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Traditional Chinese medicine — *Panax notoginseng* root and rhizome

Médecine traditionnelle chinoise — Rhizome et racine de Panax notoginseng

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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).

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For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

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

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Introduction

Panax notoginseng root and rhizome are medicinal parts of *Panax notoginseng* (Burk.) F.H. Chen named *Sanqi*, which is a well-known traditional Chinese medicine. Due to its ability to treat bleeding, blood stasis and some other blood disorders, *Panax notoginseng* root and rhizome soared to great importance during Qing dynasty times after being praised by the master herbalist Li Shizhen in the 16th century. *Panax notoginseng* root and rhizome are native to the southern Chinese provinces of Yunnan and Guangxi, as well as Vietnam. The root and rhizome exhibit a variety of botanical and biochemical similarities to ginseng, and are frequently consumed as soup. Despite this high rate of consumption, there are relatively few reported side effects, making *Panax notoginseng* root and rhizome two of the safest substances in traditional Chinese medicine. While most often consumed as a popular food tonic, practitioners of Oriental medicine know *Panax notoginseng* root and rhizome best for the medicinal qualities: moving stagnant blood, stopping bleeding and resolving swelling. Due to the high price and demand in the global market, trade in *Panax notoginseng* root and rhizome has been complicated by substitution, adulteration and species identification issues. The genuine material is often replaced by less valuable material(s), some of which exhibit potentially toxic properties. Therefore, the establishment of an international standard for *Panax notoginseng* root and rhizome is necessary to support the clinical effectiveness, safety and consistency of this valuable medicine in international trade.

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Traditional Chinese medicine — *Panax notoginseng* root and rhizome

1 Scope

This document specifies minimum requirements and test methods for notoginseng root and rhizome which are derived from the plant *Panax notoginseng* (Burk.) F.H. Chen.

It is applicable to notoginseng root and rhizome that are sold and used as food supplements, functional food or natural medicines 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 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*

CODEX STAN 229-1993, REV.1-2003: *Analysis of pesticide residues: Recommended methods*

CODEX STAN 1-1985: *Codex general standard for the labelling of prepackaged foods*

CAC/MRL01-2009: *Maximum Residue Limits for Pesticides in Foods*

World Health Organization 2011: *Quality control methods for herbal materials, General advice on sampling*

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:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1
notoginseng
plant of *Panax notoginseng* (Burk.) F. H. Chen that has been cultivated for at least three years

3.2
root weight
average weight of final samples of root

3.3
root length
largest distance from the bottom to the stem scar of the tap root

Note 1 to entry: See Figure 1.

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3.4
root diameter
diameter of the tap root

3.5
root number per 500 g
number of tap roots per 500 g

3.6
batch
samples collected from the same particular place at the same time

Note 1 to entry: This is not more than 5 000 kg.

3.7
final sample
samples after the final sampling

4 Descriptions

In this document, dried notoginseng root and rhizome consist of tap root, lateral root and rhizome, as shown in Figure 1.

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