

# UNCARIA RHYNCHOPHYLLA



This product is the dried hooked stems and branches of *Uncaria rhynchophylla* (Miq.) Miq. ex Haval., *Uncaria macrophylla* Wall., *Uncaria hirsuta* Haval., *Uncaria sinensis* (Oliv.) Haval. or *Uncaria sessilifructus* Roxb. of the Rubiaceae family. It is harvested in autumn and winter, leaves removed, cut into sections and

## 【 PROPERTIES 】

The stems and branches of this product are cylindrical or quasi-square columnar, 2-3cm long and 0.2-0.5cm in diameter. The surface is reddish brown to purple-red with fine longitudinal stripes, smooth and hairless; yellow-green to gray-brown has white dot-shaped lenticels and is covered with yellow-brown soft hairs. Most branches have two downward-curved hooks (sterile peduncles) on opposite sides, or only one side has a hook and the other side is a protruding scar; the hook is slightly flat or slightly round, with a fine tip and a wider base; the branches at the base of the hook have pit-like marks and ring-shaped stipule marks after the petiole falls off. The texture is tough, the cross section is yellow-brown, the cortex is fibrous, and the pith is yellow-white or hollow. The smell is slight and the taste is light.

## 【 IDENTIFICATION 】

(1) *Uncaria* powder is light yellow-brown to red-brown. The phloem thin-walled cells are in sheets, the cells are elongated, the boundaries are not obvious, and the secondary wall is often separated from the primary wall, presenting a spiral or irregular twist. The fibers are bundled or scattered individually, mostly broken, with a diameter of 10~26 $\mu$ m and a wall thickness of 3~11 $\mu$ m. The marginated pit vessels are mostly broken, with a diameter of up to 56 $\mu$ m, and the pits are densely arranged. The epidermal cells are brown-yellow, polygonal or slightly elongated in surface view, with a diameter of 11~34 $\mu$ m. Calcium oxalate sand crystals exist in oblong thin-walled cells, densely, and some sand crystal-containing cells are connected in rows. *Uncaria sinensis* is similar to *Uncaria rhynchophylla*.

*Uncaria macrophylla* has more single-cell non-glandular hairs, and 2~15 cells of multicellular non-glandular hairs. *Uncaria hairy* has 1~5 cells of non-glandular hairs. Sessile fruit *Uncaria* has rare non-glandular hairs, 1~7 cells. Thick-walled cells can be seen, which are rectangular, 41~121 $\mu$ m long and 17~32 $\mu$ m in diameter.

(2) Take 2g of the powder of this product, add 2ml of concentrated ammonia test solution, soak for 30 minutes, add 50ml of chloroform, heat and reflux for 2 hours, cool, filter, take 10ml of the filtrate, evaporate to dryness, add 1ml of methanol to the residue to dissolve it, and use it as the test solution. Take another isorhynchophylline reference substance, add methanol to make a solution containing 0.5mg per 1ml, and use it as the reference solution. According to the thin layer chromatography method (General Rule 0502), take 10~20 $\mu$ l of the test solution and 5 $\mu$ l of the reference solution, and spot them on the same silica gel G thin layer plate, use petroleum nitrate (60~90 $^{\circ}$ C)-acetone (6:4) as the developing agent, develop, take out, dry, and spray with modified potassium iodide test solution. In the chromatogram of the test sample, spots of the same color appear at the corresponding position of the chromatogram of the reference substance.



**【 INSPECTION 】**

The water content shall not exceed 10.0% (General Rule 0832 Second Method) for determination. Total ash content shall not exceed 3.0% (General Rule 2302).

**【 EXTRACT 】**

Determine by hot leaching method under the alcohol-soluble extract determination method (General Rule 2201), using ethanol as solvent, and shall not be less than 6.0%.

**【 NATURE AND FLAVOR AND MERIDIANS 】**

Sweet, cool. Enters the liver and pericardium meridians.

**【 FUNCTIONS AND INDICATIONS 】**

Calming wind and calming convulsions, clearing heat and calming the liver. Used for internal liver wind movement, epilepsy convulsions, high fever convulsions, colds with convulsions, crying in children, eclampsia during pregnancy, headache and dizziness.

**【 USAGE AND DOSAGE 】**

3~12g, taken later.

**【 STORAGE 】**

Store in a dry place.

