

ABSTRAK

Ginjal merupakan organ ekskresi utama yang sangat penting. Kerusakan pada ginjal dapat berakibat fatal, akibat kerusakan pada ginjal fungsi ginjal menjadi tidak terlaksana, sehingga proses filtrasi dan reabsorpsi tidak berlangsung sempurna. DMBA merupakan zat toksik yang dapat menyebabkan kerusakan pada ginjal. Ginjal yang telah terpapar DMBA akan mengalami kerusakan seperti peningkatan signifikan dari selularitas glomerulus, dilatasi kapsula bowman dan degenerasi sel tubular. Telah diketahui, bahwa tumbuhan daun dewa (*Gynura divaricata*) mengandung senyawa flavanoid dan asam fenolat yang dapat menghambat proliferasi sel. Tujuan penelitian untuk melihat perbandingan gambaran mikrostruktur ginjal tikus yang diinduksi DMBA dan diberi ekstrak air daun dewa. Sebanyak 30 tikus galur Wistar digunakan sebagai hewan coba. Penelitian ini merupakan penelitian eksperimental murni *in vivo* dan data deskripsi. Data penelitian diambil dengan cara melakukan observasi pada preparat ginjal tikus yang telah diberikan serangkaian perlakuan menggunakan mikroskop cahaya dengan bantuan aplikasi *Image Raster*. Hasil penelitian menunjukkan adanya perbedaan gambaran sel epitel tubulus dan ukuran *capsula bowman* ginjal tikus yang hanya diinduksi DMBA dengan yang diinduksi oleh DMBA dan berbagai dosis ekstrak air daun dewa.

Kata Kunci: kerusakan Ginjal, , DMBA terhadap Ginjal, Daun Dewa

ABSTRACT

*Kidney is the main excretory organ that is very important. Damage to the kidneys can be fatal, due to damage to the kidneys, renal function is not carried out, so the filtration and reabsorption process does not take place perfectly. DMBA is a toxic substance that can cause damage to the kidneys. Kidney that has been exposed to DMBA will experience damage such as a significant increase in glomerular cellularity, bowman capsule dilation and tubular cell degeneration. It is known, that the plant leaves of the god (*Gynura divaricata*) contain flavanoid compounds and phenolic acids that can inhibit cell proliferation. The purpose of this study was to compare the microstructural picture of rats that were induced by DMBA and given water extract from the leaves of the god. A total of 30 Wistar strain rats were used as experimental animals. This research is purely experimental research in vivo and description data. The research data was taken by observing the rat kidney preparations that had been given a series of treatments using a light microscope with the help of the application of Image Raster. The results showed differences in the description of tubular epithelial cells and the size of rats bowman capsules in rats that were only induced by DMBA and those which were induced by DMBA and various doses of water extract from Dewa leaves.*

Keyword: *Kidney damage, DMBA against Kidney, God Leaves*