a 2014 0069

The invention relates to chemistry and biotechnology, in particular to the synthesis of a new coordinative compound of iron(II) with antioxidant properties that can be used in the food industry and in medicine, and to a process for cultivation of microalga *Porphyridium cruentum* with its use.

According to the invention, a coordinative compound – bis[1-phenyl-3-methyl-6-(pyridinium-4-il)-4,5-diaza-hexa-1,3-diene-1-hydroxy-6-olato(-2)-O^1,N^4,O^6]iron(II)sulphate tetrahydrate is claimed.

Also, claimed is a process for cultivation of microalga *Porphyridium cruentum*, 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; $ZnSO_4 \cdot 5H_2O$ – 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 bis[1-phenyl-3-methyl-6-(pyridinium-4-il)-4,5-diaza-hexa-1,3-diene-1-hydroxy-6-olato(-2)-O^1,N^4,O^6]iron(II)sulphate tetrahydrate – 0.011…0.012 and distilled water up to 1 L; having the pH 6.8…7.2, at the temperature of 23…25°C, the illumination of 2000…3000 lx/cm^2, with periodic slow agitation.

The result consists in increasing the phenol content in the microalga biomass.

Claims: 2
Fig.: 1