



Toxicitatea ionilor de mercur și legătura sa cu selenitii și glutatyonul

Catalina CIOBANU, Ramona MOLNAR - Universitatea "Al. I. Cuza" Iași
Manuela MURARIU - Universitatea Tehnică "Gh. Asachi" Iași
Raluca RUSCANU, Roxana BUTNARIU - Universitatea "Al. I. Cuza" Iași
Geanina MANGALAGIU - Colegiul Național Mihail Sadoveanu Iași
G. DROCHIOIU - Universitatea "Al. I. Cuza" Iași

Studies to test the noxious effect of mercury and selenite ions on the wheat germination showed that the germination rate, shoot and radicle length as well as fresh weights varied as a function of concentration of each investigated ion. Lots of 50 seed samples of wheat were treated with 5 mL of $3 \cdot 10^{-5}$ – $5 \cdot 10^{-2}$ molar solutions of mercury, glutathione and/or sodium biselenite for 1 hour. 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 and weight measured. Higher concentrated solutions of mercury and selenite ions exhibited highly inhibitory activity on the wheat germination, while the lower concentrations than 10^{-3} M resulted in a moderate one. Glutathione reduces significantly mercury and selenite toxicity.