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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17315-2026

Replacing GB/T 17315-2011

Technical code of practice for maize seed production

玉米种子生产技术规程

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB/T 17315-2011 "Technical Operating Procedures for Maize Seed Production". Compared with GB/T 17315-2011, except for the following. Aside from structural adjustments and editorial changes, the main technical changes are as follows:

- a) Definitions for genetically modified corn seeds and accidental contamination have been added (see 3.5, 3.6);
- b) The spatial isolation distance and method for producing inbred lines have been modified (see 4.1.2, 2011 version 4.1.2);
- c) The technical methods for producing and sowing inbred lines have been modified (see 4.1.3, 2011 version of 4.1.3);
- d) The process for removing impurities in the production of inbred lines has been modified (see 4.1.4, 2011 version 4.1.4);
- e) Increased threshold requirements for the detection of genetically modified seeds and accidental contamination (AP) of genetically modified organisms (GMOs) (see 4.1.6, 4.1.7);
- f) The spatial isolation distance of the parental inbred lines seeds was changed (see 4.2.1, 2011 version 4.2.1);
- g) The spatial isolation distance for hybrid seed production has been changed (see

5.2.1, 2011 version 5.2.1);

h) Increased barrier isolation requirements for genetically modified maize hybrids (see 5.2.2);

i) Increased requirements for pre-sowing treatment and harvesting of hybrid seed production (see 5.3, 5.9);

j) Increased requirements for preventing crossbreeding in hybrid seed production (see 5.10);

k) Increased the shelter seed requirement (see 5.12);

l) Increased requirements for the authenticity and purity of the transformants (see Chapter 7). Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents. This document was proposed by the Ministry of Agriculture and Rural Affairs of the People's Republic of China. This document is under the jurisdiction of the National Technical Committee on Standardization of Crop Seeds (SAC/TC37). This document was drafted by: National Agricultural Technology Extension Service Center, Gansu Provincial Seed Station, China Agricultural University, and Beijing Academy of Agricultural and Forestry Sciences. The Academy, China Seed Group Co., Ltd., Xinjiang Uygur Autonomous Region Seed Industry Development Center, Xinjiang Production and Construction Corps Seed Management Station, Ningxia Hui Autonomous Region Seed Work Station of the Autonomous Region, Seed Management Station of Yunnan Province, and Seed Administration Bureau of Zhangye City. The main drafters of this document are. Qiu Jun, Lü Xiaorui, Bai Changqing, Jiang Zhendong, Ma Wenhui, Ma Zhengguo, Song Weibin, Yi Hongmei, and Liu Chunqing. Tang Jiacheng, Song Fangwei, Yang Hehong, Hou Xinhe, Si Jianwei, Liu Jianxi, Wang Jia, Yin Changsheng, Li Xiaoling, Chen Mohuan, Peng Tao, Zhang Xuteng, Li Li Ning Mingyu and Wang Bingbing. The release history of this document and the document it replaces is as follows:

1 Scope

GB/T 17315-2026 is the Chinese national standard covering producing hybrid maize seed - the isolation distance from other maize, the planting ratio of the two parents, the detasselling that must be complete and on time, and the harvest and drying of the seed parent alone. A missed detasselling window costs the whole field. It replaces GB/T 17315-2011 and has been in force since 1 September 2026. It was issued on 27 February 2026 and has been in force since 1 September 2026, replacing GB/T 17315-2011. The document is under the responsibility of the Ministry of Agriculture and Rural Affairs. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the categories, production procedures, and technical requirements for corn seeds. This document applies to the production of breeder's seeds, primary seeds, parent seeds, and hybrid seeds of maize (including genetically modified seeds).

4.1 Production of the original seed

4.1.1 Develop a plan Before producing the original seed, a production plan is formulated, the process is strictly followed, and production records are established.

4.1.2 Site Selection Production sites should be spatially isolated and at least 500 meters away from other corn pollen sources (with sufficient protective measures to ensure no...). For pollen sources that may be contaminated, a 500m isolation distance may not be necessary; alternatively, barrier isolation or time-based isolation methods can be used. The fertility of the producing fields must be considered. The soil is uniform, fertile, and easy to irrigate and drain, ensuring stable yields.

4.1.3 Sowing Before sowing, the land should be carefully prepared, and seeds should be selected and coated. Sowing should be done at the appropriate time with sufficient moisture, or drip irrigation technology can be used for "dry sowing and wet emergence" to ensure uniform and strong seedlings.

4.1.4 Removing impurities During the seedling stage, jointing stage, tasseling stage, and before pollen shedding, it is essential to promptly, strictly, and thoroughly remove any unwanted or atypical plants. This should be done before drying and storing, and before sun-drying and threshing. Miscellaneous and diseased ears should be strictly removed.

4.1.5 Storage Individual harvesting and storage are required, with complete records filled out. Labels should be affixed to both the inside and outside of the packaging. The principle of original seed production is one-time propagation for batch use; continuous propagation is not advisable. It should be stored for more than 3 generations. Storage method shall comply with GB/T 7415, and labeling shall comply with GB 20464.

4.1.6 Seed Testing Seed quality inspection should be conducted according to GB/T 3543 (all parts), including seed purity, moisture content, germination rate, authenticity, and purity. Non-GMO seeds still need to undergo GMO component testing, while GMO seeds need to undergo transformant authenticity and GMO purity testing. Testing methods... National standards or relevant industry standards shall be adopted. The routine detection targets for genetically modified maize components include commonly used universal elements, target genes, and transformant events. Authenticity testing of transgenic maize seed transformants. The transgenic seeds contain only the labeled transgenic components; the testing targets include the labeled... Transformants, as well as commonly used universal elements, target genes, and transformant events. For inbred lines, transgenic purity testing indicates homozygosity of transformants. The proportion of individuals.

4.1.7 Threshold requirements for accidental contamination (AP) of genetically modified

organisms In non-GMO maize varieties, no GMO components should be detected in the inbred lines. In GMO inbred lines, no other GMOs not listed should be detected. Element.

4.2 Production of seeds from parental inbred lines

4.2.1 Site Selection Production sites should be spatially isolated and at least 300 meters away from other corn pollen sources (with sufficient protective measures to ensure no...). For pollen sources that may be contaminated, a 300m isolation distance may not be necessary; alternatively, barrier isolation or time-based isolation methods can be used. The fertility of the producing fields must be considered. The soil is uniform, fertile, and easy to irrigate and drain, ensuring stable yields.

4.2.2 Sowing Same as 4.1.3.

4.2.3 Removing impurities Same as 4.1.4.

4.2.4 Storage Same as 4.1.5.

4.2.5 Threshold requirements for accidental contamination (AP) of genetically modified organisms Same as 4.1.7.

4.3 Flowchart of inbred line original seed and parental seed production The production process of inbred lines and parent seeds is shown in Figure 1.

5 Hybrid Production

5.1 Site Selection In areas with suitable natural conditions and free from quarantine pests and diseases, qualified seed production units should select suitable plots of land to establish seed production bases. Land. Seed production plots should have fertile soil, convenient irrigation and drainage, and be relatively concentrated and contiguous.

5.2 Isolation

5.2.1 Spatial Isolation When spatial isolation is required, the seed production base should be at least 100m away from other pollen sources.

5.2.2 Barrier Isolation Where the spatial isolation distance is less than 100 meters, a barrier isolation zone should be set up around the seed production base. Non-GMO maize hybrids Barrier isolation is implemented by planting dense-leaved, tall-stalked crops to create barrier isolation zones. These zones must be at least 5 meters wide and 3 meters high. Another type of parent line with a width of not less than 5m. Biological isolation of genetically modified maize hybrids is achieved by establishing biological isolation zones through the planting of dense-leaved, tall-stalked crops, with a width of no less than A buffer zone of at least 5 meters in length and at least 3 meters in height, along with a non-GMO parental line at least 5 meters in width, should be planted to reduce pollen dispersal; non-biological methods should be employed. When setting up barriers, the height and