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Biology in Space (7)

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SPACE MUTATION BREEDING IN CHINA BY LIU JIYUAN, WU MEIRONG, SUN YONGCHENG

Abstract

China has used recoverable satellite to experiment on seeds for 23 times since 1987, 4,000 kinds of seeds were experimented, 200 of them were successful. Aerospace breeding is to use recoverable satellite to fly various seeds, branches or sprouts those are induced to occur genetic mutations by the external conditions of microgravity, various cosmic rays, heavy particle, and alternating fields. Then through ground planting to achieve fine quality varieties, there is no external gene in the method of aerospace breeding that does not use the way of transferring gene. It is a new channel of breeding. Aerospace breeding has the characteristics of high rate of mutation, big variation range, fast mutation steadying and more good mutations. Aerospace breeding can make the mutation rate rise to 4

Agriculture is the foundation of China economy. China government pays more and more attention to agriculture. How to serve the development of agriculture becomes the important research subject of State Aerospace Bureau and its attached institutes, China have experimented on this subject for more than 20 years and achieved some results.