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**Traditional Chinese medicine — *Lycium barbarum* and *Lycium chinense* fruit**

*Médecine traditionnelle chinoise — Baie de goji (baie de Lycium barbarum et de Lycium chinense)*



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 249, *Traditional Chinese medicine*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

## Introduction

*Lycium barbarum* and *Lycium chinense* fruit, commonly called Lycium fruit or *Lycii Fructus*, is the dried fruit of *Lycium barbarum* Linné or *Lycium chinense* Mill. (Fam. Solanaceae). Lycium fruit was firstly recorded in the book '*Divine Farmer's Classic of Materia Medica*', and it has a long history in China, Korea, Japan and other Southeast Asian nations, where it is used to nourish the liver and kidneys and replenish essence to improve vision. Clinically, owing to its medicinal properties, it plays an important role in the treatment of diseases such as immune suppression, cancer and diabetic retinopathy.

Additionally, *Lycium barbarum* and *Lycium chinense* fruit, with its sweet taste and warming property, is widely used in functional food and cosmetics. Lycium fruit and its finished products also have a very high reputation worldwide for their effectiveness, and account for a large market share in the international trade of Chinese herbal medicines.

*Lycium barbarum* and *Lycium chinense* fruit is widely cultivated in the northwest of China, Korea and Canada, among other places. However, the quality of Lycium fruit provided from different areas or by different cultivators is quite different. In addition, though *Lycium barbarum* and *Lycium chinense* fruit has been recorded in several pharmacopeia and standards, specifications and quality requirements in these standards vary. Thus, there is a clear and urgent need to develop an international standard for harmonizing the existing standards, as well as ensuring the safety and effectiveness of *Lycium barbarum* and *Lycium chinense* fruit.

As national implementation may differ, national standards bodies are invited to modify the values given in [5.3](#), [5.4](#), [5.5](#), [5.6](#), [5.8](#) and [Clause 9](#) in their national standards. Examples of national and regional values are given in [Annex E](#).

# Traditional Chinese medicine — *Lycium barbarum* and *Lycium chinense* fruit

## 1 Scope

This document specifies the minimum requirements and test methods for *Lycium barbarum* and *Lycium chinense* fruit, which is derived from the plant of *Lycium barbarum* L. or *Lycium chinense* Mill.

It is applicable to *Lycium barbarum* and *Lycium chinense* fruit that is sold and used as herbal raw materials in the international trade, including unprocessed and traditionally processed materials.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1575, *Tea — Determination of total ash*

ISO 1577, *Tea — Determination of acid-insoluble ash*

ISO 18664, *Traditional Chinese Medicine — Determination of heavy metals in herbal medicines used in Traditional Chinese Medicine*

ISO 20409, *Traditional Chinese medicine — Panax notoginseng root and rhizome*

ISO 21371, *Traditional Chinese medicine — Labelling requirements of products intended for oral or topical use*

ISO 22258, *Traditional Chinese medicine — Determination of pesticide residues in natural products by gas chromatography*

ISO 22590, *Traditional Chinese medicine — Determination of sulfur dioxide in natural products by titration*

World Health Organization *Quality control methods for herbal materials*, 2011

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### ***Lycium barbarum* fruit**

dried ripe fruit of *Lycium barbarum* L. (Fam. Solanaceae)

### 3.2

#### ***Lycium chinense* fruit**

dried ripe fruit of *Lycium chinense* Mill. (Fam. Solanaceae)

### 3.3

#### **batch**

samples collected from the same particular place at the same time, of no more than 1 000 kg