

## Artemisia Capillaris Flower

### *Artemisiae Capillaris Flos*

インチンコウ

*Artemisia Capillaris* Flower is the capitulum of *Artemisia capillaris* Thunberg (*Compositae*).

**Description** Capitulum of ovoid to spherical, capitula, about 1.5–2 mm in length, about 2 mm in diameter, with linear leaves, peduncles, and thin stem. Outer surface of capitulum, light green to light yellowish brown in color; peduncle, greenish brown to dark brown in color. Under a magnifying glasses, the capitulum; involucre scale, in 3–4 succubous rows, outer scale of ovate with obtuse, inner scale of elliptical, 1.5 mm in length, longer than outer one, with keel midrib and thin membranous margin. Floret; tubular, marginal flower of female, disk flower of hermaphrodite. Achene of obovoid, 0.8 mm in length. Light in texture.

Odor, characteristic, slight; taste, slightly acrid, which gives slightly numbing sensation to the tongue.

**Identification** To 0.5 g of pulverized *Artemisia Capillaris* Flower add 10 mL of methanol, shake for 3 minutes, filter, and use the filtrate as the sample solution. Perform the test with the sample solution as directed under the Thin-layer Chromatography. Spot 5  $\mu$ L of the sample solution on a plate of silica gel for thin-layer chromatography. Develop the plate with a mixture of acetone and *n*-hexane (1:1) to a distance of about 10 cm, and air-dry the plate. Examine under ultraviolet light (main wavelength: 365 nm): a principal spot with a blue fluorescence appears at the *R<sub>f</sub>* value of about 0.5.

**Purity** Stem—*Artemisia Capillaris* Flower does not contain any stem less than 2 mm in diameter.

**Loss on drying** Not more than 12.0% (6 hours).

**Total ash** Not more than 9.0%.

**Acid-insoluble ash** Not more than 2.0%.

**Extract content** Dilute ethanol-soluble extract: not less than 15.0%.

## Asiasarum Root

### *Asiasari Radix*

サイシン

*Asiasarum* Root is the rhizome and root of *Asiasarum sieboldii* F. Maekawa or *Asiasarum heterotropoides* F. Maekawa var. *mandshuricum* F. Maekawa (*Aristolochiaceae*).

**Description** Nearly cylindrical rhizome with numerous thin and long roots; externally light brown to dark brown. The root, about 15 cm in length, about 0.1 cm in diameter, with shallow longitudinal wrinkles on the surface, and brittle. The rhizome, 2–4 cm in length, 0.2–0.3 cm in diameter, often branched, with longitudinal wrinkles on the surface, with

petioles, and sometimes peduncles or buds at the upper end; internode short; each node has several scars of petiole and peduncle, and several thin and long roots.

Odor, characteristic; taste, acrid, with some sensation of numbness on the tongue.

**Purity** (1) Terrestrial part—The terrestrial parts such as leaves and petioles are not found.

(2) Foreign matter—The amount of foreign matter other than terrestrial part contained in *Asiasarum* Root does not exceed 1.0%.

**Total ash** Not more than 10.0%.

**Acid-insoluble ash** Not more than 3.0%.

**Essential oil content** Perform the test with 30.0 g of pulverized *Asiasarum* Root as directed in the Essential oil content under Crude Drugs: the volume of essential oil is not less than 0.6 mL.

## Astragalus Root

### *Astragali Radix*

オウギ

*Astragalus* Root is the root of *Astragalus membranaceus* Bunge, *Astragalus mongholicus* Bunge (*Leguminosae*).

**Description** Nearly cylindrical root, 30–100 cm in length, 0.7–2 cm in diameter, with small bases of lateral root dispersed on the surface, twisted near the crown; externally light grayish yellow to light yellow-brown, and covered with irregular, dispersed longitudinal wrinkles and horizontal lenticel-like patterns; difficult to break; fractured surface fibrous. Under a magnifying glass, a transverse section reveals an outer layer composed of periderm; cortex light yellowish white, xylem light yellow, and zone near the cambium somewhat brown in color; thickness of cortex from about one-third to one-half of the diameter of xylem; white medullary ray from xylem to cortex in thin root, but often appearing as radiating cracks in thick root; usually pith unobservable. Odor, slight; taste, sweet.

**Purity** Root of *Hedysarum* species and others—Under a microscope, a vertical section of *Astragalus* Root reveals no crystal fiber containing solitary crystals of calcium oxalate outside the fiber bundle.

**Loss on drying** Not more than 13.0% (6 hours).

**Total ash** Not more than 5.0%.

**Acid-insoluble ash** Not more than 1.0%.