Enhanced Stability of Laccase by Xylitol

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Laccase is a multicopper oxidase able to perform one-electron oxidation of several aromatic substrates.

The application of laccase on wood delignification, drug analysis, biosensor, wine clarification, bioremediation, etc., was proposed [1].

As every enzymatic system, laccase has some limitations due to the reaction conditions, mainly temperature and pH.

Deactivation of laccase at pH values over 6 and lower 3 are undesirable properties that must be improved. The addition of some compounds is an easy and conventional way to get the stabilization of laccase [2].

In this work laccase from \textit{Trametes hirsuta} was studied in order to get its stabilization towards different pH values by addition of xylitol, a polyol used in food industry with optimal characteristics with respect to its prize and non-toxical properties.
