



## Fresh corn grains from Liaocheng China enter space

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The Shenzhou XV spacecraft, China's 10th manned spaceflight, entered its designated orbit on Nov 29. Among the passengers aboard the Shenzhou XV were 400 fresh corn grains bred by the Liaocheng, which will be used to carry out science experiments in space.

"The 400 fresh corn grains are of the same breed and weigh about 60 grams, and have a rich genetic background and gene types after breeding in the south and the northern areas of the country," said Zhang Guige, director of Modern Breeding Technology Innovation Centre of Liaocheng Academy of Agricultural Sciences.

The primary purpose of this space experiment is to break the old chain and achieve new recombination by mutagenesis caused by cosmic rays, microgravity and high vacuum in space.

It is the first time in the 60-year breeding history of the Liaocheng to carry experiments out in space and implement space breeding with a Shenzhou spacecraft. It is also an example of the Liaocheng development of modern biological breeding research and its transformation from the breeding 2.0 era to the breeding 4.0 era.

It is reported that the Liaocheng Academy of Agricultural Sciences was established in 1959, and breeding research has always been its strength. The maize variety "Liaoyu 18" created by it has been popularized throughout the country, generating social and economic benefits of 4.94 billion yuan (\$707.32 million). Since 2019, the Institute has bred 290 excellent maize inbred lines and 32 new excellent wheat lines through modern biotechnology such as hybridisation, radiation mutagenesis and haploid.