Voluntary Report – Voluntary - Public Distribution **Date:** August 17, 2026

Report Number: CH2026-0098

Report Name: China Launches Essentially Derived Varieties System with First Set of Ten Crops

Country: China - People's Republic of

Post: Beijing

Report Category: Agriculture in the News, Planting Seeds

Prepared By: FAS China Staff

Approved By: Abigail Nguema

Report Highlights:

On July 27, 2026, the Ministry of Agriculture and Rural Affairs (MARA) released its initial Implementation Catalogue for its new system of essentially derived varieties (EDVs) for agricultural plants, which took effect immediately upon issuance. So far, the catalogue covers 10 crops: rice, wheat, cotton, foxtail millet, faba bean, rapeseed, peanut, Chinese cabbage, pepper, and peach.

FAS China provides this reporting and analysis as a service to U.S. farmers, ranchers, rural communities, and agribusinesses in support of a worldwide agricultural information system and a level playing field for U.S. agriculture.

Summary

On July 27, 2026, the Ministry of Agriculture and Rural Affairs (MARA) released the Implementation Catalogue (First Batch) for the System of Essentially Derived Varieties (EDVs) of Agricultural Plants (link in Chinese), marking the official launch of China's EDV system for agricultural plants. The catalogue of the first batch covers 10 crops: rice, wheat, cotton, foxtail millet, faba bean, rapeseed, peanut, Chinese cabbage, pepper, and peach.

At a MARA press conference (link in Chinese) held on July 27, a senior seed official stated that, to support implementation of the EDV system, MARA issued the Guidelines for Determining EDV of Agricultural Plants (link in Chinese), EDV Determination Thresholds (link in Chinese), Capability Requirements for EDV Identification Institutions (link in Chinese), and established an expert panel to ensure the system is operational.

While this regulation provides greater clarity about how China will implement intellectual property rights protections for seeds, in contrast to other countries, it seems to place the burden of proof in disputes on the original rights holder rather than on new applicants. Some international seed companies are concerned that this factor, combined with the regulation's emphasis on domestically-developed standards, could disadvantage outside firms in disputes with domestic Chinese companies.

The Guidelines for Determining EDV of Agricultural Plants define the scope of application, basic principles, technical identification procedures, principles for establishing determination thresholds, and determination procedures. The guidelines provide practical guidance for breeders, seed industry regulators, and judicial authorities in determining whether a variety constitutes an EDV. MARA released the draft guidelines for public comments in March 2026, see GAIN Report: China Releases Draft Guidelines and Thresholds for the Determination of Essentially Derived Varieties. Annex 1 of this report provides an unofficial translation of the final version of the Guidelines.

The EDV Determination Thresholds establish the genetic similarity values used as the reference thresholds in EDV determinations. The threshold was set at 90 percent for rice, wheat, cotton, foxtail millet, peanut, and pepper, and 85 percent for rapeseed, soybean, faba bean, and peach. The thresholds are unchanged from those proposed in the draft released for public comment in March 2026. Annex 2 of this report provides an unofficial translation of the final version of the Thresholds.

The requirements for EDV identification institutions specify the qualifications and technical capabilities required for institutions conducting molecular testing and phenotypic testing. Annex 3 of this report provides an unofficial translation of the capability requirements for EDV

identification institutions. MARA also established an expert panel composed of specialists in technical, administrative, and legal fields to provide professional technical advice in support of EDV determinations.

BEGIN UNOFFICAL TRANSLATION

Announcement No. 1034 of the Ministry of Agriculture and Rural Affairs of the People's Republic of China

Date of Issuance: July 27, 2026

Pursuant to the relevant provisions of the Seed Law of the People’s Republic of China and the Regulation of the People’s Republic of China on the Protection of New Varieties of Plants, the Implementation Catalogue (First Batch) for the System of Essentially Derived Varieties of Agricultural Plants has been approved by the State Council and is hereby promulgated. It shall enter into force as of the date of promulgation.

Crop Name		**Latin Name**
Rice		*Oryza sativa L.*
Wheat		*Triticum aestivum L.*
Cotton (genus)		*Gossypium L.*
Foxtail millet		*Setaria italica (L.) Beauv.*
Faba bean		*Viciafaba L.*
Oilseed rape	Rapeseed	*Brassica napus L.*
	Mustard rape	*Brassica juncea Czern.et Coss.*
	Turnip rape	*Brassica campestris L.*
Peanut		*Arachis hypogaea L.*
Chinese cabbage		*Brassica campestris L. ssp. Pekinensis (Lour.) Olsson*
Pepper (genus)		*Capsicum L.*
Peach		*Prunus persica （L.） Batsch.*

Annex 1: MARA Announcement No. 1035 Guidelines for Determining Essentially Derived Varieties (EDVs) of Agricultural Plants

To regulate the technical identification and determination of Essentially Derived Varieties (EDVs) of agricultural plants, and to provide guidance to breeders, agricultural and rural affairs authorities, judicial authorities, and other relevant parties in resolving EDV-related disputes, these Guidelines are hereby formulated.

I. Scope of Application

These Guidelines apply to the technical identification and determination of EDVs for relevant plant genera (species) included in the EDV implementation catalogue issued by MARA in accordance with the requirements for phased implementation.

II. Basic Principles

1. Implement comprehensive determination. Technical identification and determination of EDVs are relatively independent. Technical identification provides the basis for determination, which shall also take into account genetic similarity thresholds and, where necessary, factors such as breeding methods, selection processes, and pedigree relationships.

2. Maintain efficiency and timeliness. Molecular testing and phenotypic evaluation methods shall be applied scientifically, with priority given to convenient and efficient molecular techniques to ensure the timeliness and accuracy of technical identification.

3. Align with industry practice. Thresholds shall reflect both current breeding levels and future development trends and incorporate industry consensus. When genetic similarity between varieties is equal to or exceeds the threshold, the burden of proof shall shift.

III. Technical Identification

Technical identification refers to the assessment, conducted by qualified testing institutions in accordance with relevant technical standards or methods, of whether a suspected variety may have an essentially derived relationship with the initial variety.

1. **Identification Methods:** Molecular testing or phenotypic evaluation methods shall be adopted.

1) Molecular testing. EDVs retain an obviously higher proportion of the genome of the initial variety than varieties developed through conventional crossing and may even retain nearly the entire genome. Molecular technologies may be used to determine the genetic similarity between varieties and assess whether an essentially derived relationship may exist.

2) Phenotypic evaluation. Except for trait differences caused by derivation, EDVs remain largely consistent with the initial variety in other characteristics. Phenotypic differences between varieties may be tested to assess the likelihood of an essentially derived relationship.

2. Selection of methods: To ensure that technical identification is scientific and efficient, molecular testing technologies shall be prioritized. Where no molecular testing standards are available, phenotypic testing may be conducted. The testing method shall be determined through consultation between the parties; where no agreement can be reached, it shall be determined by the relevant determination authority.

1) Molecular testing

Taking into account the availability of DNA molecular markers, identification efficiency, accuracy, and cost, marker types based on high-throughput testing platforms shall be selected. Technical procedures shall follow relevant national standards or agricultural industry standards. Where standards for high-throughput marker technologies are unavailable, SSR marker-related technical standards may be used as a reference.

Where multiple molecular testing methods are available for the same plant genus (species), the method shall be determined through consultation between the parties. Where no agreement can be reached, the relevant determination authority shall designate the method.

2) Phenotypic testing

With reference to the Guidelines for the Conduct of Tests for Distinctness, Uniformity and Stability (DUS) of the relevant plant genus (species), testing shall be conducted over one growing cycle, and a report containing variety descriptions and trait comparisons shall be issued. If traits resulting from the derivation process are not included in the testing guidelines, the testing institution may conduct phenotypic testing using commonly accepted industry methods.

IV. Principles for Determining Thresholds

A threshold refers to the critical value of genetic similarity between varieties that triggers a determination that the candidate variety is an EDV when molecular testing methods are used. No threshold shall be established when phenotypic testing methods are used.

1. When the genetic similarity between varieties is equal to or higher than the threshold, the burden of proof shall shift.

2. Thresholds shall be determined based on scientific algorithms, taking into consideration industry realities, development trends, and internationally accepted practices.

3. Thresholds shall be established separately for different plant genera (species). Where different molecular marker methods are used for the same plant genus (species), thresholds shall be determined independently.

4. Thresholds shall be adjusted in a timely manner according to changes in breeding methods and improvements in breeding levels to ensure consistency with the development of the seed industry.

V. Determination Procedures

Determination refers to the final conclusion made by the determination authority regarding whether a candidate variety constitutes an EDV in resolving EDV disputes.

1. Submission of evidence

The holder of rights to the initial variety shall bear the primary burden of proof in EDV disputes. The holder of rights to the initial variety shall submit relevant information on the initial variety and the candidate variety, including but not limited to: proof that plant variety rights have been granted for the initial variety; evidence of commercialization of the candidate variety; a technical identification report issued by a qualified and capable identification institution.

Where necessary, the holder of rights to the initial variety and the other party shall submit evidence regarding breeding methods, breeding processes, genetic relationships, or other information capable of demonstrating the origin of the variety.

2. Determination rules

For varieties developed from a single parent through methods such as genetic modification, mutation breeding, natural mutation, recurrent selection, or genome editing, the variety may generally be determined to be an EDV. For varieties developed from multiple parents, determination shall be made by comprehensively considering technical identification results and threshold assessments, and where necessary, factors such as breeding methods, breeding processes, and genetic relationships.

1) When molecular methods are used for testing, if the genetic similarity between the candidate variety and the initial variety is below the threshold, the candidate variety shall be determined not to be an EDV. If the genetic similarity is equal to or above the threshold, the candidate variety shall be determined to be an EDV.

If the other party objects to the determination result, it shall bear the burden of proof and may provide evidence regarding breeding methods, breeding processes, genetic relationships, and other relevant factors. If the evidence provided by the other party demonstrates that its variety was not derived from the initial variety, the variety shall be determined not to be an EDV. If no evidence is provided, or if the evidence fails to prove that the variety is not an EDV, the variety shall be determined to be an EDV.

2) When phenotypic testing methods are used, differences in traits between the two varieties shall be evaluated in combination with breeding methods, breeding processes, genetic relationships, and other relevant factors.

If all differentiated traits resulted from the derivation, the variety shall be determined to be an EDV; otherwise, it shall be determined not to be an EDV. If the other party objects to the determination result, it shall bear the burden of proof.

3) Where different conclusions arise due to the use of different molecular testing methods or different phenotypic testing methods, determination shall be made by comprehensively considering breeding methods, breeding processes, genetic relationships, and other relevant factors.

VI. Supplementary Provisions

1) “Derivation” refers to the development of new varieties through breeding methods that are likely to generate EDVs, including natural mutation, induced mutation, systematic selection, repeated backcrossing, genetic modification, and genome editing.

2) EDV determination thresholds and requirements for the capabilities of identification institutions shall be separately issued by the Plant Variety Protection Office of MARA.

3) Parties holding rights to the initial variety and the other party are encouraged to refer to these Guidelines and resolve disputes through voluntary consultation. Where consultation fails, disputes may be resolved through administrative mediation, arbitration, or litigation.

4) For disputes involving administrative mediation, the EDV determination authority shall be the agricultural and rural affairs authority of the people's government at or above the county level. For disputes involving arbitration or litigation, the determination authorities shall be the relevant arbitration institutions and judicial authorities, respectively.

5) Where technical identification disputes or complex cases arise during administrative mediation, arbitration, or litigation, experts from the EDV expert bank may provide professional opinions as reference for determination.

6) These Guidelines shall enter into force on June 26, 2026.

Annex 2: Determination Thresholds for Essentially Derived Varieties of Agricultural Plants

(First Batch)

No.	Crops		Molecular Testing Standard	Thresholds
1	Rice		MNP Marker Method for Identification of Rice Varieties and Their Essentially Derived Varieties (NY/T 4459-2025)	90 percent
			SSR Marker Method for Technical Rules for the Rice Varieties Identification (NY/T 1433-2014)	88 percent
2	Wheat		MNP Marker Method for Identification of Wheat Varieties and Their Essentially Derived Varieties (NY/T 4912-2025)	90 percent
			SSR Marker Method for Technical Rules for the Wheat Varieties Identification (NY/T 2470-2013)	90 percent
3	Cotton (genus)		SSR Molecular Marker Method for Technical Rules for Upland Cotton Varieties Identification (NY/T 2469-2013)	90 percent
4	Oilseed rape	Rapeseed	SSR Molecular Marker Method for Technical Rules for the Rapeseed Varieties Identification (NY/T 2468-2013)	85 percent
		Mustard rape	SSR Molecular Marker Method for Technical Rules for the Mustard rape Varieties Identification (NY/T 4496-2025)	85 percent
		Turnip rape	SSR Molecular Marker Method for Technical Rules for the Turnip rape Varieties Identification (NY/T 4909-2025)	85 percent

5	Peanut	SSR Molecular Marker Method for Peanut Variety Identification (XMK-23095)	90 percent
6	Chinese Cabbage	MNP Marker Method for Identification of Chinese Cabbage Varieties and Their Essentially Derived Varieties (NY/T 4914-2025)	85 percent
7	Pepper (genus)	MNP Marker Method for Identification of Pepper Varieties and Their Essentially Derived Varieties (NY/T 4915-2025)	90 percent
8	Millet	MNP Marker Method for Plant Variety Identification (GB/T 38551-2020)	90 percent
9	Faba bean	SSR Molecular Marker Method for Authenticity Identification of Faba Bean Varieties (NY/T 3756-2020)	85 percent
10	Peach	SSR Molecular Marker Method for Peach Variety Identification (NY/T3642-2020）	85 percent

Note 1: Where thresholds established in issued national standards or agricultural industry standards are inconsistent with the thresholds specified in this document, the thresholds specified in this document shall prevail.

Note 2: Where the standards adopted in this document are revised, the revised standards shall replace the original standards.

Note 3: For testing using the SSR molecular marker method, the genetic similarity (GS) shall be calculated using the following formula: $GS = 2Nij/(Ni + Nj)$, where Nij represents the number of shared alleles between the two varieties, and Ni and Nj represent the total number of alleles of each of the two varieties, respectively.

Annex 3: Capability Requirements for Identification Institutions for Essentially Derived Varieties of Agricultural Plants

1. Capability Requirements for EDV Molecular Identification Institutions

(1) The institution shall possess qualifications as a China Accredited Seed Laboratory (CASL)**.**

(2) The institution shall have achieved satisfactory or higher results in proficiency testing or inter-laboratory comparisons within the past five years, and shall have no record of violations or major quality incidents.

(3) The institution shall be equipped with instruments and equipment necessary for conducting testing using various DNA molecular markers (such as SSR, SNP, and MNP), including gene amplifiers, sequencing instruments, and fluorescence detection systems. The performance specifications of such equipment shall meet the requirements of relevant technical procedures.

(4) The institution shall have at least five professional testing personnel with backgrounds in molecular biology, genetics, or crop breeding, each with no less than three years of experience in seed or variety testing and inspection. The institution shall also have at least two management personnel familiar with relevant laws, policies, technical standards for seed testing and inspection, and knowledge related to EDVs, with no less than three years of experience in managing seed testing institutions.

(5) The institution and its personnel shall not engage in plant breeding or variety development activities.

II. Capability Requirements for EDV Phenotypic Identification Institutions

(1) The institution shall be an agricultural plant variety DUS testing institution authorized by MARA**,** including the MARA Plant Variety Testing Center, affiliated testing sub-centers, and other testing units established under the MARA Science and Technology Development Center and relevant organizations.

(2) The institution shall have received a rating of generally qualified or above in quality assessments or unannounced inspections conducted within the past five years, and shall have no record of violations or major quality incidents.

(3) The institution shall be equipped with instruments and equipment necessary for conducting phenotypic identification of varieties. Where trait-specific identification is involved, the institution shall be equipped with specialized facilities or equipment required by relevant technical standards.

(4) The institution shall have at least five full-time testing personnel with backgrounds in agronomy, botany, genetics, or breeding, each with no less than five years of experience in variety testing. The institution shall also have at least two management personnel who are familiar with relevant laws, policies, technical standards for plant variety phenotypic testing, and knowledge related to EDVs, and who have engaged in variety testing management for no less than three years.

(5) The institution and its personnel shall not engage in plant breeding or variety development activities.

END UNOFFICAL TRANSLATION

Attachments:

No Attachments.