## SPACE EXPLORATION SYMPOSIUM (A3) Mars Exploration – Science, Instruments and Technologies (3B)

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## CONCEPT OF PLANTATION ON MARS

## Abstract

The quest for extraterrestrial life has become the ambition of modern science to explore Mars in search of life on the red planet and the prospective human habitation on the Red Planet reflects the need of development of new technology and systems to explore Mars in a better way. This paper presents a cheapest way to explore the Mars and make the Martian condition habitable for human being by introducing a new era of exploring Mars i.e plantation of trees on Mars Specially tree of Ficus religiosa as Ficus religiosa tree release oxygen in the day as well as in night and uptake carbon die oxide in both day and night, It has ability to perform a type of photosynthesis called crassulacean in the night. From the NASA MAVEN mission result comes that there is a huge amount of carbon die oxide present on Mars. The paper focuses the concept of a development of PLANTATION ON MARS to carry out plantation on mars. The design of rover such that it can dig the Martian soil using its robotic arm. It should have a two separate compartment, one where the seeds of ficus religiosa stored another where sufficient amount of water stored. Robotic arm of the rover designed such that it can take seeds from the compartment and spread over the dug places and cover it with soil, and spray water at a regular interval of time at that place. Rover also have high quality camera so that it can take images of that place and transmit to the earth so that it can be reviewed, Is there ficus religiosa tree growing or not. If the mission success in planting tree on mars then several other missions can be carried out to Make martian atmosphere habitable for human being and the future colonies could be established on the red planet called MARS.