The invention relates to biotechnology, particularly to a process for producing the myxoxanthophyll carotenoid pigment from *Spirulina platensis* biomass for use as a nitrosation inhibiting agent in the food industry and in medicine.

According to the invention, the process comprises the following steps: separation of biomass from the culture broth, extraction of myxoxanthophyll with organic solvent, separation and purification thereof, wherein as solvent for extraction of myxoxanthophyll is used 70...96% ethyl alcohol, and before removal of beta-carotene and lipids with hexane is carried out the saponification, then separation and production of myxoxanthophyll in the form of crystals by reducing the concentration of ethyl alcohol to 45...50%.

It was established the high capacity of myxoxanthophyll, in concentrations of 0.01...0.08 mg/ml, to inhibit the process for piperidine nitrosation with nitrite and formation of N-nitrozopiperidine, expressed in nitrite content reduction to 85...94% for 30 min.

Claims: 1