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Antioxidative effects of Dibenzo-*-*pyrones in Fruits of *Trapa natans* on Lipid Peroxidation

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Three dibenzo-*-*pyrones, 3-hydroxy-6*H*-dibenzo [*b,d*] pyran-6-one (1), 3,8-dihydroxy-6*H*-dibenzo [*b,d*] pyran-6-one (2), 3,9-dihydroxy-6*H*-dibenzo [*b,d*] pyran-6-one (3) isolated from the fruits of *Trapa natans*, inhibited lipid peroxidation which was induced by interaction of hemoglobin and hydrogen peroxide *in vitro*. While 2 and 3 have antioxidative effects, inhibitory effect of 3 was stronger than those of 2, methyl gallate and gallic acid as related compounds. Antioxidative effect of 1 was weak. The results demonstrated that the antioxidative properties of dibenzo-*-*pyrones which have a hydroxy group at the 3-position, are derived from hydroxy groups at the other positions.