



China Tests Bioregenerative Life Support Module

Three Chinese volunteers on May 20 concluded an experiment in which they lived in an enclosed capsule for 105 days. This was China's first manned test of the "Yuegong-1," a 500-cubic-meter module that is China's first and the world's third bioregenerative life support base. The capsule featured a cabin and two plant cultivation labs. According to Liu Hong, chief designer of the system, the core of Yuegong-1 is the Bioregenerative Life Support Systems, a state-of-the-art closed life support system and the core technology for long-term survival in outer space. The closed lab

is a virtual biosphere, where inhabitants can cultivate grain, vegetables, fruit and insects. The system can also produce water and fertilizers, process waste and revitalize air. The research team selected five grains, 15 varieties of vegetable, one kind of fruit as well as a yellow mealworm, which provided protein for the volunteers during the experiment. Yuegong-1 is of great importance in ensuring the smooth progress of China's space programs and astronaut's life safety and quality.

