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CYANOBACTERIA: A MODEL FOR STUDYING SURVIVAL OF TERRESTRIAL LIFE IN LUNAR
BASE ENVIRONMENTS

Abstract

Cyanobacteria was regarded as colonize pioneer in extreme environments such as hot, cold, salt and poor nutrient, and the microorganism has many potential in the exploration and establishment of lunar base with eventually long-term human presence. Cyanobacteria can be used to understand the adaptability of human in the lunar base environments. In addition, cyanobacteria can be used to investigate the photosynthesis function of higher plant in bioregenerative life support system applied in lunar base. Increasing space exploration activities make cyanobacteria an important model biology for studying the survival of terrestrial life beyond Earth.