

The invention relates to chemistry and biotechnology, namely to the synthesis of a new coordinative compound of cobalt(II) and to a process for cultivation of microalga *Porphyridium cruentum* with the use thereof.

According to the invention, a coordinative compound – sulphato-bis(nicotinoylhydrazone)- 2,6-diacetylpyridin-cobalt(II) monomethanol trihydrate is claimed.

Also, a process for cultivation of microalga *Porphyridium cruentum* is claimed, which consists in that microalga is cultivated on a nutrient medium containing, in g/L: NaNO_3 – 5.0; NaCl – 7.0; KCl – 7.5; $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$ – 1.8; $\text{Ca}(\text{NO}_3)_2 \cdot 4\text{H}_2\text{O}$ – 0.15; KBr – 0.05; KI – 0.05; K_2HPO_4 – 0.2; $\text{FeCl}_3 \cdot 6\text{H}_2\text{O}$ – 0.00027; $\text{ZnSO}_4 \cdot 5\text{H}_2\text{O}$ – 0.00002; $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ – 0.00005; $\text{MnSO}_4 \cdot 5\text{H}_2\text{O}$ – 0.0003; H_3BO_3 – 0.0006; MoO_3 – 0.00002; NaVO_3 – 0.00005; the compound sulphato-bis(nicotinoylhydrazo-ne)-2,6-diacetylpyridin-cobalt(II) monomethanol trihydrate – 0.019...0.021 g/L and distilled water up to 1L, having the pH 6.8...7.2; at the temperature of 23...25°C, the lighting of 2000...3000 lx/cm², with slow intermittent agitation.

The result consists in increasing the antioxidant activity of the alcoholic extract obtained from microalga biomass.

Claims: 2