



***Saccharomyces cerevisiae* UE-ME₃ is a good strain for isoproturon biorremediation?**

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Isoproturon, an herbicide of pre- and pos-emergence of Autumn-Winter crops, persists occasionally in soil, groundwater and biological systems at levels above those established by European Directives. *Saccharomyces cerevisiae* UE-ME₃ exposed in stationary phase to 50 and 100 µM isoproturon exhibit growth rates higher than control or exposed cells to 5 and 25 µM of this phenylurea. However, in *S. cerevisiae* UE-ME₃ grown in the presence of 5 µM isoproturon, were observed a decrease of GSH/GSSG ratio, an increase of cytoplasmatic MDA level, GR and GPx activities, usual markers of cell damage and oxidative stress. Nevertheless, *S. cerevisiae* grown at 25, 50 and 100 µM isoproturon, have developed adaptive responses to this phenylurea by stabilization of its reducing environment, lipid peroxidation decrease and GR, GPx activities increase, events regulated by isoproturon level in culture medium, facts which suggest that this yeast strain can be useful on bioremediation.

Keywords *Saccharomyces cerevisiae*, isoproturon; lipid peroxidation

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