INTISARI

Mengkudu (*Morinda citrifolia* L.) merupakan tumbuhan suku Rubiaceae, dikenal masyarakat sebagai tumbuhan obat tradisional. Buah dan daunnya dimanfaatkan untuk mengobati penyakit cacingan. Untuk memperoleh informasi yang jelas mengenai efek anthelmintik maka dilakukan penelitian tentang pengaruh infus daun mengkudu terhadap *Ascaridia galli in vitro*.

Penelitian ini termasuk eksperimen murni dengan rancangan acak lengkap pola satu arah. Data rata-rata waktu kematian cacing dianalisis dengan ANOVA satu arah, dilanjutkan dengan uji Tukey HSD dengan taraf kepercayaan 95 % dan analisis Probit.

Penelitian ini diawali dengan uji kelangsungan hidup *Ascaridia galli* jantan dan betina pada media NaCl fisiologis. Tujuannya untuk mengetahui lama hidup cacing di luar tempat hidup yang sebenarnya. Ternyata di dalam larutan NaCl fisiologis cacing betina mati dalam waktu 60,40 jam, sedangkan cacing jantan 31,11jam. Uji daya anthelmintik dilakukan menggunakan cacing betina dengan panjang ± 8,00 cm dengan cara direndam pada larutan infus daun mengkudu kadar 10 %, 20 %, 30 %, 40 %, 50 %, dan 60 % b/v, larutan baku piperasin sitrat kadar 0,05 %, 0,1 %, 0,2 %, 04 %, 0,6 %, dan 0,8 %b/v, serta larutan kontrol NaCl 0,9 %b/v. Diamati kematian cacing setiap jam hingga semua cacing mati.

Larutan infus dengan kadar 10 % dan 20 % menimbulkan kematian cacing dengan waktu yang hampir sama dengan larutan baku pembanding piperasin sitrat 0,4 % yaitu 18,00 jam, 16,00, dan 16,33 jam. Larutan infus daun mengkudu mempunyai LC 50 sebesar 24,67 % dengan LT 50 dalam waktu 9,06 jam dan larutan piperasin sitrat mempunyai LC 50 sebesar 0,087 % dalam waktu 4,20 jam. Berdasar hasil penelitian ini, larutan infus daun mengkudu berpotensi sebagai anthelmintik.

ABSTRACT

Mengkudu (*Morinda citrifolia* L.) is a plant of Rubiaceae group. People know it as a traditional medicine. Its fruits and leaves can be used to treat intestinal worms. To get a clear information concerning with anthelminthic effect, then there was a research conducted to study about the influence of mengkudu leaves infusion against *Ascaridia galli in vitro*.

The research was done pure experiment with the posttest only control group design. The worms death time average data were analyzed using ANOVA one way, continued with 95% confidence level HSD Tukey test and Probit.

The research was started by life test of male and female *Ascaridia galli* on physiology NaCl media. The purpose was to know the life time of the worms outside from their hospes. Actually, in NaCl solution, the female worms physiology died in 60.40 hours, and the male ones died in 31.11 hours. Anthelmintical activity test was done at female worms which had about ± 8.00 cm in length by soaking solutions of mengkudu leaves infusion with 10%, 20%, 30%, 40%, 50%, and 60% b/v contents, piperazin citrate was a standard solution with 0.05%, 0.1%, 0.2%, 0.4%, 0.6% and 0.8% b/v contents, and NaCl 0.9% b/v was as a control. The death worms was observed per hour until all of ones died.

Infusion with 10 % and 20 % contents caused the death of the worms in time which was almost similar with piperazin citrate standard solution with 0.4 % content, that was in 18.00 hours, 16.00 hours, and 16.33 hours. Solutions of mengkudu leaves infusion has LC 50 with 24,67 % contents and LT 50 was in 9.06 hours, piperazin citrate was a standard solution has LC 50 with 0,08 % contents and LT 50 was in 4.20 hours. Based on the result, mengkudu's leaves infusion act potentialy as an anthelmintic.