

# 3<sup>rd</sup> International Conference and Exhibition on **Traditional & Alternative Medicine**

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## **Effect of multiflora honey's (Mel Depuratum) on VEGF expression and glomerular tuft area of kidney Experimental study on male Sprague dawley rats induced by Streptozotocin**

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Multiflora honey contains poliphenol especially quercetin that was shown to have antioxidant, anti inflammation and anti proliferating effect, which potentially decreased damage of renal tissue caused by diabetic nephropathy. We investigate the effect of multiflora honey on VEGF expression and glomerular tuft area in renal tissue of STZ-induced Sprague- dawley rats. It was a randomized post test only control group, animal experimental study. 20 rats were divided into 4 groups, hyperglycemic control (K) group; and treatment group (P1= honey 0.33 g/kgBW/day, P2= honey 1 g/kgBW/day and P3= honey 10 g/kgBW/day). Postprandial Blood glucose were measured after 2 days post injection. All rats were terminated at 15th days. The VEGF expression and glomerular-tuft area of renal tissue were measured by Allred score and Software OLIVIA. VEGF expression was analyzed by Kruskal Wallis test, Mann Whitney U test and Spearman correlation test. Glomerular-tuft area was analyzed by One-way ANOVA, post-hoc LSD test and Pearson correlation test. The expression levels of VEGF in renal tissue of P1and P2, groups are significantly different than that of K group ( $p= 0.0001$ ), no significant dose - effect relationship of VEGF expression. The glomerular tuft areas in renal tissue are significantly different between groups. There was a significant dose-effect relationship of glomerular tuft area ( $r= - 0.291$ ). All doses of multiflora honey decreased glomerular tuft area. Only dose 0.33 and 1 g/kgBw/day could decrease VEGF expression.

### **Biography**

Susilorini has completed her Master of Medical Science from Magister of Biomedic of Diponegoro University and Pathology Anatomy Residency from Medical faculty of Diponegoro University. She is a pathologist and staff of Departement Pathology Anatomy of Medical faculty of Sultan Agung Islamic University and Sultan Agung Islamic hospital. Her research focussed in the prophetic medicine.

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