International Standard

ISO 19047

Traditional Chinese Medicine — *Polygonum multiflorum* root

Médecine traditionnelle chinoise — Racine de Polygonum multiflorum

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Foreword

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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.

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Introduction

Polygonum multiflorum root (also called *Fallopia multiflora* root) is the dried root of *Polygonum multiflorum* Thunb. (Fam. Polygonaceae), which is known as *Heshouwu* (何首乌 in Chinese) in China. It has a long history of medicinal use in East Asian countries and is traditionally valued and reported for its hair-blacking, liver- and kidney-tonifying and anti-aging effects as well as its low toxicity.

Although *Polygonum multiflorum* root and its related prescriptions are limited in the international market due to concerns over liver injury, there is still a large demand for *Polygonum multiflorum* root in the Chinese materia medica market to date; 200 t to 300 t per year of *Polygonum multiflorum* root are exported to Japan, the Republic of Korea, Hongkong (China), and other countries and regions. In addition, *Polygonum multiflorum* root is ranked no. 26 in the priority list of single herbal medicines for developing standards in ISO/TR 23975:2025.

There is currently no unified International Standard for *Polygonum multiflorum* root. The regulatory authorities in many countries have not adequately differentiated the adulterants of *Polygonum multiflorum* root. Additionally, the quality of *Polygonum multiflorum* root provided from different areas varies a lot. Therefore, an International Standard for *Polygonum multiflorum* root in terms of quality control of this herb and its products is required to ensure the safe use of these medicinal materials.

As national implementation can differ, national standards bodies are invited to modify the values given in 5.4 and 5.5 in their national standards. Examples of national and regional values are given in Annex D.

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Traditional Chinese Medicine — *Polygonum multiflorum* root

1 Scope

This document specifies the quality and safety requirements and test methods of *Polygonum multiflorum* root, which is derived from the dried root of *Polygonum multiflorum* Thunb. (Fam. Polygonaceae).

This document is applicable to raw and processed *Polygonum multiflorum* root that are sold and used as natural medicines in international trade, including Chinese materia medica (whole medicinal material) 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/TS 21310, *Traditional Chinese medicine — Microscopic examination of medicinal herbs*

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 23723:2021, *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

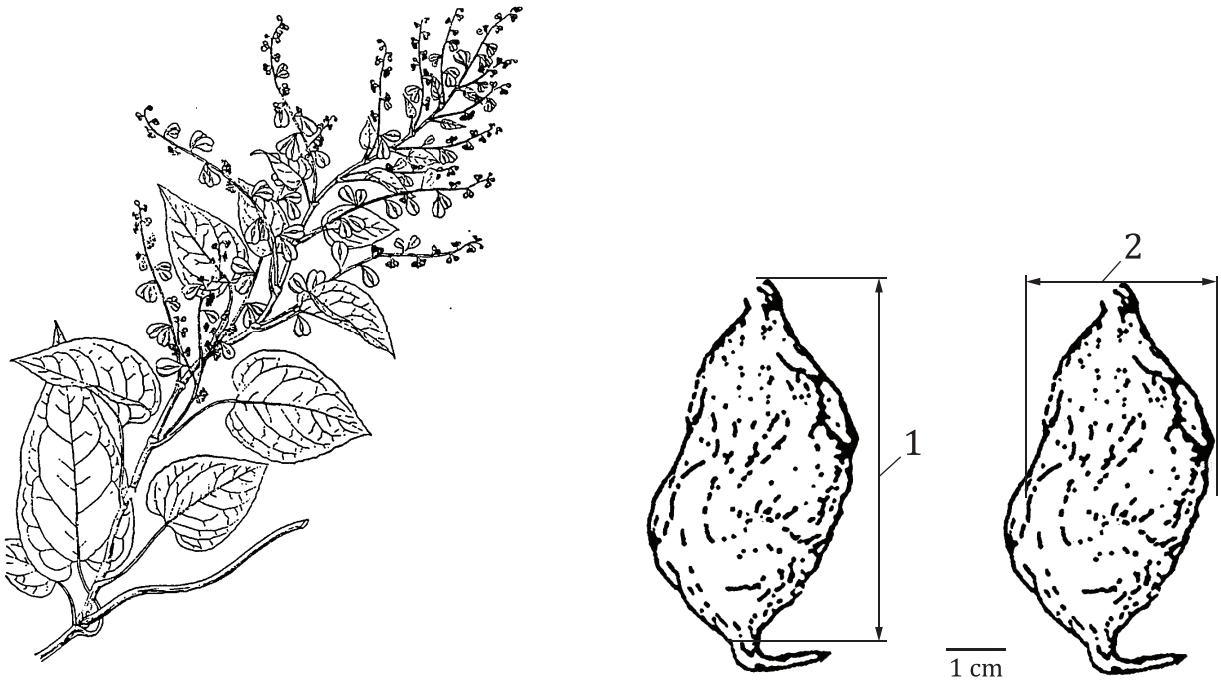
— IEC Electropedia: available at https://www.electropedia.org/

3.1
***Polygonum multiflorum* root**
***Fallopia multiflora* root**
Reynoutria multiflora root
dried root of *Polygonum multiflorum* Thunb [syn. *Reynoutria multiflora* (Thunb.) Moldenke; *Fallopia multiflora* (Thunb.) Haraldson] in the family of Polygonaceae

4 Descriptions

In this document, the structure of *Polygonum multiflorum* Thunb. (Fam. Polygonaceae) and the dried root are shown in Figure 1.

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a) plant of *Polygonum multiflorum* Thunb. **b) *Polygonum multiflorum* root**

Key

1	length
2	diameter

Figure 1 — Structure of the plant and root of *Polygonum multiflorum* Thunb.

5 Quailty and safey requirements and recommendations

5.1 General

The following requirements shall be met before the sampling (see Clause 6).

a) *Polygonum multiflorum* root shall be clean and free from leaf, stem and foreign matter.

b) The presence of living insects, mouldy root and external contaiminants which are visible to the naked eye shall not be permitted.

5.2 Morphological features

5.2.1 Appearance

The root is in the shape of a briquette or an irregular spindle.

5.2.2 Colour

The external surface of the root is reddish-brown with irregular wrinkles, transverse elongated lenticel-like protrusion, and fine rootlet scars.

5.2.3 Dimensions

The root is 6 cm to 15 cm in length measured from the base to the end of the root, and 4 cm to 12 cm in diameter measured at the middle of the root.

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