

## ABSTRAK

### **Acetylcholinesterase inhibitor activity of *Syzygium cumini*, *Syzygium aromaticum*, *Syzygium polyanthum* and *Syzygium aquaeum* leaves extract**

The extract made from *Syzygium* genus leaves, were collected from Purwodadi botanical garden, Indonesia. Determined for their acetylcholinesterase inhibitor activity through the modified Ellman's spectrophotometric method and thin-layer chromatography with bioautography. Our report shows that all of extracts had  $IC_{50}$  over 1000 ppm in spectrophotometric analysis. Thus, they had no significant inhibitory effects on acetylcholinesterase. Furthermore, TLC with bioautography approaches were used in screening for acetylcholinesterase inhibition properties of the extracts. All of extract showed inhibition spots. The spots showed similar  $R_f$  with steroid/triterpenoid compound.

Keyword: *Syzygium*, *Syzygium cumini*, *Syzygium aromaticum*, *Syzygium polyanthum*, *Syzygium aquaeum*, Acetylcholinesterase inhibitors, TLC, Bioautography, spectrofotometry, Alzheimer's disease

