

INTISARI

Senggani (*Melastoma polyanthum* B.I) merupakan salah satu tanaman yang digunakan sebagai bahan kontrasepsi wanita di daerah Singkawang, Kalimantan Barat. Sejauh ini penggunaannya sebagai kontrasepsi pria masih jarang dimanfaatkan bahkan tak pernah digunakan. Untuk memperoleh informasi yang jelas mengenai efek kontrasepsi bagi pria, dilakukan penelitian tentang pengaruh ekstrak etanol akar senggani terhadap spermatogenesis tikus putih dan profil spermanya.

Penelitian ini menggunakan 20 ekor tikus jantan fertil galur Wistar, umur 2,5-3 bulan, bobot badan 150-200 gram dan dibagi menjadi 4 kelompok sama banyak. Kelompok I merupakan kelompok kontrol negatif dengan perlakuan *aquadest*. Pada kelompok II, III, dan IV diberi perlakuan ekstrak senggani dengan dosis 34,38; 103,14; dan 309,42 mg/kg BB. Semua kelompok diberi perlakuan secara peroral selama 22 hari dengan frekuensi pemberian sekali sehari. Pada hari ke-23 tikus dikorbankan dan dilakukan pengamatan terhadap bobot badan, bobot testis, bobot epididimis, bobot kelenjar asesori, histopatologi testis dan profil sperma (warna, bau, viskositas, motilitas, morfologi, dan angka sperma).

Data bobot badan dianalisis dengan Split-Plot anava dengan taraf kepercayaan 95%. Data bobot testis, epididimis, kelenjar asesori, motilitas, dan angka sperma dianalisis dengan analisa varian pola satu arah, dilanjutkan LSD taraf kepercayaan 95%. Data histopatologi testis, warna, bau, viskositas, dan morfologi sperma dianalisis secara deskriptif.

Hasil penelitian menunjukkan bahwa pemberian ekstrak etanol akar senggani pada semua peringkat dosis mengakibatkan penghambatan secara proporsional spermatogenesis tikus putih. Pemberian ekstrak senggani pada dosis 34,38 dan 309,42 mg/kg BB mengakibatkan perubahan bobot badan tikus yang bermakna terhadap kontrol. Pemberian ekstrak etanol pada semua peringkat dosis tak mengakibatkan perubahan bobot testis, epididimis, kelenjar asesori, warna, bau, viskositas, dan jumlah sperma abnormal tetapi mengakibatkan penurunan motilitas dan angka sperma bila dibandingkan kontrol.

Abstract

Senggani (*Melastoma polyanthum* B.L) is one kind of plant which used as female contraceptive among people of Singkawang, West Borneo. So far the utilization this plant as male contraceptive is very rare because it never used before. This study was conducted to evaluate the information about senggani effect on spermatogenesis of *Rattus norvegicus*.

The subject of this experiment was four groups of fertile male Wistar rat, which every group consist of five rats. Group I was treated by aquadest. as negative control, while group II, III, and IV were treated by ethanolic extract af senggani root. The control animal receive aquadest. 309,42 mg/kg body weight, then the other groups continually gave with the ethanolic extract of senggani root in gradually dose as follows 34,38; 103,14 and 309,42 mg/kg body weight. Every group was treated for twenty-two days period of time, by orally administer, once a day. In every farticular time period, the rat was killed, then the inspection was done toward the body weight, testis weight, epididymis weight, accessory glands weight, testis histopathology and the sperm profile (colour, smell, viscosity, motility, morphology, and the sperm count).

The data of testis weight, epididymis weight, accessory glands weight, motility and sperm count were analyzed by one way anava, continued LSD with 95% reliable level, while the body weight was analyzed by Split-Plot anava. The data of testis histopathology, colour, smell, viscosity, and sperm morphology were analyzed by descriptive method of statistic.

The experiment result shows that the ethanoic extract of senggani root in every rank doses causing proportional inhibition on spermatogenesis process in tubuli seminiferi testis. Dose 34,38 and 309,42 mg/kg body weight of senggani extract resulting significant body weight change than control. The administer of senggani extract for twenty-two days in every rank doses have not change testis weight, epididymis weight, accessory glands weight, colour, smell, viscosity, and total number of normal/abnormal sperm but decreasing motility and sperm count than control.