

Pengaruh Minuman Kombucha *Caesalpinia sappan* L. pada Parameter Obesitas Tikus Ovariectomi = The Effect of *Caesalpinia sappan* L. Kombucha Beverage on Obesity Parameters in Ovariectomized Rats

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Abstrak

Obesitas merupakan masalah kesehatan yang ditandai dengan nilai Indeks Massa Tubuh ≥ 30 . Obesitas dapat memicu penyakit lain seperti Diabetes Mellitus dan penyakit Kardiovaskular. Pada penelitian sebelumnya, ekstrak *Caesalpinia sappan* L. atau dikenal di Indonesia sebagai kayu Secang, terbukti dapat mengurangi akumulasi lemak secara *in vitro*. Sementara, kombucha dipercaya dapat meningkatkan sistem imun. Pada penelitian ini, dilakukan eksperimen secara *in vivo* pada kombucha *C.sappan*. Penelitian ini menggunakan tikus putih betina Sprague-Dawley yang dibagi menjadi 8 kelompok, yaitu kontrol sham dan kontrol negatif (CMC-Na 0,5% 2 mL/200 grBB), kontrol positif (Tamoksifen 0,4 mg/200gr BB), ekstrak Secang (20 mg/200grBB), kombucha (1 mL/200grBB), serta 3 kelompok variasi dosis kombucha Secang dengan D1 (1 mL/200 gr BB), D2 (3 mL/200 grBB/), dan D3 (3 mL/200 grBB/3 kali sehari), dengan pemberian secara oral. Semua tikus dilakukan ovariectomi, kecuali kelompok sham dilakukan pembedahan tanpa pengambilan ovarium. Tikus dipelihara 4 minggu pasca operasi, lalu diberi perlakuan selama 28 hari. Parameter yang diukur adalah berat badan, food intake, akumulasi lemak visceral, dan ukuran sel adiposit. Berdasarkan penelitian, kombucha Secang dosis 3 (3 mL/200grBB/3 kali sehari) menurunkan berat badan, nafsu makan, mengurangi akumulasi lemak visceral dan ukuran sel adiposit.

.....Obesity is a health problem characterized by a Body Mass Index value ≥ 30 . Obesity can trigger other diseases such as diabetes mellitus and cardiovascular disease. In previous studies, *Caesalpinia sappan* L. extract was shown to reduce fat accumulation *in vitro*. Meanwhile, kombucha is believed to boost the immune system. In this study, *in vivo* experiments were conducted on kombucha from *C. sappan* extract. This study used female Sprague-Dawley white rats which were divided into 8 groups, namely sham and negative control (CMC-Na 0.5% 2 mL/200grBW), positive control (Tamoxifen 0.4 mg/200grBW), *C.sappan* extract (20 mg/200grBW), kombucha (1 mL/200grBW), as well as 3 groups of dose variations of *C.sappan* kombucha with D1 (1 mL/200 gr BB), D2 (3 mL/200grBW), and D3 (3 mL/200grBW/3 times a day), with oral administration. All rats were ovariectomized, except for the sham group. After 4 weeks ovariectomy, rats were treated for 28 days. Parameters measured were body weight, food intake, visceral fat accumulation, and adipocyte cell size. Based on the study, *C. sappan* kombucha dose 3 (3 mL/2grBW/3 times a day) decreased body weight, food intake, reduced visceral fat accumulation and adipocyte cell size.