



**International
Standard**

ISO 25115

**Traditional Chinese medicine —
Cultivated *Cistanche deserticola*
stem**

*Médecine traditionnelle chinoise — Tige de Cistanche deserticola
cultivée*

**First edition
2026-03**

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Published in Switzerland

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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 document 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).

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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.

This document was prepared by Technical Committee ISO/TC 249, *Traditional medicine*, Subcommittee SC 1, *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.

Introduction

Cistanche deserticola stem (Rou Cong Rong) is the dried stout stem of *Cistanche deserticola* Y.C. Ma. It was first recorded in the book *Shennong Bencao Jing*, a commonly used reference for traditional Chinese medicine. *Cistanche deserticola* stem has long been used in traditional Chinese medicine for its multiple therapeutic properties (warming kidney yang, reinforcing essence and blood, relaxing bowel). Modern pharmacological studies have shown that it has significant effects in improving renal function, enhancing memory, preventing Alzheimer's disease, anti-aging, anti-fatigue, regulating immune function, etc. It is a highly regarded traditional Chinese medicine with significant medicinal and economic value around the world. The quantity of *Cistanche deserticola* has declined sharply due to its extensive exploitation. The *Convention on International Trade in Endangered Species of Wild Fauna and Flora* classifies it as an endangered species, which is not conducive to trade. With the increasing demand, researchers and farmers began to study the artificial cultivation of *Cistanche deserticola* in the 1990s, and cultivated products have gradually replaced wild products on the market. So far, the output of cultivated *Cistanche deserticola* stem has largely met market demand, forming an industrial chain integrating planting, processing, production and sales. From the perspective of protecting wild *Cistanche deserticola*, the use of cultivated *Cistanche deserticola* stem is encouraged. Therefore, it is advisable to provide a certificate of cultivation for the product during trade. Furthermore, *Cistanche tubulosa* and *Cistanche salsa* stem are also used as *Cistanche* herbs in some countries. For the distinctions among the three species in terms of morphological features, chemistry and molecular levels, see [Annex E](#). Among them, *Cistanche tubulosa* stem is also explicitly included in the Chinese Pharmacopoeia and the Japanese Pharmacopoeia, and its specific quality requirements can be found in [Annex F](#).

Cultivated *Cistanche deserticola* stem is mainly produced in the following provinces of China: Inner Mongolia, as well as Ningxia, Gansu, Xinjiang and Qinghai with a relatively smaller volume. There is no significant difference in the quality of *Cistanche deserticola* stem produced in these provinces, and it is exported to Japan, South Korea, Southeast Asia and other regions every year, with a large international and domestic demand. Although *Cistanche deserticola* stem has been recorded in Chinese Pharmacopoeia (2020 edition)^[2], Japanese Pharmacopoeia (18th edition)^[4] and Korean Herbal Pharmacopoeia (version 4)^[5], these standards are not harmonized and can be unsuitable for the purpose of international trade of cultivated *Cistanche deserticola* stem. Therefore, it is of utmost urgency that the quality of cultivated *Cistanche deserticola* stem be standardized throughout the world. This can benefit consumers (patients), farmers, enterprises and companies related to the planting, management and trade of *Cistanche deserticola* stem.

As national implementation can differ, national standards bodies are invited to modify the values given in [5.3](#), [5.4](#) and [5.6](#) in their national standards. Examples of national and regional values are given in [Annex D](#).

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Traditional Chinese medicine — Cultivated *Cistanche deserticola* stem

1 Scope

This document specifies the quality and safety requirements for cultivated *Cistanche deserticola* stem derived from the plant of *Cistanche deserticola* Y.C. Ma.

It is applicable to cultivated *Cistanche deserticola* stem that is sold as natural medicine in international trade, including Chinese materia medica (whole medicinal materials) and decoction pieces derived from this plant.

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

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

ISO 22217, *Traditional Chinese medicine — Storage requirements for raw materials and decoction pieces*

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

ISO 23723, *Traditional Chinese medicine — General requirements for herbal raw material and materia medica*

3 Terms and definitions

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

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

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

3.1

***Cistanche deserticola* stem**

dried stout stem of *Cistanche deserticola* Y.C. Ma with scaly leaves and spadices (in case of flowering) removed

4 Descriptions

Cultivated *Cistanche deserticola* stem is shown in [Figure 1](#).