

Stevioside prevents oxidative stress in wheat seedlings

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Abstract

© 2015, Pleiades Publishing, Ltd. This is the first study on the effect of stevioside, a diterpene glycoside that is a new promising plant growth regulator, on the antioxidant and photosynthetic systems of seedlings of the winter wheat cultivar Kazanskaya 560. Stevioside has been demonstrated to cause a decrease in the malondialdehyde formation rate, an increase in the activities of antioxidant enzymes (peroxidase and ascorbate peroxidase), and the accumulation of proline and carotenoids. Apparently, this integrated effect of stevioside can prevent oxidative stress caused by adverse environmental factors in plants.

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