

IMPORTANT  
MEDICINAL PLANTS  
OF  
JAPAN

Prof. T. Ichimura



日本藥用植物圖譜

市 村 塘

# 日本藥用植物圖譜

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## PREFACE

According to many earlier Japanese writers there exist about six hundred species of medicinal plants in Japan. In this volume the author has selected the one hundred most important of these species. Each coloured plate contains all the morphological and anatomical characteristics of the plant as observed by the author. The method of description of each medicinal plant has followed that of Koeler's "Medicinal-Pflanzen, Bd. I-III, 1898"; i.e. (1) morphological description, (2) flower-season, (3) fruit-season, (4) habitat, (5) officinal part, (6) anatomical and chemical properties of medicinal portion, (7) medicinal uses and (8) explanation of the plate.

The object of this work is to supply the want of a book in English on the medicinal plants of Japan. The present investigation was begun with the assistance of the Monbushō (the Japanese Department of Education) in the summer of 1920, and has continued through more than six years.

The author wishes to take this opportunity to thank Professor Shozaemon Keimatsu, (of the College of Medicine, Tokyo Imperial University) and Mr. Sakiō Tsurumi, (Director of Keimei-Kwai) for their invaluable suggestions concerning the subject matter of this book. The Keimei-Kwai, through its generous contribution of funds, made possible the carrying out of this work. Heartiest thanks are due to this organization, and also to Mr. Shigeji Kanayama, and Mr. Ensaku Konya, artists, for their drawings which are used to illustrate the text. Finally, the author thanks Dr. Juntarō Asano, of his correction of the manuscript and his assistant, Mr. Masahiko Tedzuka, for his help in preparing the text.

Tsutsumi Ichimura.

Kanazawa City, Japan,

July, 1, 1932.

## 序 言

古來我邦ニ於テ藥用植物トシテ知ラルルモノ  
ノ四五百種ハアルベシ、本書ハ就中重要ト考フ  
ベキ百種ヲ選擇シ、其各種ノ形態、解剖ニ關スル  
自家觀察ト製作ニ係ル色彩版ヲ主トシ、之ニ其  
説明文トシテ大體「ケーラー」氏藥用植物圖譜式  
ニ、植物ノ形態、開花期、結實期、產地、藥用部、藥用部  
ノ組織化學、藥用、及ビ圖版説明ヲ添ヘタリ。

本書發行ノ目的ハ英文ヲ以テ、本邦產藥用植  
物ヲ汎ク歐米諸國ニ紹介セントスルニアリ、此  
研究着手ハ大正十年七月、文部省ノ科學研究補  
助費支給ニ始マリ、爾來約六ケ年持~~續~~シタルモ  
ノノ一端ナリ。

此書發行ニ就キ、著者ハ多大ノ援助ヲ受ケタ  
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昭和七年七月一日

金澤ニテ

著 者

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# Cyperus rotundus, L.

## Plate 1.

Fam. **Magnoliaceae.**

Nom. Jap. Hama-suge (香附子).

*Morphological Description.*—Perennial grass-like herbs 1-2 feet high, with tubers sheathed by hairy scales, in creeping rhizome. Stem angular, without nodes, solid. Leaves alternate, springing from the nodes, equitant in 2-3 rows; petiole in a closed sheath; blade linear, channelled, with pararell nerves, margin entire, scabrid when young, shining green on the upper, pale green on the lower surface. Flowers in spikelets of umbellate inflorescence (spiked panicle). Spikelets with flowers in 2 rows, linear, compressed; rhacheola persistent. 1 scarious glume, dorsal green, red margined. Perianth 0. Stamens hypogynous 3; filament filiform, free, white; anther yellowish linear, basifixed, 2-celled, introrse, dehiscence longitudinal; pollen spherical, smooth, yellow. Ovary sessile with 3 angles answering to the 3 stamens, 1-celled, 1-ovuled, white; styles 3, stigmatiferous on their inner edge, bases continuous to a common 1 style; ovule inserted at the inner base of the ovary, erect, anatropous. Fruit 1-seeded, indehiscent, 3 gonous, chestnut-brown, cylindric, smooth with remnant of style; pericarp crustaceous. Seed erect; testa thin, yellow-brown; albumen farnaceous; embryo minute, near the hilum, surrounded by fatty and proteid substances; cotyledon lenticular, fleshy, undivided; radicle inferior.

*Flower-Season.*—July.

*Fruit-Season.*—August.

*Habitat.*—Found in sandy coast-region of the southern part of Japan.

*Officinal.*—Rhizome (*Rhizoma cyperi rotundi*).

*Anatomical and Chemical Properties of the Above.*—Full of starch grains; ethereal oil drops<sup>1)</sup> abundant; resinous proteid substance diffusely tested within numerous cells through tissue. In vascular bundles proteid tested.

*Medicinal Uses.*—Decoction of dried rhizome is drunk as a good emmenagoga or antispasmodica.

### EXPLANATION OF THE PLATE.

- |   |   |
|---|---|
| A, upper part of plant with umbellate inflorescence of flowers-spikelets; $\times 2/3$ .                            | 4, pollen; $\times 145$ .   |
| B, lower part of plant with leaves and tuberous rhizome; $\times 2/3$ . sections of leaf-blade and tuber are shown. | 5, ovule within ovary; $\times 10$ .  |
| 1, a spikelet; $\times 2 \frac{1}{2}$ .   | 6, fruit; $\times 8$ .  |
| 2, flowers analysed; $\times 7$ .   | 7, the same cut longitudinally, showing embryo embedded in seed-albumen; $\times 8$ . |
| 3, stamen; $\times 12$ .  | 8, the same cut crossly; $\times 8$ .   |
|   | 9, floral diagram.  |

1) Cyperol  $C_{15}H_{24}O$ , Cyperen  $C_{18}H_{24}$ .

# ハマスゲ (香附子)、莎草科

## カウブシ

**形態。** 多年生莎草、高三寸乃至二尺、匍枝アリ、所々肥厚塊状ヲナシ、有毛鱗ノ鞘ヲ以テ被ハル。莖ハ稍單立、梢部三稜柱、無節、中實。葉ハ五生莖ヨリ超出、二三列ヲナス、葉柄ハ閉鞘トナル、葉片線狀、有溝、並行脈アリ、全緣(嫩葉粗感)銳尖頭、表面輝綠色、裏面淡綠色。花ハ繖形花序 = 疎生、穗狀花、茶褐色、小穗ハ狹線形、側扁二列、花穗軸永存、穎ハ披針形膜質、綠背、褐緣、花被缺如、雄藥ハ雌藥下生、三、花絲ハ絲狀、離生、白色、藥ハ黃色線狀、基着、二室、內向、縱裂、花粉ハ球狀、平滑、黃色。子房ハ坐着三稜一室、一胚珠、白色、花柱三岐、基部合着、內緣、柱頭様胚珠ハ子房ノ內底 = 着坐、直立倒生。果實(瘦果)ハ閑果、三稜、栗褐色、圓筒狀、平滑、外果皮堅牢。種子ハ直生、種皮薄ク、黃褐色、胚乳ハ澱粉、胚ハ小、臍附近 = 位シ、脂肪及ビ蛋白質物質ヲ以テ圍包セラル、子葉ハ「レンズ」形肉質不分裂、幼根下方。

**開花期。** 七月。

**結實期。** 八月。

**產地。** 日本南部ノ海邊 = 自生。

**藥用部。** 地下莖(香附子)。

**藥用部ノ組織化學。** 澱粉充實、揮發油滴豐富、樹脂様蛋白質物質ハ全組織 = 播布シ、特 = 蛋白質様物質ハ緯管束內 = 證明セラル。

**藥用。** 香附子ノ煎汁ハ通經、鎮痙ノ効アリ。

## 第一圖版説明

- A, 繖形花序 = 配列スル穗狀花ヲ有スル植物ノ上部 ( $\times \frac{2}{3}$ )  
B, 葉及ビ塊狀莖ヲ有スル植物ノ下部 ( $\times \frac{2}{3}$ ) 別 = 葉片及ビ塊莖ノ斷面ヲ示ス
- 1, 小穗 ( $\times 2\frac{1}{2}$ )
  - 2, 花ノ分解 ( $\times 6\frac{1}{2}$ )
  - 3, 雄藥 ( $\times 13$ )
  - 4, 花粉 ( $\times 150$ )
  - 5, 子房 內ノ胚珠 ( $\times 10$ )
  - 6, 果實 (瘦果) ( $\times 8$ )
  - 7, 果實ヲ縱斷シテ胚乳 = 埋沒スル胚ヲ示ス ( $\times 8$ )
  - 8, 果實橫斷 ( $\times 8$ )
  - 9, 花式圖

1) シペレン ( $C_{15}H_{24}$ ) シペロール ( $C_{15}H_{24}O$ )



# Pinellia ternata, Breitenb.

## Plate 2.

### Fam. Araceae.

- Syn. P. tuberifera, Ten.  
Arum ternatum, Th. Fl.  
A. bulbosum, Pers.  
A. atrorubens, Spr.  
A. fornicatum, Roth.  
A. subulatum, Desf.  
A. triphyllum, Houtt.  
Arisaema ternatum, Schott.  
A. macronrum, Bunge.  
A. Loureirii, Bl.  
Atherurus ternatus, Bl.  
Hemicarpurus fornicattus, Nees.  
Typhonium tuberculigerum, Schott.
- Nom. Jap. Karasu-bishaku (半夏).

*Morphological Description.*—A perennial tuberous herb 7–8 inches high. Leaves compound, 3-sect, leaflets entire ovo-lanceolate, glabrous, pinninerved united in margin, green on the upper, slightly green on the lower surface; petiole long sheathing at the base. Stem or scape terminated by a spadix bearing flowers and enveloped by the convolute lower part of the greenish monophyllous spathe, persistent; spadical appendage long filiform tail, basal purplish and apical greenish. Flowers sessile on the spadix, the ♀ below (adhering spathe) the ♂ above (free from spathe); by a ring ridge, spathe space is constricted into 2 parts including the upper ♂ and the lower ♀ spadix. No perianth. Male flowers (stamens): many white sessile and connate in continuous stratum; anthers extrorse, oblong 2-celled, opening by longitudinal slits; pollen spherical, thin walled with minute protuberances of regular order, white or very slightly yellow. Female flowers (ovaries): densely crowded green, ovary 1-celled; style short or 0; stigma disciform papillose; ovules solitary erect, basilar, orthotropous. Fruit, berry indehiscent, 1-seeded. Seeds subglobose, greenish, farinaceous; embryo axile cylindrical.

*Flower-Season.*—May.

*Fruit-Season.*—August.

*Habitat.*—Widely distributed field-plant in central Japan and Kiusiu.

*Official.*—Tuber (Rhizoma pinelliac).

*Anatomical and Chemical Properties of the Above.*—Tuber, Rich of starch grains. Raphides found abundant in mucilage sacs. Proteid substances tested along vascular bundles.

*Medicinal Uses.*—Decoction of dried tuber is said to be a good expectorantia and to have an immediate effect when man suffers from emesis caused by stomachica, nephritis, kakke and pregnancy.

#### EXPLANATION OF THE PLATE.

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| A. whole plant with tuber, leaves and spathe; ×2/3.                                  | 6. pollen; ×150.                                      |
| B. vertical section of tuber; ×2/3.  | 7. ♀ flowers; ×65.                                    |
| 1. young spathe; ×2/3.   | 8. ♀ flowers on a spadix, cut crossly; ×5.            |
| 2. spadix opened to show flowers, the ♀ on the lower, the ♂ on the upper part; ×2/3. | 9. longitudinal section of ovary, showing ovule; ×16. |
| 3. ♂ flowers on a spadix; ×5.  | 10. fruit; ×1 1/2.                                    |
| 4. cross section of the same; ×5.  | 11. the same showing seed; ×1 1/2.                    |
| 5. anther opened; ×5.  | 12. seed; ×2.   |
|  | 13. longitudinal section of the same; ×2.             |
|  | 14. cross section of the same; ×2.                    |