ABSTRACT

Antihipercholesterolmic Activity of Dry Extract of *Orthosiphon stamineus* Benth. and *Allium sativum* Linn. Combination in Alloxan Induced Hipercholesterolemic Mice

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Hypercholesterolemia was defined as a state with an increase in cholesterol levels over the reference value, but is regarded as a high risk factor for coronary artery disease state is if the increase in cholesterol levels ≥ 240 mg / dl. The present studies was carried out to evaluate combination of dry extract from *Orthosiphon stamineus* Benth. and *Allium sativum* L. for antihypercholesterolemic activity in alloxan induced cholesterolemic mice. Alloxan was administered as a 150mg/kg BW in buffer citrate to induce hypercholesterolemic.

Combination of dry extract *Orthosiphon stamineus* Benth. and *Allium sativum* L. with ratio 1:1, 1:2 and 2:1 (23,3mg/20g BW mice), was administered orally to groups I, II, III for seven days. The standardized drug atorvastatin (0,026mg/20g BW mice) and CMC-Na also administered orally to mice as positive and negative control group respectively.

After repeated daily oral administrations of the extract (23,3mg/20g BW mice) for seven days, the extract significantly reduce blood cholesterol level in hypercholesterolemic mice at the 5 days compared to negative control group. The dry extract *Orthosiphon stamineus* Benth. and *Allium sativum* L. with ratio 1:1 showed the biggest reduction in blood cholesterol level (93,2 mg/dL) with percentage 38,48%. The combination with ratio 1:2 and 2:1 also have significant blood cholesterol level (70,8 mg/dL) with percentage 30,13% and (54,0 mg/dL) with percentage 23,34%, the combination were compared with standard drug atorvastatin (0,026mg/20g BW mice) have no significant to reduce blood cholesterol level.

The results indicate that dry extract of *Orthosiphon stamineus* Benth. and *Allium sativum* L could be a good natural source developing as an antihypercholesterolemic drugs that can effectively maintain blood cholesterol levels.

Keywords : *Orthosiphon stamineus* Benth., *Allium sativum* Linn., hypercholesterolemia activity, dry extract.