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

GB/T 13942.1-2009

Replacing GB/T 13942.1-1992

**Durability of wood - Part 1: Method for laboratory test of natural
decay resistance**

木材耐久性能 第1部分：天然耐腐性实验室试验方法

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Foreword

GB/T 13942 "Wood Durability" is divided into two parts.

--- Part 1. Laboratory test methods for natural decay;

--- Part 2. Test methods for natural durability field. This section GB/T 13942 Part 1. This Part replaces GB/T 13942.1-1992 "Standard Test Method for natural durability of wood timber natural decay of the laboratory test side law". This section compared with the GB/T 13942.1-1992 The main changes are as follows: Forestry Culture Collection Center (CFCC) numbering rules for each of the standard test species are numbered;

--- Add "a wide-mouth screw-cap bottle cap circle" as an alternative culture flask, and the corresponding increase in media preparation methods and access Species schematic;

--- Edit "control sample by the mass loss rate after the decay test should be more than 25%" to "should be more than 45%";

--- Edit "oven temperature of the sample was measured before and after testing all dry mass of $(103 \pm 2) ^\circ\text{C}$ ". Appendix A of this section is informative appendix. This part by the State Forestry Administration. This part of the National Standardization Technical Committee centralized timber. This section is responsible for drafting units. China Forestry Science Institute of Wood Industry. Participated in the drafting of this section. Guangdong Provincial Academy of Forestry. The main drafters of this section. Yang Zhong, Maxing Xia, Liu Lei, Su Haitao, Jiang Mingliang. This part of the standard replaces the previous editions are.

--- GB/T 13942.1-1992. Wood durability Part 1. Laboratory test methods for natural decay

1 Scope

GB/T 13942.1-2009 is the Chinese national standard on durability of wood - part 1: method for laboratory test of natural decay resistance, in the field of wood 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 23 February 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 August 2009. Classification: ICS 79.020, CCS B60. 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 section GB/T 13942 specifies the wood mass loss in laboratory conditions, wood rot fungi on the wood caused by infection, in order to comment Test methods for natural wood decay constant level. This section applies to assessment under laboratory conditions of natural wood decay levels.

2 Normative references

The following documents contain provisions which, through reference

GB/T 13942 in this section constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 14019 wood preservative term

3 Terms and Definitions

Terms and definitions GB/T 14019 apply to this part of the established GB/T 13942 of.

4 Principle Test Method

Wood rot fungi secrete enzymes degrade and absorb the wood components, wood corrupt and cause loss of quality timber of various degrees of wood decay and quality Different Loss.

5 Test Equipment

5.1 steam autoclave. design pressure 0.25MPa, the design temperature of 138 °C.

5.2 vaccination room or clean bench.

5.3 bacteria culture chamber or electric incubator. temperature (28 ± 2) °C, relative humidity of 75% to 85%.

5.4 Analysis of balance. a sense of the amount of 0.01g.

5.5 flasks. 500mL flask wide mouth with screw caps or wide-mouth bottle dome (minimum volume 250mL, minimum diameter 32mm, thread Cover can be sterilized).

6 Sample and feeding wood

6.1 test material taken from the site of trees at breast height 3 ~ 5 logs more than 1m long section (diameter 180mm ~ 350mm)

2 Gen ~ 3. test Equal samples taken from each plant timber trees heartwood segment cross section uniformly distributed at no visible defects in healthy trees near the site of the pith of heartwood sampling.

6.2 Each sample surface should be smooth, not allowed to have visible defects. Dimensions of 20mm x 20mm x 10mm (grain direction) (see FIG. 1) External heartwood at least 12 (Equal taken 2 ~ 3 logs). Ring width should be the width of the average tree rings within $\pm 20\%$ range.