

EFFECT OF PORANG POWDER CONSUMPTION ON RAT (*RATTUS NOVERGICUS* WISTARSTRAIN) BODY WEIGHT AND KIDNEY HEALTH

IdiekDonowarti⁽¹⁾Nurul Muddarisna⁽²⁾ Muhandoyo⁽³⁾
Agriculture Faculty, Wisnuwardhana University, Malang
Email: idiek_donowati@yahoo.com

ABSTRACT

This study aimed to determine the effect of macerated porang powder consumption to rat kidney's health through five treatment groups including control, 300 mg/kg BW and 500 mg/kg BW of macerated porang powder, 300 mg/kg BW and 500 mg/kg BW of non macerated porang powder. Each group consisted of six male rats (*Rattus novergicus* Wistar strain). Rats were treated for 60 days and weighed on the first and last treatments. Calcium level in the blood was also measured and histopathology analysis of kidney was conducted by using microscope observation. Consumption of macerated porang powder with dosage 300 mg/kg BW for 60 days lead to the kidney defect but the defect did not observe at non macerated porang powder treatment. The defect was shown with necrosis at the cell of tubules. Body weight gain was affected by the difference of applied dosage but not affected by maceration treatment.

Keyword: Porang Powder, Calsium Oxalate, Kidney, Body Weight, Rat.