a 2012 0100

The invention relates to chemistry and biotechnology, in particular to the synthesis of a new coordinative compound of cobalt(III) and to a process for cultivation of microalga *Porphyridium cruentum* with the use thereof. According to the invention, a coordinative compound – hexafluorotitanate-bis[(dimethyl-glyoximato)-di-(thiocarbamide)cobalt(III)]di-hydrate 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; $MgSO_4 \cdot 7H_2O$ – 1.8; $Ca(NO_3)_2 \cdot 4H_2O$ – 0.15; KBr – 0.05; KI – 0.05; K_2HPO_4 – 0.2; $FeCl_3 \cdot 6H_2O$ – 0.00027; $ZnSO_4 \cdot 5H_2O$ – 0.00002; $CuSO_4 \cdot 5H_2O$ – 0.00005; $MnSO_4 \cdot 5H_2O$ – 0.0003; H_3BO_3 – 0.0006; MoO_3 – 0.00002; $NaVO_3$ – 0.00005; the compound hexafluorotitanate-bis[(di-methylglyoximato)-di-(thiocarbamide)cobalt (III)] dihydrate – 0.020…0.022 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/cm^2, with slow intermittent agitation.

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

Claims: 2