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## HORTICULTURAL THERAPY IN SPACE ANALOG MISSIONS: LEARNINGS TO SPACE EXPLORATION

## Abstract

This research seeks to examine how the use of horticultural therapy could be applied in future space exploration, as well in space analog space stations. Horticultural therapy is an approach to develop natural ways to treat stress and anxiety, improving professional productivity. This study has as aim evaluates and develop methodologies of horticultural therapy applied to space. The research and development happened during a space analog mission in Habitat Marte space simulation station in Brazil. As results, can be seen that activities with plants can provide relaxing experiences that release endorphins and provide psychological, cognitive and social benefits, bringing mental health. The horticultural therapy was applied during in person mission 121, during May 2022, in BioHabitat greenhouse in Habitat Marte space analog station in Brazil. A survey showed the following results: all analog astronauts enjoyed and were satisfied and emotionally stable and wish practice this activity again.