

ABSTRACT

Alfisah Gama Putra. 24020120140159. Histological Structure of White Rat (*Rattus norvegicus*) Uterine After Treated With Nanochitosan Preparation of Neem Leaf (*Azadirachta indica* A. Juss) Ethanol Extract, under the guidance of Agung Janika Sitasiwi and Teguh Suprihatin.

The neem plant is one of herbal plant that is often used as traditional medicine. Neem leaves (*Azadirachta indica* A.Juss) contains compounds that antifertility potential. The constraint in giving medicine orally is the low bioavailability and distribution of active compounds in herbal plants. This problem can be solved by packing herbal plant extracts in nanochitosan. The aim of this study was to analyze the effect of treated with a nanochitosan ethanol extract of neem leaves on the histological structure histological structure of the white rat uterine. This study used a randomized design (CRD) which was divided into 3 treatment groups with 4 replication of each. Treatments groups are P0 (an aquades 2 ml/animal/day), P1 (an ethanol extract of neem leaves 2 ml/animal/day, and P2 (a nanochitosan preparation of neem leaves 2 ml/head/day. The variabels measured were endometrial thickness, number of uterine glands, uterine diameter and uterine weight. Data on endometrial thickness, number of uterine glands, uterine diameter and uterine weight were analyzed statistically parametrically using the ANOVA test at a confidence level of 95%. Data that were significantly different were carried out by Duncan's further test. The results showed that the treatment of nanochitosan ethanol extract of neem leaves had no significant difference in endometrial thickness, number of uterine glands, uterine diameter and uterine weight ($P>0.05$). The conclusion of this study that the treatment of nanochitosan ethanol extract of neem leaves has same potential with ethanol extract of neem on the histological structure of white rats uterine.

Keyword : *nanochitosan, neem, uterine*