

<i>n</i>	<i>t</i> <sup>2</sup> = <i>F</i> <sub>1</sub>	<i>n</i>	<i>t</i> <sup>2</sup> = <i>F</i> <sub>1</sub>	<i>n</i>	<i>t</i> <sup>2</sup> = <i>F</i> <sub>1</sub>
1	161.45	13	4.667	25	4.242
2	18.51	14	4.600	26	4.225
3	10.129	15	4.543	27	4.210
4	7.709	16	4.494	28	4.196
5	6.608	17	4.451	29	4.183
6	5.987	18	4.414	30	4.171
7	5.591	19	4.381	40	4.085
8	5.318	20	4.351	60	4.001
9	5.117	21	4.325	120	3.920
10	4.965	22	4.301	∞	3.841
11	4.844	23	4.279		
12	4.747	24	4.260		

**Containers and storage** Containers—Tight containers.  
Storage—Light-resistant.

## Dioscorea Rhizome

### *Dioscoreae Rhizoma*

サンヤク

Dioscorea Rhizome is the rhizome (rhizophore) of *Dioscorea japonica* Thunberg or *Dioscorea batatas* Decaisne (*Dioscoreaceae*), from which the periderm has been removed.

**Description** Cylindrical or irregular cylindrical rhizome, 5 – 15 cm in length, 1 – 4 cm in diameter, occasionally longitudinally split or transversely cut; externally whitish to yellowish white; fractured surface, whitish, smooth and powdery; hard in texture but breakable. Practically odorless and tasteless.

**Identification (1)** To the cut surface of Dioscorea Rhizome add dilute iodine TS dropwise: a dark blue color develops.

(2) To 0.2 g of pulverized Dioscorea Rhizome add 2 mL of acetic anhydride, warm on a water bath for 2 minutes, and filter. To 1 mL of the filtrate add 0.5 mL of sulfuric acid carefully to make two layers: a red-brown to purple-brown color appears at the zone of contact.

**Loss on drying** Not more than 14.0% (6 hours).

**Total ash** Not more than 6.0%.

**Acid-insoluble ash** Not more than 0.5%.

## Powdered Dioscorea Rhizome

### *Dioscoreae Rhizoma Pulveratum*

サンヤク末

Powdered Dioscorea Rhizome is the powder of Dioscorea Rhizome.

**Description** Powdered Dioscorea Rhizome occurs as nearly yellowish white to white; odorless and tasteless.

Under a microscope, Dioscorea rhizome powder reveals starch grains; fragments of parenchyma cells containing starch grains; raphides of calcium oxalate, 100 to 200 μm in length and its containing mucilage cells; ring and scalariform vessels, 15 to 35 μm in diameter; starch grain isosceles deltoid or oblong, solitary, 18 to 35 μm, hilum and striation being distinct.

**Identification** To 0.2 g of Powdered Dioscorea Rhizome add 2 mL of acetic anhydride, warm on a water bath for 2 to 3 minutes, and filter. To the filtrate add 0.5 mL of acetic anhydride, shake, and add carefully 0.5 mL of sulfuric acid to make two layers: a red-brown to purple-brown color develops at the zone of contact.

**Loss on drying** Not more than 14.0% (6 hours).

**Total ash** Not more than 6.0%.

**Acid-insoluble ash** Not more than 0.5%.

**Containers and storage** Containers—Tight containers.

## Diphenhydramine and Bromovalerylurea Powder

ジフェンヒドラミン・ワレリル尿素散

### Method of preparation

Diphenhydramine Tannate	90 g
Bromovalerylurea	500 g
Starch, Lactose, or their mixture	a sufficient quantity
To make 1000 g	

Prepare as directed under Powders, with the above ingredients.

**Description** Diphenhydramine and Bromovalerylurea Powder occurs as a slightly grayish white powder.

**Identification (1)** To 0.1 g of Diphenhydramine and Bromovalerylurea Powder add 5 mL of dilute hydrochloric acid, 1 mL of ethanol (95) and 10 mL of water, shake, and filter. To the filtrate add 10 mL of sodium hydroxide TS, and extract with 10 mL of chloroform. Separate the chloroform layer, add 1 mL of bromophenol blue TS, and shake: a yellow color develops in the chloroform layer (diphenhydramine tannate).

(2) Shake 0.02 g of Diphenhydramine and Bromovalerylurea Powder with 10 mL of diethyl ether, filter, and evaporate the filtrate on a water bath. Dissolve the residue in 2 mL of sodium hydroxide TS, and add 5 mL of dimethylglyoxime-thiosemicarbazide TS, and heat on a water bath for 30 minutes: a red color develops (bromovalerylurea).

(3) Shake 0.3 g of Diphenhydramine and Bromovalerylurea with 5 mL of methanol, filter, and use the filtrate as the sample solution. Dissolve 0.15 of bromovalerylurea and 0.03 g of diphenhydramine tannate in 5 mL each of methanol, and use the solutions as standard solution (1) and standard solution (2). Perform the test as directed under the Thin-layer Chromatography with these solutions. Spot 5 μL each of the sample solution and the stan-