

ICS 67.060
CCS B 22



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

GB/T 22499-2025

Replacing GB/T 22499-2008

Selenium-rich paddy

富硒稻谷

Issued on: December 31, 2025

Implemented on: July 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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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 22499-2008 "Selenium-Enriched Rice". Compared with GB/T 22499-2008, the main differences are structural adjustments and editorial changes. Aside from the changes, the main technical changes are as follows:

---The requirements for terms and definitions have been changed (see Chapter 3, Chapter 3 of the.2008 edition);

---Hygiene requirements have been removed (see

4.3 in the.2008 edition), and other quality requirements have been changed (see Chapter 4, Chapter 4 in the.2008 edition);

---Added a calculation method for the "selenomethionine percentage" (see 5.3);

---The judgment rules have been changed (see 6.3,.2008 version of 6.3). 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 National Food and Strategic Reserves Administration. This document is under the jurisdiction of the National Technical Committee on Standardization of Grain and Oil (SAC/TC270). This document was drafted by: COFCO Wuhan Scientific Research and Design Institute Co., Ltd., Suzhou Selenium Valley Technology Co., Ltd., and COFCO Nutrition and Health Research. Institute Co., Ltd., Gannan Academy of Sciences, Wuhan University of Light Industry, Anhui University of Science and Technology, Heilongjiang Qiuran Rice Industry Co., Ltd., Hubei Selenium Grain Technology Group Limited Liability Company, Yixing Grain and Oil Group Rice Co., Ltd., Taoyuan County Xinglong Rice Industry Technology Development Co., Ltd., Jinhe Agriculture (Qiqihar) Co., Ltd. Limited Liability Company, Anhui Guowan Agricultural Technology Co., Ltd., and Anhui Zhongxi Agricultural Technology Co., Ltd. The main drafters of this document are. Xie Jian, Yin Xuebin, Xie Tian, Li Xinyue, Guo Wei, Liu Zhikui, Ding Wenping, Yang Huibin, Zhang

Chaofu, and Guo Yali. Li Zhifang, Tu Xu, Zhang Zezhou, Wang Baoqi, Liu Xinghai, Gu Bingsong, Liu Dezheng, Zhou Zuohang, Niu Jiaduo, Fan Gaojun, Fan Langsheng. The release history of this document and the document it replaces is as follows:

---First published in 2008 as GB/T 22499-2008;

---This is the first revision. Selenium-enriched rice

1 Scope

GB/T 22499-2025 is the Chinese national standard covering selenium-enriched rice - the range of selenium content that qualifies a crop as selenium-rich, which has both a floor to justify the claim and a ceiling because selenium is toxic in excess, plus the ordinary grain quality requirements. It replaces GB/T 22499-2008. It was issued on 31 December 2025 and has been in force since 1 July 2026, replacing GB/T 22499-2008. The document is under the responsibility of the National Food and Strategic Reserves Administration. This page is published from the official record of the 2025 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 defines the relevant terms and definitions for selenium-enriched rice, and specifies the technical requirements, inspection rules, labeling, packaging, storage, and transportation. The requirements are specified, and the corresponding testing methods are described. This document applies to the acquisition, storage, transportation, processing, and sale of commercial selenium-enriched rice.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document. GB 1350 Rice

GB 5009.93 National Food Safety Standard - Determination of Selenium in Food

GB/T 5490 General Rules for Inspection of Grains and Oils

GB/T 5491 Sampling and Divided Sampling Methods for the Inspection of Grains and Oils

NY/T 3556 Determination of selenocysteine and selenomethionine in grains by liquid chromatography-inductively coupled plasma mass spectrometry

3 Terms and Definitions

The terms and definitions defined in GB 1350 and the following terms and definitions apply

to this document.

3.1 Selenium is enriched during the field growth process, and brown rice with selenium content that meets the requirements of this document is produced.

Note. This does not include rice fortified with selenium after harvest.

3.2 The mass fraction of selenomethionine (as Se) in the total selenium content.

4 Technical Requirements

4.1 Quality Requirements It complies with the requirements of GB 1350.

4.2 Selenium content requirements The total selenium content and the proportion of selenomethionine in the processed brown rice are shown in Table 1.