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Cultural characteristics of oil-degradation of produced Biosurfactants by *Bacillus* sp. TBM 40-3

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Oil pollution is an environmental problem of increasing importance. Hydrocarbon-degrading microorganisms have an important role in the biological treatment of this pollution. The TBM 40-3 producing biosurfactants were isolated from soil samples and identified as *Bacillus subtilis* by physiological characteristics using API kit and 16s rDNA nucleotides sequence analysis.

The surface tension of culture filtrate of *Bacillus* sp. TBM 40-3 decreased to 30mN/m. Emulsification activity and stability of crude biosurfactant measured by using water-immiscible hydrocarbon and oil as substrate. Maximum emulsification activity and stability was obtained from soybean oil. The crude biosurfactant had potent properties as an emulsifying agent and an emulsion-stabilizing agent.