Efectul protector al glutationului fata de ionii de cupru in procesul germinativ al graului

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The antitoxic activity of glutathione was followed using lots of 50 seed samples of wheat that were treated with 5 mL of 10–4 – 10–2 molar solutions of copper ions and sodium biselenite for 1 hour. A blank with redistilled water was also carried out. After a 7 day period of germination in the presence of the investigated compounds, the wheat plantlets were cut from the seeds, and their height, weight, and length of radicle measured. Highly concentrated solutions of copper and selenite ions exhibited a powerful inhibitory activity on the wheat germination, while the lower concentrations (10–4M for copper and 5·10–4M for selenite ions, respectively) determined a stimulating action. Glutathione simply cancelled the copper and selenite toxicity. While various concentrations of both copper and selenite drastically inhibited the radicle formation, glutathione treatment resulted in higher values than those of the untreated samples. All results were statistically validated.