

ABSTRACT

The study in the male rats showed that Pasak Bumi's root extract induce increasing LH concentration, FSH concentration, and LH concentration. This study was conducted to investigate the effects of Pasak Bumi's root extract in adult male mice on numbers of spermatogenic cells, Sertoli cells, and Leydig cells.

Fifty four adult male mice in sexually mature were used. They were divided into six groups. Each groups consist of nine mice. Group I : without anytreatment were killed before measurment (K1). Group II : treatment with aquadest 0,5 ml/kgBW/day (K2), Group III : treatment with methanol extract 200 mg/kgBW/day, Group IV : treatment with methanol extract 500 mg/kgBW/day, Group V : treatment with chloroform extract 200 mg/kgBW/day, and Group VI : treatment with chloroform extract 500 mg/kgBW/day, treatment given during 52 days peroral administration. At the end of treatment, mice were killed, the left testis was fixed in Bouin solution and embedding in paraffin wax, then stained by the Periodic Acid-Schiff method.

The result of this study showed that administration of methanol extract or chloroform extract Pasak Bumi's root 200 mg/kgBW/day and 500 mg/kgBW/day caused increased numbers of spermatogenic cells, Sertoli cells, and Leydig cells compared to those of control (K2), with significant statistically ($p < 0,05$) (Anova). In the methanol extract, the dose 200 mg/kg/BW/day more potentially than 500 mg/kgBW/day, but in the chloroform extract, the dose 500 mg/kgBW/day more potentially than 200 mg/kgBW/day. In addition, chloroform extract more potentially than methanol extract.

Keywords : Pasak Bumi's root, methanol extract, chloroform extract, spermatogenic cells, Sertoli cells, Leydig cells.