**ANTIDIABETIC BIOACTIVITY TEST**

**OF CHROMIUM(III) AND COPPER(II) COMPLEX COMPOUNDS ON MICE (*Mus musculus L*.)**

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**Abstract:** The Chromium(III) complex compounds have been known to reduce glucose levels in people with type 2 diabetes. This study aims to test the antidiabetic bioactivity of mice from the synthesis of complex compounds of Cr(III) and Cu(II) with amino acid alanine. The antidiabetic testing was carried out in vivo using alloxan-induced mice. Antidiabetic test results are expressed in %GL (Glucose Lowering) for Cr-alanine dose of 50 μg at 29.79%, dose of 100 μg at 37.13%, and a dose of 200 μg at 59.19%. Whereas at Cu-alanin dose of 50 μg was 25.39%, dose of 100 μg was 33.87%, and the dose of 200 μg was 54.96%. Antidiabetic tests show that the Cr-alanine complex compound is more effective in reducing blood glucose levels in mice compared with Cu-alanine.

**Keywords**: Cr-alanine, Cu-alanine, antidiabetic, glucose, mice