

## RINGKASAN

Minuman jahe berbasis gula kelapa merupakan salah satu bentuk minuman fungsional yang mempunyai kadar dan aktifitas antioksidan yang tinggi sehingga dapat menghambat reaksi oksidasi komponen tubuh. Konsentrasi radikal bebas yang tidak seimbang dengan antioksidan dapat menimbulkan stress oksidatif pada tubuh. Organ hati menjadi sampel penelitian ini karena hati merupakan pusat metabolisme lipid dan memiliki fungsi detoksifikasi. Tujuan dari penelitian ini untuk mengetahui pengaruh pemberian minuman jahe berbasis gula kelapa terhadap kadar dan aktivitas antioksidan pada hati tikus percobaan.

Penelitian ini berbentuk eksperimental dengan menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan pemberian minuman jahe selama 30 hari masing-masing dengan 6 pengulangan yaitu: P1J = kontrol, P2J = perlakuan pemberian minuman jahe dengan jumlah takaran 20 gram/200 ml setara konsentrasi 1 gelas, P3J = perlakuan pemberian minuman jahe dengan jumlah takaran 60 gram/200 ml setara konsentrasi 3 gelas, P4J = perlakuan pemberian minuman jahe dengan jumlah takaran 180 gram/200 ml setara konsentrasi 9 gelas. Minuman jahe berbasis gula kelapa diberikan dengan cara pencekokan sebanyak 2,5 ml/ekor. Variabel yang dikaji meliputi total fenol hati, kadar glutathione tereduksi (GSH) hati dan penghambatan malonaldehid (MDA)

Hasil penelitian menunjukkan pemberian minuman jahe berbasis gula kelapa sebanyak 20 gram/ 200 ml sudah dapat meningkatkan kadar total fenol hati dari 659.3 menjadi 1162.6 ppm dan GSH hati dari 1.15 menjadi 2.12 ppm, tetapi belum mampu menurunkan kadar MDA secara nyata. Penurunan MDA secara nyata terjadi pada konsentrasi minuman 60 gram/ 200 ml. Takaran terpilih minuman jahe berbasis gula kelapa optimum yang dapat menghambat malonaldehid terdapat pada pemberian konsentrasi minuman jahe 60 gram/ 200 ml sebesar 42.20% dengan kadar total fenol 1333.64 ppm dan kadar glutathione (GSH) 2.27 ppm.

## **SUMMARY**

*Ginger drink based of palm sugar is a kind of functional drinks. It has high antioxidant activity so that it can inhibit the oxidant reaction of body components. If the concentration of free radicals that were not balanced with antioxidant agents can cause oxidative stress on the body. Liver sample in this research has detoxification function,. This research aimed to determined the effect of ginger drink based of palm sugar levels and the activity of antioxidant rats liver.*

*This research was conducted in the experimental design that used a completely randomized design (CRD) with 4 treatment groups for 30 days where in each 6 repetitions ie: group control (P1), the treatment group were given by ginger drink based of palm sugar with number of doses 20gr/200 mL concentration equivalent to 1 cup (P2), the treatment group were given by ginger drink based of palm sugar with number of doses 60gr/200 mL concentration equivalent to 3 cup (P3), the treatment group were given by ginger drink based of palm sugar with number of doses 60gr/200 mL concentration equivalent to 9 cup. Ginger drink based of palm sugar was given with dosage 2,5 ml. Variables studied include total fenolic, glutathione content (GSH) and inhibitory malonaldehyde (MDA)*

*The result of research showed that ginger drink based with palm sugar was able to increase total fenolic, from 659.3 to 1162.6 ppm and glutathione content from 1.15 to 2.12 ppm, but not been able to significancy reduce levels of MDA. MDA significancy decrease at concentration 60 gram/ 200 ml. Selected doses ginger drink based of palm sugar optimum wich can inhibit malonaldehyde in concentration 60 gram/200 ml by 42.20% with fenolic content 1333.64 ppm and gluthatione content 2.27 ppm.*