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Poster Presentation

The Oxidative Stress Assessment of Echium Amoenum on Mice Brain

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Abstract

Echium Amoenum (Boraginaceae) is one of the important medicinal herbs in traditional medicine. It has known for its variety effects such as demulcent, anti-inflammatory and analgesic, especially for common cold, anxiolytic and sedative, this plant contains small quantities of pyrrolizidine alkaloids that are toxic and chronic consumption may have adverse effects on the body's organs. in this study, 60 mice were chosen and divided into four groups. Group (1) as control group (without injection), group (2) received 12.5mg/kg, group (3) received 25mg/kg, group (4) received 50mg/kg body weight plant. Boraginaceae was injected into mice for a month. Then, the mice were decapitated and brains were collected to evaluate oxidative stress. The level of lipid oxidation was significant in groups. Brain tissue is rich in polyunsaturated fatty acid. Therefore, the level of lipid oxidation is usually more than other tissue. Changes in Ion reducing antioxidant capacity assay (CUPRAC) were not significant. The level of glutathione (GSH) increase in high dose. Echium Amoenum may don't trigger toxicity in brain in low and intermediate doses.

Keywords: Echium Amoenum, Oxidative Stress, Brain

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