Izvestiia Akademii nauk. Seriia biologicheskaia / Rossiiskaia akademiia nauk 2000 N3, pages 382-386

Effect of various organic compounds on the growth and hydrocarbon production by sulfur-reducing bacteria | Vliianie razlichnykh organicheskikh veshchestv na rost i obrazovanie uglevodorodov sul'fatredutsiruiushchimi bakteriiami.

Bagaeva T., Beliaeva M. Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

The effects of lactate, pyruvate and ethanol on growth and formation of extracellular hydrocarbons by Desulfovibrio desulfuricans 1799 cultivated in H2 + CO2 atmosphere were studied. It was shown that sulfate reducing bacteria grow and produce hydrocarbons on all studied carbon and energy sources. Substitution of lactate in the medium for pyruvate or ethanol decreased only insignificantly the amount of synthesized hydrocarbons with concomitant increase in the content of isoform.