

ABSTRACT**Screening Acetylcholinesterase Inhibitory Activities Ethanol Extract,
Methanol Fraction, Methanol Subfraction III, and Myricitrin *Syzygium
polyanthum* (Wight) Walp. Leaves
(Using TLC Bioautography and Spectrophotometric)**

Acetylcholinesterase (AChE) inhibitors is a key target in the treatment of Alzheimer's disease (AD). In an isolation guided bioassay search for acetylcholinesterase inhibitors used *Syzygium polyanthum* (Wight) Walp leaves. Ethanol extract, methanol fraction, methanol III subfraction, and myricitrin of these plant was tested for the AChE inhibitory activity using TLC Bioautography and Spectrophotometric. The result demonstrated that ethanol extract, methanol fraction, methanol III subfraction showed AChE inhibitory activity which in the TLC bioautographic assay appeared as white spots. Whereas, ethanol extract, methanol fraction, methanol III subfraction, and myricitrin did not showed in acetylcholinesterase inhibition at concentration 1000 ppm using Spectrophotometric.

Keywords : AChE inhibitors, *Syzygium polyanthum* (Wight) Walp., Alzheimer's disease.