Formulation of Putrimalu (Mimosa pudica L.) Herbs Extract Tablet With Avicel and Primojel Binder For Hiperuricemia Treatment

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FORMULATION OF PUTRI MALU (Mimosa pudica L.) HERBS EXTRACT TABLET WITH AVICEL AND PRIMOJEL BINDER FOR HIPERURICEMIA TREATMENT

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ABSTRACT

Hyperuricemia symptom amongst Sundanese people has been treated empirically using putrimalu (Mimosa pudica L.) herbs. Previous studies reported the percentage of inhibition of uric acid formation in vitro at dose 125 mg/mL and 62,5µg/mL indicated that putrimalu herbs ethanol extract inhibited uric acid each of 82.11 and 62.10% (Susilawati Y et al, 2006). In vivo test in mice by induction of 20%chickenjuice liver indicated that putrimaluherb extract dose of 250 and 500 mg/kg body weight lowering uric acid levels of 1.10 and 1.40 mg/dL were significant with 95% respectively (Maulida H, et al, 2011). In vivotestshowed a reduction in inflammatory symptoms caused by the hyperuricemia: Analgesic activity of putrimalu herb extract at doses of 250 and 500 mg/kg body weight performed in mice using the writhing reflex method with 0.07% acetic acid as inducer, showed an inhibition of pain 45.35, and 60.28% respectively. Anti-inflammatory activity of putrimalu herb extract doses of 250 and 500 mg/kg body weight with carageenan-induced paw edema method in white male rats showed inhibition of oedema 35.20 and 42.74% respectively. Acute and subchronic toxicity tests showed that putrimaluherb extract has an LD500f 2 g/kg and safe for 90 days (Sumiwiet al, 2013). Formulation of tablet with direct method using avicel and primojelshowed that the six formulas of A, B, C, D, E and F withcomparison 86: 0; 85: 1; 84: 2; 83: 3; 82: 4; 81: 5 showed that formula C (avicel-primojel84: 2) is the best (water content 1.39%; friabilitytest of 1.8;density test of 10.24%; uniformity of weight with an average of 470 mg, hardness test of 42. 45 g/cm³, and the fragility of the weight loss test of 0%).

Keywords: Mimosa pudica L, antihiperuricemia, tablet, formulation