

OPHIOPOGON JAPONICUS



This product is the dried root of *Ophiopogon japonicus* (L. f) Ker-Gawl, a plant of the Liliaceae family. It is dug up in summer, washed, repeatedly exposed to the sun and piled up until it is 70% to 80% dry, the fibrous roots are removed, and dried.

【 PROPERTIES 】

This product is spindle-shaped, slightly pointed at both ends, 15-3cm long, 0.3-0.6cm in diameter. The surface is light yellow or grayish yellow with fine longitudinal lines. The texture is flexible, the cross section is yellow-white, translucent, and the pith is small. The smell is slightly fragrant, and the taste is sweet and slightly bitter.

【 IDENTIFICATION 】

(1) Cross-section of this product: Epidermal cells are in one row or fall off, and the root is composed of 3-5 rows of lignified cells. The cortex is broad, with scattered mucous cells containing calcium oxalate needle crystals, some of which have a diameter of up to 10μm; the cell wall of the endodermis is uniformly thickened, lignified, with channel cells, and a row of stone cells on the outside, whose inner and side walls are thickened and the pores are fine. The pith is small, with 16-22 phloem bundles, and the xylem is connected into a ring layer by vessels, tracheids, wood fibers and inner lignified cells. The pith is small, and the thin-walled cells are round.

(2) Take 2g of this product, cut it into pieces, add 20ml of chloroform-methanol (7:3) mixed solution, soak for 3 hours, ultrasonically treat for 30 minutes, cool, filter, evaporate the filtrate, and dissolve the residue in 0.5ml of chloroform to prepare the test solution.

Take another 2g of *Radix Ophiopogonis* as a control medicinal material and prepare the control medicinal material solution in the same way. According to the thin layer chromatography method (General Rule 0502), take 6ml of each of the above two solutions and spot them on the same silica gel GF254 thin layer plate, use toluene-methanol-glacial acetic acid (80:5:0.1) as the developing agent, develop, take out, dry, and examine under ultraviolet light (254nm). In the chromatogram of the test product, spots of the same color appear at the corresponding position of the chromatogram of the control medicinal material.

【 INSPECTION 】

The water content shall not exceed 18.0% (General Rule 0832 Method 2).

Total ash content shall not exceed 50% (General Rule 2302).



【 EXTRACT 】

Determine by cold leaching method under the water-soluble extract determination method (General Rule 2201), and shall not be less than 60.0%.

【 ASSAY 】

Preparation of reference solution Take an appropriate amount of Ruscosa saponin reference substance, accurately weigh it, and add methanol to make a solution containing 50% of Ruscosa saponin per 1ml.

Preparation of standard curve Accurately measure 0.5ml, 1ml, 2ml, 3ml, 4ml, 5ml, 6ml of reference solution, place them in stoppered test tubes respectively, evaporate the solvent in a water bath, accurately add 10ml of perchloric acid, shake well, keep warm in hot water for 15 minutes, take out, cool with ice water, use the corresponding reagent as blank, and determine the absorbance at a wavelength of 397nm according to the UV-visible spectrophotometry method (General Rule 0401), and draw a standard curve with absorbance as the ordinate and concentration as the abscissa. **Determination method** Take about 3g of fine powder of this product, accurately weigh it, put it in a stoppered conical bottle, accurately add 50ml of methanol, weigh it, heat and reflux for 2 hours, let it cool, weigh it again, make up the lost weight with methanol, shake it well, filter it, accurately measure 25ml of the filtrate, recover the solvent to dryness, add 10ml of water to the residue to dissolve it, shake and extract it with water-saturated n-butanol saturated with water 5 times, 10ml each time, combine the n-butanol solution, wash it with ammonia test solution 2 times, 5ml each time, discard the ammonia solution, and evaporate the n-butanol solution. Dissolve the residue with 80% methanol, transfer it to a 50ml volumetric flask, add 80% methanol to the scale, and shake it well. Accurately measure 2~5ml of the test solution, put it in a 10ml stoppered test tube, and determine the absorbance according to the method under the preparation of the standard curve, starting from "evaporating the solvent in a water bath", and read the weight of rusko saponin in the test solution from the standard curve, and calculate it. This product, calculated on the basis of dry product, contains not less than 0.12% of total saponins of Radix Ophiopogonis, calculated as ruscosaponins (C₂₇ H₄₂ O₄).

MEDICINAL PIECES



【 PROCESSING 】

Remove impurities, wash, moisten, flatten, and dry.

【 PROPERTIES 】

This product is shaped like *Radix Ophiopogonis*, or is a flattened spindle-shaped piece. The surface is light yellow or grayish yellow with fine longitudinal lines. The texture is flexible, the cross section is yellowish white, translucent, and the middle column is small. The smell is slightly fragrant, and the taste is sweet and slightly bitter.

【 IDENTIFICATION 】 【 INSPECTION 】 【 CONTENT DETERMINATION 】

Same as medicinal materials.

【 NATURE AND FLAVOR AND MERIDIANS 】

Sweet, slightly bitter, slightly cold. It enters the heart, lung, and stomach meridians.

【 FUNCTIONS AND INDICATIONS 】

Nourishes yin and produces body fluid, moistens the lungs and clears the heart. It is used for dry cough due to lung dryness, cough due to yin deficiency, sore throat due to throat numbness, thirst due to body fluid loss, internal heat and thirst, restlessness and insomnia, and constipation due to dry intestines.

【 USAGE AND DOSAGE 】

6~12g.

【 STORAGE 】

Store in a cool, dry place away from moisture.

