

On the Production of Antioxidants by Fungi Isolated in the
Presence of Higher Amounts of Salt

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S u m m a r y

Many fungi were isolated from soil samples using a malt extract medium containing 10 % of salt. They have been screened for the production of antioxidants synergistic with tocopherol(Toc), and two strains were investigated.

One of them has grown on a malt extract medium containing various concentration of salt. The presence of 2~10% amounts of salt helped to attain to higher synergism between ethyl acetate(EA) extract of culture broth and Toc. However, salt concentrations more than 20 % completely halted the growth of the strain. The EA extract was gel-chromatographed on Sephadex LH 20(methanol) to give yellow substance which, upon recrystallization, produced needles from methanol. This compound was identified to be citrinin by NMR data.

The other has grown on a malt extract medium and culture broth and mycelial mats were extracted with EA and acetone(Ac), respectively. The EA extract was chromatographed on silica gel, using benzene-EA (1:1), EA and Ac, to give yellow substance, which was recrystallized from methanol. The results of elementary analysis and spectral data suggest that this compound is a derivative of some xanthenes. The Ac extract was partitioned with Ac and methanol. Acetone-insoluble and methanol-soluble portion was gel-chromatographed to give yellow crystals. This compound was determined to be deoxyherqueinone by NMR data.