ABSTRACT

Decreases of ovarium function make condition of ovarian hormone deficiency, especially estrogen. This condition is a major risk factor for osteoporosis in premenopausal women. Pegagan is one of phytoestrogens source that able to inhibit bone resorption. The treatment using pegagan expected to give result changes in the blood phosphorus level. So far, the changes blood phosphorus levels remain unclear. The aim of this research was to find out the influence of pegagan's leaf extract to blood phosphorus level in ovariectomized Wistar-strain Rattus norvegicus rats. Twenty one ovariectomized rats aged 4 months and bodyweight of one hundred eighty grams. The rats were randomized into three groups, each groups consisting of seven rats. Group P0 received no pegagan extract. Group P1 and P2 received pegagan's leaf extract on day 21 post ovariectomy in the following doses: 60 mg/kg bw/day and 120 mg/kg bw/day, respectively, per oral for twenty days. On day 41 post-ovariectomy, the rats were sacrificed for blood sample. Phosphorus serums analyze using Goldenberg and Fernandes method. Data were analyzed by One-way analysis of variance. The result show that pegagan's leaf extract of ovariectomized rat has effect, it can be notice from the decrease of blood phosphorus level, the low level blood phosphorus were consist of P2 and P1 and the highest level on P0.

Key words: osteoporosis, phosphorus, pegagan, ovariectomy, phytoestrogen

PENGARUH PEMBERIAN EKSTRAK DAUN PEGAGAN (Centella asiatica) TERHADAP KADAR FOSFOR DALAM DARAH PADA TIKUS (Rattus norvegicus) OVARIECTOMI.

EFFECT OF PEGAGAN S (Centella asiatica) LEAF ADMINISTRATION ON BLOOD PHOSPHORUS LEVEL IN OVARIECTOMIZED RAT (Rattus norvegicus)

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