

ABSTRACT

Many former investigations mentioning that the ethanolic extract of Sambiloto herb is proven in having a broad pharmacology effects. Beside of having anti-inflammation and anti-diabetes effects, it also affects spermatogenesis. The effect results in decreasing the amount and motility of the sperm and increasing of the sperm abnormality. This examination aims to investigate the effect of the ethyl acetate fraction of Sambiloto herb ethanolic extract in decreasing the amount and motility of the sperm and increasing of the sperm abnormality of Balb/c mice.

The examination used 25 male Balb/c mice aging 30 days which were divided into 5 examination groups. They were: the Sambiloto extracts group (dosage 1500 mg/kg BB); the ethyl acetate fraction of Sambiloto extract (dosage 50.949 mg/kg BB) group; the ethyl acetate fraction of Sambiloto extract (dosage 25.641 mg/kg BB) group; the positive control group employing Gandarusa extract (dosage 0.195 mg/kg BB); and the negative control group employing CMC-Na 0.5%. The injections were given in 35 days. In the 36th day, surgery and pharmacology examination were done in order to investigate the amount/concentration, abnormality, and the motility of the Balb/c mice sperm.

The result showed that the ethyl acetate fraction with the dosage of 50.549 mg/kg BB gave the best impact towards the motility reduction, and the abnormality improvement of the mice's sperm. Meanwhile, the ethyl acetate fractions with the dosage of 25.641 and 50.949 mg/kg BB give no effect towards the amount/concentration of the sperm of the male Balb/c mice.

Key words: *Sambiloto herb, andrographolid, ethyl acetate fraction, sperm quality*