

**FAKULTAS KEDOKTERAN
UNIVERSITAS PEMBANGUNAN NASIONAL “VETERAN” JAKARTA**

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LASKMIWATI NABILA, No. NRP 1910211060

**PENGARUH EKSTRAK BUAH PEDADA PUTIH (*Sonneratia alba*)
TERHADAP MOTILITAS MENCIT (*Mus musculus*) JANTAN GALUR
DDY**

RINCIAN HALAMAN (xix + 73 halaman, 15 tabel, 4 gambar, 7 lampiran)

ABSTRAK

Tujuan

Partisipasi pria dalam program KB di Indonesia masih rendah dibandingkan dengan negara lain. Hal ini disebabkan kontrasepsi pria non-hormonal bersifat permanen seperti vasektomi. Oleh karena itu, penting untuk menyelidiki strategi alternatif kontrasepsi yang aman dan efektif. Buah pedada putih (*Sonneratia alba*) saat ini sedang diteliti potensinya sebagai alternatif kontrasepsi. Tujuan penelitian ini adalah untuk mengetahui pengaruh Buah Pedada Putih (*Sonneratia alba*) terhadap motilitas spermatozoa.

Metode

Penelitian eksperimental ini dilakukan di iRATco *Veterinary Laboratory Services* Bogor pada bulan Mei-Juli 2023. Subyek yang digunakan adalah mencit jantan (*Mus musculus*) strain DDY. Kriteria inklusi sampel penelitian adalah mencit jantan sehat dan aktif, berumur 8-12 minggu, dengan berat \pm 20-40 gram. Tikus dengan kelainan anatomi dan yang telah digunakan untuk percobaan sebelumnya dieksklusikan. Mencit yang memenuhi kriteria restriksi kemudian dibagi menjadi lima kelompok yaitu kontrol negatif (pemberian NaCl 0,9%), kontrol positif (pemberian NaCMC 1%), serta kelompok perlakuan 1 (dosis 200mg/KgBB), perlakuan 2 (dosis 300mg/KgBB), dan perlakuan 3 (dosis 400 mg/KgBB).

Hasil

Pengujian bivariat menggunakan *Kruskal-Wallis* dan *Post Hoc* didapatkan hasil $p < 0.05$ antara kontrol negatif dengan perlakuan 2 dan perlakuan 3 yang menunjukkan bahwa terdapat perbedaan yang signifikan antara kontrol negatif dengan perlakuan 2 ($p = 0.038$) dan perlakuan 3 ($p = 0.038$).

Kesimpulan

Berdasarkan hasil penelitian, didapatkan bahwa pemberian ekstrak buah pedada (*Sonneratia alba*) dengan konsentrasi 300mg/KgBB (Perlakuan 2) dan dosis 400mg/KgBB (Perlakuan 3) dapat memengaruhi motilitas spermatozoa mencit jantan galur DDY.

Daftar Pustaka : 70 (1991 – 2023)

Kata Kunci : *Sonneratia alba*, motilitas spermatozoa, galur DDY

**FACULTY OF MEDICINE
UNIVERSITY PEMBANGUNAN NASIONAL “VETERAN” JAKARTA**

Undergraduate Thesis, Juli 2023

LAKSMIWATI NABILA, No. NRP 1910211060

**THE EFFECT OF PEDADA FRUIT EXTRACT (*Sonneratia alba*) ON
MOTILITY OF MALE MICE (*Mus musculus*) DDY STRAIN**

PAGE DETAIL (xix + 73 pages, 15 tables, 4 pictures, 7 appendices)

ABSTRACT

Objective

Male participation in the family planning program in Indonesia is still low compared to another countries. This is due to permanent non hormonal contraception like vasectomy. Therefore, it is important to investigate alternative strategies for contraceptions that are safe and effective. Pedada fruit (*Sonneratia alba*) is now being studied for their potencies as contraception alternatives. The aim of our study was to explore the effect of Pedada Fruit (*Sonneratia alba*) on spermatozoa motility.

Method

This experimental study is conducted at iRATco Veterinary Laboratory Services Bogor. The research was conducted in May-July 2023. The subjects used were male mice (*Mus musculus*) DDY strain. Inclusion criteria for the study sample included healthy and active male mice, aged 8-12 weeks, weighing \pm 20-40 grams. Mice with anatomical abnormalities and those that had been used for previous experiments were excluded. Mice that met the restriction criteria were then divided into five groups: Mice that met the restriction criteria were then divided into five groups: negative control (0.9% NaCl), positive control (1% NaCMC), and treatment 1 (200mg/KgBB), treatment 2 (300mg/KgBB), and treatment 3 (400 mg/KgBB).

Result

Bivariate analysis using *Kruskal-Wallis* and *Post-Hoc* obtained results of $p < 0.05$ between the negative control with treatment 2 and treatment 3 which indicated that there was a significant difference between the negative control with treatment 2 and treatment 3.

Conclusion

Mangrove fruit (*Sonneratia alba*) extract with concentrations of 300 mg/kg (treatment 2) and 400 mg/kg (treatment 3) showed significant effect on spermatozoa motility of the mice.

Reference : 70 (1991 – 2023)

Keywords : *Sonneratia alba*, spermatozoa motility, DDY strain

