Irene Fitricia, 2012. The Influence of Giving Tomato (*Solanum lycopersicum* L.) to Histology Change of Mammae Gland in Female Mice Induced 7,12-Dimetilbenz(α)antrasena (DMBA).. This bachelor degree thesis was in under advisory of Dr. Dwi Winarni, M. Si and Drs. I.B. Rai Pidada, M.Si Biology Department, Faculty of Science and Technology, Airlangga University, Surabaya.

Abstract

The aims of the study are to know the influence of giving tomato (*Solanum lycopersicum* L.) extract to in emerging histology change in mammae gland ductus of female mouse induced with DMBA and to know the optimal doze tomato extract to reduce the influence of DMBA toward histology change in mammae gland ductus of mouse. This is an experimental study by using 30 female mice which were treated by dimethylbenz(α)anthracene (DMBA) 0,56 mg/20gBW in corn oil and divided into 6 treated groups (K+, K-, P1, P2, P3, P4). K+ was control group which does not be given special treatment, K- was control group which was given DMBA treatment without giving tomato extract, while P1, P2, P3, and P4 were given DMBA treatment and tomato extract with 100, 250, 400, and 500 mg/kgBW doze respectively in four time weekly for six weeks. All treatments are done orally.

Data which are measured in this study are ductus diameter, lumen, epitel thickness, and type of ductus epitel cell of mammae gland. Data obtained are analyzed one way statistic test ANOVA and then continued with Duncan test, while the data of ductus lumen diameter are analyzed by using Brown Forsythe and continues with Games-Howell (α = 0.05) test, the result showed that giving tomato extract (*Solanum lycopersicum* L.) in 400 and 500 mg/kgBW doze influenced to mammae gland histology of female mice which are proven by indicator of the reducing of average of lumen diameter and ductus epitel thickness. The conclusion of this study is there is a influenced on histology change of mammae gland ductus of female mice when they are being given tomato extract (*Solanum lycopersicum* L.) induced dimetilbenza(a)antrasena (DMBA), with optimal doze for tomato extract is 500 mg/kgBW.

Key words: Tomato (*Solanum lycopersicum* L.), DMBA, mammae gland ductus, breast cancer