

EFFECT OF POLYPHENOL EXTRACTS ON GLUTATHIONE PEROXIDASE ENZYME ACTIVITY IN CONDITIONS OF TOXIC HEPATITIS

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ABSTRACT

In this study, the inhibitory effects of helmar-1 and helmar-2 polyphenol extracts isolated from the helichrysummaracandicum plant on the activity of the antioxidant glutathione peroxidase enzymes in a toxic hepatitis model were compared with silymarin. To induce toxic hepatitis, the subcutaneous area of the abdomens of the experimental animals were injected twice a week with a 50% solution of carbon tetrachloride in olive oil at a dose of 1 ml/kg. After an increase in the levels of the enzymes alanine aminotransferase (ALT) and aspartate aminotransferase (AST) were observed in the blood plasma, which indicates toxic hepatitis, the helmar-1 and helmar-2 polyphenol extracts and silymarin were administered subcutaneously at a dose of 20 mg/kg once daily for 15 days for pharmacocorrection.

KEYWORDS: *Helichrysummaracandicum, Glutathione Peroxidase, Malondialdehyde, Mitochondria, Superoxide Dismutase, Silymarin, Toxic Hepatitis*

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