

## Inhibitory Potential of *Poligala paniculata* L. Against $\alpha$ -glucosidase

\* Aktsar Roskiana Ahmad, Risda Waris

Laboratory of Pharmacognosy-Phytochemistry, Faculty Of Pharmacy  
Universitas Muslim Indonesia

**Abstract :** There are many Indonesian plants used as herbal medicine. For example, herbal medicine to treat the diabetes mellitus, such as *Poligala paniculata* L. In this point, we tested the ethanolic extracts of *Poligala paniculata* L. with respect to a glucosidase inhibition activity. *Polygala paniculata* L. used for herbal medicine as antihypertension and anticholesterol, and potential for hyperglycemia. The sample has extracted with maseration method using ethanol solvent. Antidiabetic assay with inhibitory of enzyme  $\alpha$ -glucosidase. Our results show the extract of *P. paniculata* have a potential as antidiabetic with  $IC_{50}$  0.518  $\mu$ g/mL. It is higher than the glucobay 0,017  $\mu$ g/mL. These results demonstrate the ability of *P. paniculata* extract is still lower than the positive control, but this results contribute to understand and the mechanism of action of these plants on glucose metabolism.

**Key word :** Antidiabetic, enzyme  $\alpha$ -glucosidase, *Poligala paniculata* L.

Aktsar Roskiana Ahmad *et al* /International Journal of PharmTech Research, 2016,9(12): 531-535.

\*\*\*\*\*