

The invention refers to the microbiological biotechnology, in particular to the processes for obtaining of the *Haematococcus pluvialis* green alga biomass, utilized as source of carotenoids.

Summary of the invention consists in that the proposed process includes cultivation of the green alga *Haematococcus pluvialis* during 7 days on a nutrient medium, containing in mg:

NaNO ₃	290...301
KH ₂ PO ₄	19,9...20,1
K ₂ HPO ₄	79,9...80,1
NaCl	19,9...20,1
CaCl ₂	46,9...47,1
MgCO ₄ · 7H ₂ O	9,9...10,1
ZnSO ₄ · 7H ₂ O	0,099...0,11
MnSO ₄ · H ₂ O	1,49...1,51
CuSO ₄ · 5H ₂ O	0,079...0,081
H ₃ BO ₃	0,29...0,31
(NH ₄) ₆ Mo ₇ O ₂₄ · 4H ₂ O	0,29...0,31
FeCl ₃ · 6H ₂ O	16,9...17,1
Co(NO ₃) ₂ · H ₂ O	0,19...0,21
EDTA	7,4...7,6
distilled water	up to 1 L.

The illumination intensity constitutes 1500 lx, pH - 6,8...7,2 and the temperature - 25...27°C.

The inoculum is added into the medium in a quantity of 0,3 g/L. The next day after cultivation in this medium is added the organic tetranorditerpenic compound 9 - episclareolid in the amount of 0,025...0,075 g/L.

The result of the invention consists in increasing the productivity of the alga biomass and the carotenoid synthesis.