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CACTUS ON MARS: CULTIVATING INDIGENOUS PLANTS ON MARS: EXPERIMENTS ON
HABITAT MARTE SPACE ANALOG STATION

Abstract

In the space analog station Habitat Marte, based in Brazilian Semiarid, was developed during March, 2022, in the mission 105, an experiment about to prepare the Brazilian indigenous plant Palma miúda (*Opuntia cochenillifera*), an indigenous cactus. Was considered that for Mars would be transported seeds to be cultivated on Mars to grow plants and generate meals and nutrition to astronauts. The motivation for consider cactus to be cultivated on Mars and be considered as a meal is explained by some reasons: 1) low demand of water; 2) good resistant to grow; 3) be nutritive. The experiment developed during March 2022 in Habitat Marte space analog station was prepared a meal since consultation of some references in internet, about how would be the best way to prepare the cactus Palma. The referred cactus was prepared with garlic, onions and butter. Other plates for this meal was: cabbage and garlic and rice. The evaluation about the taste of the meal with cactus palma, was considered very good, be recommended repeat this experience in next in -person missions based in Habitat Marte. The next steps of this research are: 1) cultivate on Mars analog soil; 2) receive the evaluation of others space analog astronauts; 3) Evaluates other manners to prepare the meal.