

PENGARUH PEMBERIAN EKSTRAK RUMPUT KEBAR (*Biophytum petersianum* Klotzsch) TERHADAP JUMLAH SEL SERTOLI MENCIT YANG DIPAPAR 2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

Cyrcilia Relita Berlina

ABSTRACT

This study was aimed to know the effect of Kebar grass extract on amount of mice Sertoli cell exposed by TCDD. This study was experimental study with completely randomized design. Thirty adult male mice of *Mus musculus* strain Balb/C, age 11 weeks and weight 25 – 30 g, were used. Mice were divided into five groups, that were: K- was control (aquadest 0,1 mL); K+ was injected with TCDD at dose of 7 µg/kg BW; P1 was injected with TCDD and administrated with Kebar extract (0,045 mg/g BW/day); P2 was injected with TCDD and administrated with Kebar extract (0,080 mg/g BW/day); P3 was injected with TCDD and administrated with Kebar extract (0,135 mg/g BW/day). Kebar grass extract was administrated in 53 days. Mice were sacrificed and right testis organs were taken. Then, histology preparat with HE staining were made and Sertoli cells were counted. Data were analyzed by One Way ANOVA followed by Duncan test ($\alpha = 0,05$). The result of this study showed that administration of Kebar grass extract affected amount of mice sertoli cells. K+ ($2,92^a \pm 0,109$) showed significance difference ($p < 0,05$) compared to P1 ($5,00^b \pm 0,374$), P2 ($7,64^c \pm 0,409$) and P3 ($9,68^d \pm 0,363$). Meanwhile, amount of Sertoli cells of P3 at the highest dose did not show significance difference ($p > 0,05$) with K- ($10,16^d \pm 0,829$). The conclusion of this study was administration of Kebar grass extract per oral in 53 days could maintain amount of mice Sertoli cell exposed by TCDD.

Key words : Kebar grass extract, sertoli cells, 2,3,7,8-Tetraclorodibenzo-p-dioxin