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Influence of the culture medium components on the development of extremely halophilic microbial community

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Abstract

The individual culture were isolatedand identified from the halophylic microbial community of Chott-El-Jerid lake. For the dominant *Salicola marasensis* bacterial culture growth medium optimized using the method of mathematical planning Plackett-Burman. The significant components of culture medium affecting microbial growth and production of carotenoids that can be used in cosmetic compositions were identified. The preliminary experiments were carried out in the co-cultivation of bacteria *Salicola marasensis* and algae *Dunaliella salina* that are autotrophic community component.

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