The invention relates to chemical compounds with biologically active properties, and can be used in agriculture for reducing the negative impact of oxidative stress caused by reactive oxygen species, for antioxidant protection and diminishing the oxidative destruction of cellular components.

The complex preparation, according to the invention, comprises thiourea, $Mg(NO_3)_2 \cdot 6H_2O$, $Ca(NO_3)_2 \cdot 4H_2O$, potassium salicylate, $[Co(DmgH)_2(SeUree)_2]BF_4 \cdot 2H_2O$, $[Fe_3O(CH_3COO)_6(H_2O)_3]NO_3 \cdot 3H_2O$, $Mn(CH_3COO)_2 \cdot 4H_2O$, $[Co(DmgH)_2(Nia)_2]BF_4 \cdot 2H_2O$, $Zn(NO_3)_2 \cdot 6H_2O$, $(NH_4)_6Mo_7O_{24} \cdot 4H_2O$, $(HOC_6H_4COO)_2Cu \cdot 4H_2O$.

The result of the invention consists in reducing the content of malonic di-aldehyde – the final product of lipid peroxidation by the reactive species of oxygen, and in enhancing the activity of the antioxidant protection system enzymes.

Claims: 1