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**Note**

**Enzymatic Synthesis of Hydroquinone  $\beta$ -Xyloside from Xylooligosaccharides**

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$\beta$ -Xylosidase of *Aspergillus pulverulentus* catalyzes a transxylosylation reaction from xylooligosaccharides to acceptor hydroquinone. Two transfer products were purified and their structures were examined. These were identified as hydroquinone  $\beta$ -(1 $\rightarrow$ 4)-xyloside and hydroquinone 4-O-( $\beta$ -xylosyl)- $\beta$ -xyloside. The hydrolysis of these glycosides apparently took place accompanying the synthesis of the transfer products.

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**Levoglucosan Dehydrogenase Involved in the Assimilation of Levoglucosan in *Arthrobacter* sp. I-552**

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A levoglucosan (1,6-anhydro- $\beta$ -D-glucopyranose)-using bacterium, isolated from soil, was identified. It was shown to belong to the genus *Arthrobacter* and tentatively named *Arthrobacter* sp. I-552. A novel enzyme catalyzed the dehydrogenation of levoglucosan to form 1,6-anhydro- $\beta$ -D-ribo-hexopyranos-3-ulose (3-keto levoglucosan), using  $\text{NAD}^+$  as an electron acceptor, *i.e.*  $\text{NAD}^+$ : 1,6-anhydro- $\beta$ -D-glucopyranose oxidoreductase (trivial name: levoglucosan dehydrogenase). This enzyme was purified and characterized. A possible reaction scheme for the glucose formation was proposed. This pathway for levoglucosan use is distinct from those in yeast and fungi.