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

GB/T 15672-2009

Replacing GB/T 15672-1995

Determination of total saccharide in edible mushroom

食用菌中总糖含量的测定

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Foreword

This standard replaces GB/T 15672-1995 "Edible total sugar content determination." This standard and GB/T 15672-1995 compared to the main changes are as follows:

- According to GB/T 20001.4-2001 "Rules for drafting standards - Part 4. Chemical analysis methods," the original structure of the standard modify;
- Modify the standard English name;
- Modify the standard test scope;
- Increasing the normative references a chapter;
- Normative references, increasing the "GB/T 6682 analytical laboratory use specifications and test methods" and "GB/T 5009.3 Determination of moisture in food, "deleted" GB 12530 Edible sampling methods "and" GB 12531 Edible Moisture ";
- Sample preparation added to the dry kind of sample size, and the number of clear fresh sample sampling;
- Change the sample hydrolysis conditions, increasing the amount of hydrochloric acid hydrolysis to shorten the time; Determination
- original standard Fehling reagent drop method instead of the standard phenol - sulfuric acid colorimetry, reagents, instruments and public computing Style has also been modified;
- Original standard "allows poor" to "precision", and another from a chapter, modify the error representation. This standard is proposed and managed by the People's Republic of China Ministry of Agriculture. This standard was drafted. the Ministry of Agriculture edible fungus Quality Supervision and Testing Center (Shanghai), Shanghai Academy of Agricultural Sciences of the edible fungi, Agricultural product quality Standards and Testing Technology Research Institute, Shanghai Academy of Agricultural Sciences, Kunming Institute of edible fungi, Tianjin University. The main drafters of this standard. Xingzeng Tao, T. (MONTHLY) Han Ye Qi Tan, Guiming Ying, Bank officials, left Qi, Gu race red, Wang Hongmei. This standard was first published in 1995 and 2009, the first revision.

Determination of total sugar content of edible fungi

1 Scope

GB/T 15672-2009 is the Chinese national standard on determination of total saccharide in edible mushroom, in the field of food technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 30 October 2009 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 December 2009. Classification: ICS 67.080.20, CCS X26. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the method for determination of total sugar content in edible fungi. This standard applies to the determination of the total sugar content of edible fungi.

2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply to this standard, however, encourage the parties to the agreement are based on research Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard. Determination of

GB/T 5009.3 moisture in foods Laboratory use specifications and test methods

GB/T 6682 Analysis Principle

3 Edible sugar water-soluble and water-insoluble polysaccharide hydrolysis after hydrochloric acid is converted to sugar, under the action of sulfuric acid hydrolyzate rapidly Dehydrated to furfural derivatives, and generates orange solution with phenol, the reaction product at 490nm colorimetric, using external standard.

4 Reagents

Unless otherwise stated, use only in the analysis confirmed analytically pure reagents and third grade water GB/T 6682 regulations.

4.1 of concentrated hydrochloric acid. $\rho = 1.18\text{g/mL}$.

4.2 of concentrated sulfuric acid. $\rho = 1.84\text{g/mL}$. 4.3 50g L phenol solution /. Weigh 5g phenol ($\text{C}_6\text{H}_6\text{O}$, distilled) water dissolved in 100mL flask, after constant volume mix. turn To brown bottles in the dark at 4 °C refrigerator storage. 4.4 100mg/L glucose standard

solution. glucose at 105 °C temperature drying to constant weight, glucose weighed about 0.1g (accurate to 0.0001g), was dissolved in water 1000mL volumetric flask, constant volume to the mark and shake. In the dark at 4 °C refrigerator storage, within two weeks effective. 5. Apparatus

5.1 Drying oven. temperature accuracy of ± 2 °C.

5.2 mill. with 1mm aperture metal mesh.

5.5 Analysis of balance. a sense of the amount of 0.0001g.

5.6 constant temperature water bath. temperature accuracy of ± 1 °C.

5.7 commonly used laboratory glassware.

6 Sample preparation

6.1 Sampling method and number After the sample was mixed into a square tile with quartering sampling, dry sample sampling amount not less than 200g; not less than the amount of the fresh sample 1000g; fruiting body mass greater than 200g single sample, number of samples should not be less than five.