobacterium tuberculosis*. Continuous efforts to develop new drugs to combat *M. Tuberculosis* are under way and bioactive compounds of natural origin, particularly from plants, are gaining significance. Bangle Rhizome (*Zingiber cassumuna* rRoxb.) has been used empirically as anti *Mycobacterium tuberculosis* drug. The aim of research to determine anti *M. tuberculosis* Strain H37Rv and MDR activity of methanol extract fraction of bangle rhizome (*Zingiber cassumunar* roxb.). powdered Bangle Rhizome were macerated with hexane and methanol, respectively. Methanol extract then was fractionated by vacuum liquid chromatography. Anti *Mycobacterium tuberculosis* assay was done with Microscopic Observation Drug Susceptibility (MODS) method and at final concentration at 100 ppm of fractions. Methanol extract of bangle rhizome resulting five fractions (Fraction A, B, C, D and E). *M. tuberculosis* assay results show that the most active fraction is B. Chemical screening of fraction B using TLC visualization reagents indicated that fraction B contains flavonoids and terpenes.

Keyword : *Zingiber cassumunar* Roxb., *Mycobacterium tuberculosis*, MODS.

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