

IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (A1)  
Interactive Presentations - IAF/IAA SPACE LIFE SCIENCES SYMPOSIUM (IP)

Author: Ms. Pallabi Das  
Private, India, daspallavi95@gmail.com

Mr. Anand Nagesh  
Big Dipper Exploration Technologies, India, anand.nagesh@bigdipperexploration.space

Ms. Nafisa Zian Imam Shafi  
Spaceonova, India, zianshafi@gmail.com

Ms. Aakansha Sharma  
Panjab University, India, aakanshasharma1405@gmail.com

Ms. Jeyasiona M.J  
Indian Institute of Technology Kharagpur, India, jeyasiona@gmail.com

CULTIVATION OF SNAKE PLANTS ON MARS REGOLITH FOR PRODUCTION OF OXYGEN TO  
AID IN GROWTH OF LIFE SUSTAINING VEGETATION.

**Abstract**

The human race is on the verge of making their first step on the planet Mars, which we will consider as our second home as the years pass. To survive and sustain in the red planet, it is essential to grow a symbiotic relationship among humans and plants. Though the Martian soil does not serve as an easy platform for plants to grow because of the complex composition of its regolith, there lies a possibility of developing an environment for these plants to grow. This paper proposes an idea of growing snake plants using silicon packs containing required fertilizers, NPK, silica and water for providing long term nutrients for aid in the growth of snake plants and also discusses the benefits it provides in the growth of a larger vegetation.

Keywords : Mars, Regolith, In-SITU, Plant Growth in Space, Sustainability