

ABSTRACT

ANTIBACTERIAL ACTIVITIES CASHEWNUT LEAF EXTRACT (*OCCIDENTALE ANACARDIUM L.*) AND CHARACTERISTICS OF LEAF POWDER DRINK AS THE EFFECT OF SUGAR AND DRYING TEMPERATURE

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Ulcer disease or gastritis is often caused by *Helicobacter pylori*. Natural ingredient that can inhibit *Helicobacter pylori* is cashew leaf (*Anacardium occidentale L.*) which has antibacterial compounds. This research aimed to determine effective concentration of cashew leaf to inhibit *Helicobacter pylori*, and to determine the proportion of the addition sugar to affect moisture content, solubility, and preference for cashew leaf powder. The design used in research was RSM (Response Surface Methodology) model, with two factors and five levels each, namely sugar content (30, 35, 40, 45 dan 50%) and (30, 35, 40, 45 dan 50%). Cashew leaf powder was analyzed for antibacterial activity, moisture content, solubility, and sensory (color, taste, aroma and overall acceptance) properties. The best result was shown by extract at 50°C with 100% concentration with inhibition zone of 23 mm. The best result of cashew leaf powder based on the RSM (Response Surface Methodology) model was sugar content of 50% and drying temperature 50°C, with 0.9599% moisture content, solubility of 62.9530%, color 5.2080 (like), taste 4.6724 (a little bit like), flavor 3.4489 (rather like) and the overall acceptance 4.9333 (a little bit like).

Keywords: Gastritis, *Helicobacter pylori*, *Anacardium occidentale L.*, Leaf powder

ABSTRAK

AKTIVITAS ANTIBAKTERI EKSTRAK DAUN JAMBU METE (*ANACARDIUM OCCIDENTALE* L.) DAN KARAKTERISTIK SERBUK MINUMAN DAUN JAMBU METE DENGAN PENGARUH GULA DAN SUHU PENGERINGAN

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Penyakit maag atau *gastritis* merupakan penyakit lambung yang sering disebabkan oleh *Helicobacter pylori*. Bahan alami yang dapat menghambat *Helicobacter pylori* adalah daun jambu mete (*Anacardium occidentale* L.) yang memiliki senyawa antibakteri. Penelitian ini dilakukan untuk mengetahui konsentrasi larutan ekstrak daun jambu mete yang efektif dalam menghambat *Helicobacter pylori* dan mengetahui penambahan proporsi gula yang tepat untuk kadar air, kelarutan dan kesukaan terhadap serbuk daun jambu mete. Penelitian ini menggunakan RSM (*Respon Surface Metodology*) dengan 2 faktor dan 5 level yakni kadar gula (30, 35, 40, 45 dan 50%) dan suhu pengeringan (30, 35, 40, 45 dan 50°C) dengan parameter uji yaitu uji antibakteri, kadar air, kelarutan dan sensoris (warna, rasa, aroma dan kesukaan keseluruhan). Hasil uji antibakteri yang terbaik yaitu ekstrak pada suhu 50°C dengan konsentrasi 100% dengan zona hambat sebesar 23 mm. Hasil terbaik serbuk minuman daun jambu mete berdasarkan model RSM (*Respon Surface Metodology*) yaitu dengan kadar gula 50% dan suhu pengeringan 50°C dengan nilai kadar air 0,9599%, kelarutan 62,9530%, warna 5,2080 (suka), rasa 4,6724 (agak suka), aroma 3,4489 (agak tidak suka) dan kesukaan keseluruhan 4,9333 (agak suka).

Kata kunci : *Gastritis, Helicobacter pylori, Anacardium occidentale* L, Serbuk daun