PARTICIPATION OF TAXIFOLIN IN THE PROTECTION OF SOYA SEEDS FROM THE EFFECTS OF HEAVY METAL SALTS

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Abstract

A correlation was revealed between the specific activity of peroxidases and their multiple forms during the germination of soya seeds (*Glycine max* (L.) Merrill) in the presence of heavy metal salts. It was shown that lead and cadmium sulfates cause emergence of new forms of the enzyme with high electrophoretic mobility, which indicates that the identified enzyme forms are involved in the molecular mechanism of adaptation to oxidative stress. Addition of taxifolin (dihydroquercetin), a bioflavonoid antioxidant, to the salts of heavy metals caused decrease in the specific activity of peroxidases and favored emergence of new forms of the enzyme, which were absent in the control samples.

Keywords: soya, multiple forms of peroxidases, taxifolin, heavy metals, oxidative stress, adaptation.

References


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