

«Lichens» Experiment
**PROTECTIVE PROPERTIES OF FUNGUS STRUCTURES (LICHEN)
IN OUTER SPACE**

Kondratyuk S. Ya.

*M. G. Kholodny Institute of Botany, NAS of Ukraine
2 Tereshchenkivska St., Kyiv 01601 Ukraine
tel: (380) +44 +2254041, fax: (380) +44 +2241064*

The purpose of experiment is to study protective features of the unique live organism-systems, namely the lichens, under the conditions of outer space. Lichens as an extremely ancient historical formations, could open up a new era for study of direct influence of outer space factors on live tissues.

Lichens are a unique biological group formed by two or three (seldom four) components — fungi, algae and cyanobacteria. Their unique nature allows them to survive in an environment, which is hostile to other forms of life.

Experiments proposed are of great importance for basic research of the resistance of various plants and fungi in the natural (non-extreme) conditions of ancient epochs. These experiments are also of applied importance for the problem of a survival of the live organisms under the conditions of the global changes on Earth, e. g. changes of the ozone layer.

Obtained data will allow selecting the most protective structures of the cortical layers of lichens, which are characterized by the highest tolerance to extreme solar radiation.