

## Antioxidant activity – integral indicator of ground features in water ecosystems

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### Abstract

Researches on estimation of total antioxidant activity of various soil samples are carried out. Humic and buried horizons of soddy-podzolic and agrosoddy-podzolic soils (Yaroslavl region) have been chosen as objects of research. As a result of researches it is positioned that total antioxidant activity indexes of aqueous suspensions of soils varied largely. Absorbed on the soil substances evolved with water and the structured water have the considerable proportion in activity. It is revealed that hydrolytic acidity influences on value of total antioxidant activity of aqueous suspension, aqueous extract and solid particles of the investigated soil samples. Influence of the exchange bases (mainly calcium and magnesium cations) in a soil adsorption complex on value of total antioxidant activity only in the case of aqueous soil suspension is shown. Direct essential close interrelations had been revealed between values of total antioxidant activity both aqueous suspension and aqueous extract from the investigated soils and carbon content of organic compounds and nitrogen content in the same soils.