ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian ekstrak metanol 70% daun *Malus domestica* Borkh. var. *manalagi* terhadap efek analgesik dengan melihat nilai proteksi dan persen proteksi geliat mencit betina galur Swiss yang terinduksi asam asetat 1 %. Penelitian ini merupakan penelitian eksperimental murni rancangan acak lengkap pola searah dengan metode rangsang kimia menggunakan 5 kelompok dimana setiap kelompok terdiri atas 5 ekor mencit yang dipilih secara acak. Kelompok I sebagai kontrol negatif (CMC-Na), kelompok II sebagai kontrol positif (asetosal 91 mg/KgBB), kelompok III-V merupakan kelompok perlakuan 3 peringkat dosis ekstrak metanol 70% daun *Malus domestica* Borkh. var. *manalagi* (833,33; 1.666,67; and 3.333,33 mg/KgBB). Setiap kelompok diberikan perlakuan secara peroral setelah 10 menit penginjeksian asam asetat 1%. Data hasil akumulasi geliat mencit dianalisa dengan metode Shapiro-Wilk kemudian dilanjutkan dengan ANOVA dan Tamhane pada taraf kepercayaan 95%. Hasil penelitian menunjukkan ekstrak metanol 70% daun *Malus domestica* Borkh. var. *manalagi* dosis 1.666,67 dan 3.333,33 mg/KgBB yang memiliki efek analgesik dilihat dari persen proteksi ekstrak metanol 70% daun *Malus domestica* Borkh. var. *manalagi* dosis 833,33; 3.333,33; dan 1.666,67 mg/KgBB berturut-turut 41,2 ± 0,7%; 58,4 ± 0,8%; and 53,0 ± 1,0%.

Kata kunci: analgesik, ekstrak metanol 70%, daun *Malus domestica* Borkh. var. *manalagi*

ABSTRACT

The aim of this research is to investigate the influence of 70% methanolic extract *Malus domestica* Borkh. var. *manalagi* leaves for analgesic effect within see the protection and percent protection female Swiss mice induced by 1% acetic acid. This research was experimental study with one-way-complete-random design with chemical induced writhing test using 5 groups of mices and each group consists 5 mices which randomly selected. First group as negative control (CMC-Na), second group as positive control (asetosal 91 mg/KgBB), the third until fifth groups as intervention group with 3 stage doses of 70% methanolic extract *Malus domestica* Borkh. var. *manalagi* leaves (833.33; 1666.67; and 3333.33mg/KgBB). Intervention of each group are given orally after 10 minuts 1% acetic acid had been induced. Accumulation writhing mices were analyzed by Shapiro-Wilk method and followed by ANOVA and Tamhane with 95% confident level. The results show 70% methanolic extract *Malus domestica* Borkh. var. *manalagi* leaves at doses 1.666,67 and 3.333,33 mg/KgBB are have analgesic effect that can be see at percent protection of 70% methanolic extract *Malus domestica* Borkh. var. *manalagi* leaves at 833.33; 1666.67; and 3333.33 mg/KgBB respectively 41.2 ± 0.7%; 58.4 ± 0.8%; and 53.0 ± 1.0%.

Keywords : analgesic, 70% methanolic extract, *Malus domestica* Borkh. var. *manalagi* leaves