# On the Medicinal Plants of Taiwan

## II. Preliminary Notes on the Original Plants of Chinese Crude Drug "Mai-Men-Tung" (麥門冬) Cultivated in Taiwan

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"Mai-Men-Tung" is a kind of Chinese crude drugs which is used as pectoral, refigerant, and tonic remedy. It is known that some species of Genera *Liriope* and *Ophiopogon* are cultivated as original plants of this drug in the mainland of China, Japan, and Korea[1)(2)]. It is an interesting problem to clarify what species are cultivated commercially in the Northern and Central Taiwan.

According to the results of actual survey in Northern and Central part of the Island in May of 1960, the author found that two species of Genus *Liriope* were cultivated commercially. In connection with this problem, the author also collected the wild specimen from Suao (蘇澳) of Ilan (宜蘭) Prefecture and cultivated on the farm of Taiwan Agricultural Research Institute, Taipei, for identification and examining its usefulness.

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Table 1: Sources of specimen plants

| Specimen | Scientific Name | Sources | Date of Collection | Remarks |
|---|---|---|---|---|
| 1. | *Liriope muscari* BAILEY | Chutung, Hsinchu Pref. | May 1960 | Cultivated |
| 2. | *L. angustissima* OHWI | Shalu Taichung Pref. | July 1961 | Cultivated |
| 3. | *L. spicata* LOUR. | Suao, Ilan Pref. | Oct. 1961 | Wild |

### Key to the species

1A. Leaves 8–14 mm. wide ……1. *L. muscari*

1B. Leaves 2–4 mm. wide

2A. Leaves 2–4 mm. wide, 40–70 cm. long; without stolones; flower many, dense.……2. *L. angustissima*

2B. Leaves 2–3 mm. wide, length up to 45 cm.; with stolones; flowers relatively few, loose ……3. *L. spicata*

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Specimen No.1 (Plate 1)

Perennial, stemless, glabrous herb, with a shortened rhizome: Root fibrous, slender, often nodulose: Lvs. radical, linear-lanceolate, narrowing at the base, 30-50 cm. long, 8-14 mm. wide, 11-15 veined, apex acute: Scape 20-40 cm. long, numerous flowers: Raceme 8-12 cm. long: Fls. usually arranged in groups of 3-6 along the raceme: Tepals 4 mm. long, violet to deep violet.

This species is chiefly cultivated in Northern part of the Island such as Taoyuan (桃園), Hsinchu (新竹) and Miaoli (苗栗) Prefectures. It is said that this species was extended by a Japanese Mr. Tokie Inamura (稻村時衛) before the world war II. Though its exact origin is still unknown, it is suggested that the specimen No. 1 has originated from the main island of Taiwan or Isl. Lanhsu (蘭嶼) ** based on the fact that some herbarium specimens from the same localities preserved in The National Taiwan University are similar to the specimen No.1. Dr. Ohwi suggested that this species is *Liriope muscari* Bailey.

In addition to the specimen No. 1, the author collected another cultivated plant specimen "Kua-Tung" (瓜冬) from the suburb of Taipei City. It is somewhat similar to the specimen No. 1, except for its stiff and thick leaves. The origin is still unknown and the further investigation is necessary for the plant identification.

Specimen No. 2 (Plate 2)

Perennial, stemless, glabrous herb, with a shortened rhizome: root fibrous, slender, often nodulose: Lvs. radical, narrowly linear, 40-70 cm. long, 2-4 mm. wide, 5-8 veined, apex acute: Scape 25-50 cm. long, bearing numerous flowers: Raceme 6-20 cm. long: Fls. usually arranged in groups of 3 to 4 along the raceme: Tepals 4 mm. long, whitish to deep violet.

This species is chiefly cultivated in the Central part of Taiwan, such as Shalu (沙鹿) and Tachia (大甲) of Taichung (臺中) Prefecture. Dr. Ohwi pointed out that this species is the one which he collected at Mt. Chi-Hsing-Shan (七星山) *** of Taipei (臺北) Prefecture in 1933 and nomenclatured as a new species *Liriope angustissima* Ohwi[3][4].

Species No. 3 (Plate 3)

Perennial, stemless, glabrous herb, with stolones: Lvs. radical, linear, up to 45 cm. long, 2-3 mm. wide, apex acute, 7 veined: Scape 15-30 cm. long: Fls. arranged in groups of 2-5 along the raceme, rather thinly flowered: Tepals 4mm. long, pale violet.

The author collected this specimen from Suao (蘇澳) of Ilan (宜蘭) Prefecture for the purpose of examining its economic value. During the cultivation on the farm of Taiwan Agricultural Research Institute, Taipei since no tuber formed, thus it is considered to be no practical value. Dr. Ohwi suggests that this specimen plant is the narrow leaf strain of "Ryukyu Yaburan". Though there is a different opinion that the scientific name of

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** Isl. Lanhsu = Botel Tabaco…Europian name
= Isl. Kotosho (紅頭嶼) …Japanese pronounciation

***Mt. Chi-Hsing-Shan = Mt. Shichiseizan…Japanese Pronounciation

"Ryukyu Yaburan" is *Liriope gracilis* NAKAI, however, it may belong to *L. spicata* LOUR. as suggested by Dr. OHWI[4][5].

## Summary

The original plants of Chinese crude drug "Mai-Men-Tung" cultivated in the Northern and Central part of Taiwan were subjected to identification. It was found that the broad leaved species cultivated in the Northern part of Taiwan was identified to belong to *Liriope muscari* BAILEY, and the narrow leaved species grown in the Central part of Taiwan belongs to *L. angustissima* OHWI. The specimen collected from the coastal area of the Northern Taiwan were assumed to belong to the narrow leaf strain of *L. spicata* LOUR. and its usefulness was evaluated.

References

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(3) Ohwi, J. : (1934) Acta phytotaxonomica et geobotanica, 3:(4), p.201
(4) _____: (Oct. 14, 1963) Private letter to the author (in Japanese)
(5) _____: (1965) Flora of Japan, p.308 (in English)

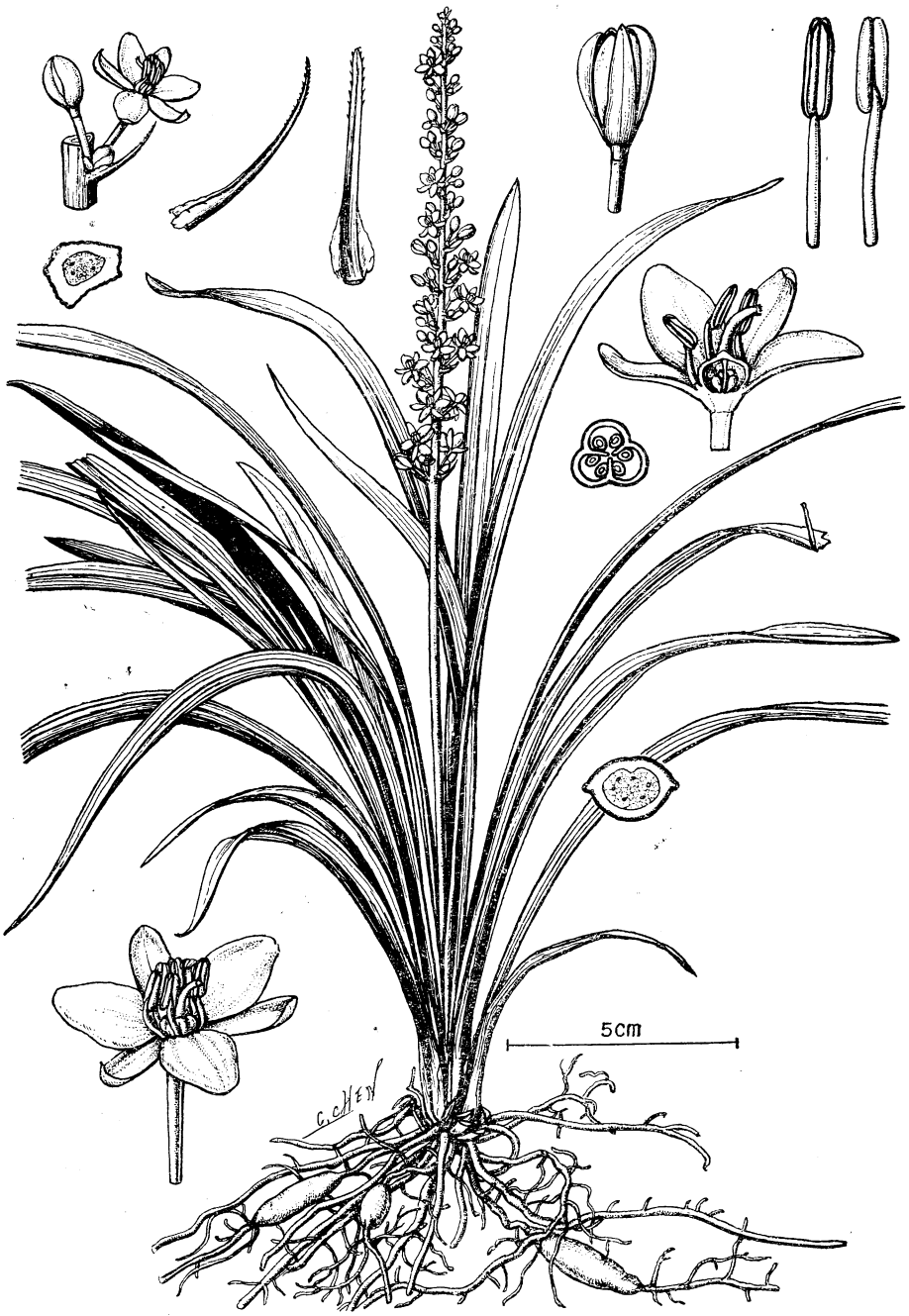



Plate 1. *Liriope muscari* Bailey




Plate 2. *Liriope angustissima* OHWI




Plate 3. *Liriope spicata* Lour.

# 臺灣之藥用植物

## (二)臺灣栽培之中藥「麥門冬」原植物及近緣植物

洪　祖　仁

### 摘　要

中藥「麥門冬」又名「麥冬」係若干沿階草屬 Genus *Ophiopogon* 及麥門冬屬 Genus *Liriope* 植物之瘤狀根經乾燥製成者，具有鎮咳、祛痰、强心、强壯及利尿之效果。

著者在日本國立科學博物館大井次三郎博士之指導下，對臺灣北、中部栽培之「麥門冬」原植物及其近緣植物獲得若干心得。茲將扼要記述其內容以供有關人士參考。

一、臺灣北、中部栽培之「麥門冬」原植物有兩種。寬葉種係 *Liriope muscari* BAILEY，在北部各地栽培。細葉種係 *L. angustissima* OHWI，多在中部栽培。

二、臺灣北部沿海地方野生之一種麥門冬屬植物具有細葉，一見如 *L. angustissima* OHWI，在臺灣省農業試驗所圃場栽培觀察結果，幾乎不產生塊狀根，除認定無栽培價值以外，其植物形態與 *L. angustissima* OHWI 有若干相異，經大井博士鑑定始知爲「琉球麥門冬」之細葉系統。對「琉球麥門冬」之學名現有兩種學說，一爲 *L. spicata* LOUR.，另一爲 *L. gracilis* NAKAI，在本篇暫用前者。