

INTISARI

Iklim tropis di Indonesia banyak memberikan keuntungan bagi kehidupan, selain mempermudah pertumbuhan tanaman iklim seperti ini juga mempermudah perkembangbiakan mikroorganisme, parasit dan jamur. Salah satu infeksi yang sering dijumpai adalah infeksi cacing parasit. Infeksi ini terjadi terutama bagi masyarakat yang hidup di lingkungan dengan sanitasi buruk. Secara tradisional penyakit cacingan bisa diobati menggunakan biji labu merah. Seiring dengan perkembangan perekonomian di Indonesia yang tidak stabil yang berdampak terhadap tingginya biaya pengobatan, penggunaan biji labu merah sebagai obat cacing merupakan alternatif pengobatan tradisional dengan harga lebih terjangkau dan mudah didapatkan.

Tujuan penelitian ini adalah untuk memperoleh informasi awal penggunaan biji labu merah sebagai obat cacing dan seberapa besar daya anthelmintikanya, maka dilakukan penelitian mengenai daya anthelmintika biji labu merah terhadap cacing *Ascaridia galli* secara *in vitro*.

Penelitian ini termasuk eksperimental murni dengan rancangan acak lengkap pola satu arah. Penelitian yang dilakukan dengan metode perendaman, dengan merendam cacing *Ascaridia galli* ke dalam infus biji labu merah. Penelitian diawali dengan uji kelangsungan hidup cacing di luar tubuh dengan merendam cacing ke dalam larutan NaCl fisiologis. Hasil yang diperoleh cacing betina lebih tahan hidup di luar tubuh selama ± 62 jam sedangkan cacing jantan ± 41 jam. Penelitian selanjutnya dibagi dalam 7 kelompok perlakuan, masing-masing perlakuan terdiri dari 5 ekor cacing betina. Kelompok I sebagai kontrol negatif, diberi NaCl fisiologis (NaCl 0,9%). Kelompok II sebagai kontrol positif, diberi larutan piperasin sitrat dengan berbagai peringkat kadar masing-masing adalah 0,05%, 0,1%, 0,2%, 0,4%, 0,6%, 0,8%. Kelompok III, IV, V, VI, VII diberi perlakuan infus biji labu merah dengan kadar berturut-turut 25%, 40%, 55%, 70%, 85%. Setiap kelompok perlakuan dilakukan replikasi sebanyak 3 kali. Pengamatan dilakukan dengan mencatat pada jam keberapa cacing mati.

Hasil penelitian yang diperoleh dilakukan analisa varian satu arah dilanjutkan dengan uji post hoc LSD, dan analisa probit dengan taraf kepercayaan 95%. Infus biji labu merah pada kadar 85% menimbulkan kematian cacing dengan waktu kematian yang tidak berbeda nyata dengan piperasin sitrat kadar 0,4%. Infus biji labu merah memiliki LC 50 sebesar 45,64% dengan LT 50 pada kadar 40% sebesar 11,23 jam, sedangkan piperasin sitrat mempunyai LC 50 sebesar 0,06% dengan LT 50 pada kadar 0,05% sebesar 10,61 jam. Berdasarkan hasil penelitian yang diperoleh dapat disimpulkan bahwa infus biji labu merah dapat berkhasiat sebagai anthelmintika.

ABSTRACT

Tropical climate in Indonesia gives so much advantage for the live here, besides giving an easy growth of plants, it can also easy microorganism growth, parasite, and fungus. One of infections which is encountered is parasite infection. It happens mainly to the people who live in a bad sanitation environment. Traditionally, this disease can be cured using seeds of pumpkin. As unstable economical growth in Indonesia which influences the cost of medical treatment, the use of this kind of seed as a medicine for this disease will be a good alternative such as cheaper and easy to get.

This research purposed to get a pre- information concerning with the use of pimpkin seeds as the medicine for worm and how big the power of anthelmintic was, then a research about the power of anthelmintic of pumpkin seeds against *Ascaridia galli* worms was held.

This research was a pure experiment using random plan of complete one way pattern. This research was done by method of soaking, by soaking *Ascaridia galli* worms in the infuse of pumpkin seeds. The research was started by testing the life of these worms outside the body. This results were that the female worms were able to survive for about 62 hours and the male ones were just for 41 hours, then seven treatment groups were formed. Each treatment consisted of 5 female worms. The first group was as the negative control group, it was given NaCl physiology way (NaCl 0,9%). The second group was the positive control group, it was got citrate piperazine compound with some various levels. Those levels were 0,05%, 0,1%, 0,2%, 0,4%, 0,6%, and 0,8%. The groups of III, IV, V, VI, VII, were also got the treatment of pumpkin seeds infusion the levels were 25%, 40%, 55%, 70%, and 85%. Each group got replications three times. The observation was done by making a note of the time when the worms dead.

The results then were got a one way variant analysis which was continued by post hoc test LSD and probite analysis with the trusting level, that was 95%. The infuse of these pumpkin seeds in level concentration of 85% emerged the death of worms in the similiar time with the citrate piperazine in level concentration of 0,4%. The infuse of pumpkin seeds had LC 50 for about 45,64% with LT 50 in the level concetration of 40% for about 11,23 hours, and the citrate piperazine had LC 50 for about 0,06% with LT 50 in the level concentration of 0,05% for about 10,61 hours. Based on the result, it could be concluded that the infuse of the pumpkin seeds had a power as anthelmintic.