

The invention relates to chemistry and biotechnology, in particular 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 – tetraisothiocyanatocobaltate of bis(nicotinoylhydrazone)-2,6-diformil-4-methyl-phenol(methanol)(aqua)cobalt(II) 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, 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 tetraisothiocyanatocobaltate of bis(nicotinoylhydrazone)-2,6-diformil-4-methyl-phenol(methanol)(aqua)cobalt(II) – 0.021...0.023 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 ethylic extract obtained from microalga biomass.

Claims: 2