

## ABSTRAK

Dennisalfa Emmanuella. 2023. UJI AKTIVITAS LAKTAGOGUM EKSTRAK ETANOL DAUN UBI JALAR UNGU (*Ipomoea batatas* L.) DENGAN PARAMETER PENINGKATAN BERAT BADAN ANAKAN TIKUS DAN HISTOLOGI KELENJAR *mammae* TIKUS WISTAR. SKRIPSI, FAKULTAS FARMASI, UNIVERSITAS SETIA BUDI, SURAKARTA. Dibimbing oleh Dr. apt. Opstaria Saptarini, S.Farm., M.Si dan apt. Jamilah Sarimanah, S.Si., M.Si.

Air susu ibu merupakan makanan yang mengandung banyak nutrisi untuk pertumbuhan bayi. Produksi ASI dapat ditingkatkan dengan mengonsumsi laktagogum. Daun ubi jalar ungu dianggap sebagai salah satu jenis sayuran yang dapat meningkatkan produksi ASI. Tujuan penelitian ini guna mengetahui aktivitas laktagogum dan dosis efektif ekstrak etanol daun ubi jalar ungu.

Daun ubi jalar ungu dimaserasi dan diuji aktivitas laktagogum terhadap 30 induk tikus meyusui yang dibagi menjadi kontrol normal; kontrol negatif; kontrol positif (Lancar ASI® 18 mg/kg BB tikus); ekstrak etanol daun ubi jalar ungu dosis I, II, dan III. Penimbangan berat badan anak tikus dilakukan selama 14 hari sebelum serta sesudah menyusu yaitu pagi hari (W1), sesudah dipisahkan selama 4 jam dari induk (W2), dan setelah digabungkan selama 2 jam (W3), dihitung dengan rumus  $[(W3-W2) + (W2-W1)/4]$ . Hari ke-15, setiap kelompok diambil 3 induk tikus untuk diamati histologi kelenjar *mammae* dan dihitung jumlah serta diameter alveolinya. Analisis data diuji menggunakan analisis *Shapiro wilk*, *One Way Anova* dan *Tukey Post Hoc Test*.

Hasil penelitian membuktikan bahwa 3 variasi ekstrak etanol daun ubi jalar ungu memiliki aktivitas laktagogum. Dosis efektif yang memberikan dampak terhadap peningkatan berat badan anak tikus dan histopatologi kelenjar *mammae* induk tikus dan setara dengan kontrol positif adalah dosis 1260 mg/kg BB tikus.

Kata Kunci : Laktagogum, daun ubi jalar ungu, peningkatan berat badan, histopatologi kelenjar *mammae*.

## **ABSTRACT**

Dennisalfa Emmanuella. 2023. LACTAGOGUE ACTIVITY TEST ON PURPLE SWEET POTATO (*Ipomoea batatas* L.) LEAVE ETHANOL EXTRACT WITH PARAMETERS OF BODY WEIGHT INCREASING OF THE RATS AND *mammae* GLANDS HYSTOLOGY OF WISTAR RATS. THESIS, FACULTY OF PHARMACY, UNIVERSITAS SETIA BUDI, SURAKARTA. Supervised by Dr. apt. Opstaria Saptarini, S.Farm., M.Si and apt. Jamilah Sarimanah, S.Si., M.Si.

Mother's milk is a food that contains many nutrients for the growth of the baby. Milk production can be increased by consuming lactagogum. Purple sweet potato leaves are considered as one type of vegetable that can increase breast milk production. The purpose of this study was to determine the activity of lactagogum and the effective dose of ethanol extract of purple sweet potato leaves.

Purple sweet potato leaves were macerated and tested for lactagogum activity against 30 lactating rats which were divided into normal controls; negative control; positive control (Lancar ASI® 18 mg/kg BW rats); ethanol extract of purple sweet potato leaves doses I, II, and III. The body weight of the puppies was carried out for 14 days before and after feeding, namely in the morning (W1), after being separated for 4 hours from the mother (W2), and after being combined for 2 hours (W3), calculated by the formula  $[(W3-W2) + (W2-W1)/4]$ . On the 15th day, 3 rats were taken from each group to observe the histology of the mammary glands and the number and diameter of the alveoli were counted. Data analysis was tested using Shapiro Wilk analysis, One Way Anova and Tukey Post Hoc Test.

The results of the study proved that 3 variations of the ethanol extract of purple sweet potato leaves had lactagogum activity. The effective dose that has an impact on increasing the body weight of the puppies and the histopathology of the mammary glands of the mother rats and is equivalent to the positive control is a dose of 1260 mg/kg BW rats.

**Keywords:** Lactagogum, purple sweet potato leaves, weight gain, mammary gland histopathology.