

**FAKULTAS KEDOKTERAN DAN ILMU KESEHATAN UNIVERSITAS
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UJI EFEKTIVITAS EKSTRAK DAUN KEJI BELING (*STROBILANTHES CRISPA*) TERHADAP PELARUTAN KRISTAL KALSIMUM OKSALAT SECARA IN VITRO

ABSTRAK

Latar Belakang: Batu ginjal merupakan salah satu penyakit saluran kemih yang paling sering ditemukan, dengan sekitar 70–80% kasus tersusun atas kristal kalsium oksalat. Selain terapi medis, pemanfaatan tanaman herbal sebagai alternatif pengobatan terus dikembangkan. Daun keji beling (*Strobilanthes crispera*) secara tradisional dikenal sebagai tanaman peluruh batu ginjal dan mudah diperoleh di masyarakat. **Tujuan:** Penelitian ini bertujuan untuk mengetahui efektivitas ekstrak daun keji beling (*Strobilanthes Crispera*) terhadap pelarutan kristal kalsium oksalat secara in vitro. **Metode Penelitian:** Penelitian ini merupakan penelitian true experimental. Uji pelarutan kristal kalsium oksalat dilakukan secara in vitro menggunakan metode gravimetri. Ekstrak daun keji beling diuji pada konsentrasi 25%, 50%, 75%, dan 100%, dengan NaCl 0,9% sebagai kontrol negatif dan Batugin Elixir sebagai kontrol positif. **Hasil Penelitian:** Hasil penelitian menunjukkan adanya penurunan berat kristal kalsium oksalat setelah perlakuan ekstrak daun keji beling. Selisih penurunan berat kristal pada konsentrasi 25% sebesar 0,01 g (10% pelarutan) ; 50% sebesar 0,02 g (20% pelarutan) ; 75% sebesar 0,03 g (30% pelarutan), dan 100% sebesar 0,05 g (50% pelarutan). Kontrol positif sebesar 0,08 g (80% pelarutan), sedangkan kontrol negatif 0 g (0% pelarutan). **Kesimpulan:** Berdasarkan hasil penelitian dapat disimpulkan bahwa ekstrak daun keji beling memiliki efektivitas dalam melarutkan kristal kalsium oksalat secara in vitro.

Kata Kunci : Daun Keji Beling (*Strobilanthes Crispera*), Kristal Kalsium Oksalat, Batu Ginjal.

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**TEST THE EFFECTIVENESS OF KEJI BELING LEAF EXTRACT
(*STROBILANTHES CRISPA*) AGAINST THE DISSOLUTION OF
CALCIUM OXALATE CRYSTALS IN VITRO**

ABSTRACT

Background: Kidney stones are one of the most frequently encountered urinary tract diseases, with approximately 70–80% of cases composed of calcium oxalate crystals. In addition to medical therapy, the use of herbal plants as an alternative treatment continues to be developed. Keji beling leaves (*Strobilanthes crispus*) are traditionally known as a plant that promotes the expulsion of kidney stones and are easily accessible in the community. **Objective:** This study aims to determine the effectiveness of keji beling leaf extract (*Strobilanthes Crispus*) on the dissolution of calcium oxalate crystals in vitro. **Method:** This study is a true experimental study. The dissolution test of calcium oxalate crystals was conducted in vitro using the gravimetric method. Keji beling leaf extract was tested at concentrations of 25%, 50%, 75%, and 100%, with 0.9% NaCl as the negative control and Batugin Elixir as the positive control. **Results:** The results showed a decrease in the weight of calcium oxalate crystals after treatment with the extract of keji beling leaves. The difference in crystal weight reduction at a concentration of 25% was 0.01 g (10% dissolution); 50% was 0.02 g (20% dissolution); 75% was 0.03 g (30% dissolution), and 100% was 0.05 g (50% dissolution). The positive control was 0.08 g (80% dissolution), while the negative control was 0 g (0% dissolution). **Conclusion:** Based on the research results, it can be concluded that the extract of keji beling leaves is effective in dissolving calcium oxalate crystals in vitro.

Keywords: Keji Beling Leaf (*Strobilanthes Crispus*), Calcium Oxalate Crystals, Kidney Stones.