

Studies in the Genus CHLOROPHYTUM of Thailand

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Introduction

The genus *Chlorophytum* (Liliaceae) is common all over the country. It is found in evergreen forest in the mountains as well as in the lowlands and some species also in deciduous forest. Some species evidently prefer soil derived from limestone hills. The knowledge on this group from neighbouring countries is scarce and apparently the genus is relatively poor in species in this part of the world. Thus from Burma only one species is reported. From Malaysia *Chlorophytum malayense* Ridl. (Fl. Mal. Pen. 5 : 341.1925) is known. From Cambodia, Laos and Vietnam also a few species only are reported.

It is strongly emphasized that our knowledge on the Thailand *Chlorophytum* species is scarce. They should be extensively collected from all over the country. The author bases his investigations primarily upon some specimens from Dr. A.F.G. Kerr's collections.

History

The species of *Chlorophytum* were described first under the genus *Anthericum* and some under *Asphodelus* and *Phalangium*. They were transferred to *Chlorophytum* in 1808 by Ker-Gawler. Later on Karl von Poellnitz, in "Die *Chlorophytum*-arten Tanganika" in *Portugaliae Acta Biologica* 1 : 255-383.1946, has listed up to 113 species in Tanganika. E.P. Phillips in "The genera of South African flowering plants ed. 2 : 184.1951" reported up to 215 species. *Chlorophytum* species are chiefly tropical and subtropical African with some species in India, Southeast Asia and Tropical Australia etc. In Asia are reported over 50 species, in Thailand about 4 species and 3 varieties.

General Characters

Chlorophytum is a genus of short rhizomatous herbs with either fibrous or fleshy-thickened roots and radical leaves which are either linear grasslike or petioled with lanceolate to ovate blades. The inflorescence is a scape, branched or unbranched with one or more leaflike bracts in the lower part the upper part racemose bearing small yellowish-white or greenish-white flowers. The flowers are actinomorphic with six equal perianth segments. The six stamens carry basifixed anthers. The pistil consists of a capitate stigma and a filiform style. The ovary is 3-celled with many ovules in each cell. Fruit 3-lobed seeds 1-4, black or dull black, somewhat compressed but not quite flat.

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KEY TO SPECIES

1. Leaves elliptic-lanceolate, if fully developed 3–7 cm broad
 2. Inflorescence branched or unbranched, erect
 3. Ratio anther to filament 1 : 1, seed developed in each locule
Chlorophytum orchidastrum
 3. Ratio anther to filament 2 : 3
seeds developed in each locule
C. orchidastrum var. simplex
 2. Inflorescence unbranched 5–6 feet long trailing on the ground anther and filament equal, 1–2 seeds per locule
C. longissimum
1. Leaves linear-lanceolate or grass like 10–20 mm broad
 4. Inflorescence branched or unbranched without pappillate hairs
 5. Ratio anther to filament 2 : 1
 6. Perianth segment 7–8 mm long
C. intermedium
 6. Perianth segment 4–6 mm long
C. laxum
 5. Ratio anther to filament 2 : 3
perianth segment not less than 10 mm long
C. intermedium var. subundulatum
 4. inflorescence branched or unbranched with many pappillate hairs on upper half of the inflorescence
C. intermedium var. pubescens

INDEX TO COLLECTOR'S SPECIMENS

Chlorophytum. orchidastrum Lindl.

Sorensen, Larsen and Hansen 4021, Chiang Mai, 12.7.1958; Marcan 2364, Sai Yok, Kanchanaburi, 31.8.1928; Kerr 5760, Muang Lom, 7.4.1922; Lasen 2094, Bo Luang, Chiang Mai, 4.7.1968; Garret 1311, Doi Chiang Dao, Chiang Mai, 14.4.1951.

C. orchidastrum var. **simplex** (Craib) Charoenphol stat. nov.

Kerr 19472, Ta Salao, Kanchanaburi, 9.7.1930; Kerr 2204, (Type, Kew) Muang Hawt, 27.10.1912; 4th Unesco training expedition, Peninsular, Surat Thani, Khao Pra Rahu, 20.9.1963.

C. longissimum Ridl.

Ch. Charoenphol, Larsen & Warnke 4102, Peninsular, Yala, 21.10.1970; Kerr 7347, Bang Na Station, Pattani, 26.7.1923.

C. intermedium Craib

Kerr 773, (Type, Kew) Doi Suthep, Chiang Mai, 29.8.1909.

C. intermedium var. **subundulatum** (K.L.) Charoenphol stat. nov.

Sorensen, Larsen, & Hansen 2450, Loei, Pha Nok Khao, 23.3.1958.

C. laxum R.Br.

Kerr 5596, Chiang Mai, 4.6.1921; Collins 672, Sriracha, Aug. 1913;
Kerr 17925, Chanthaburi, 2.1.1930; Put 4101, Nakhon Sawan, 31.8.1931.

C. intermedium var. **pubescens** Charoenphol, var. nov.

K. Larsen, T.Santisuk and E. Warnke 2017, Chiang Mai, about 1100
m alt., 3.7.1968; Kerr 8434, Phu Kradueng, Loei, 11.3.1924.

EXCLUDED SPECIES

Chlorophytum finlaysonianum Wall. Cat. n. 5061 belongs to the genus
Dracaena cf. *graminifolia* Wall.

ACKNOWLEDGEMENTS

These studies has been made under supervision of Prof. Kai Larsen, Botanisk Institute, University of Aarhus to whom, I feel grateful for his criticism and the polishing of manuscript and also very thankful to Dr. B. Hansen, Botanisk Museum, University of Copenhagen who helped me in correcting the manuscript.

CORRECTION

Page	Line from the top	Should be read
68	24	<i>C. orchidastrum</i> var. <i>simplex</i> (Craib) Charoenphol <i>stat. nov.</i> Basionym: <i>C. simplex</i> Craib, Kew Bull. 1921 . 412: 1921.
69	3	<i>C. intermedium</i> var. <i>subundulatum</i> (K.L.) Charoenphol <i>stat. nov.</i> Basionym: <i>C. subundulatum</i> K. Larsen, Dansk Bot. Arkiv. 20 : 45. 1967.
69	8	<i>C. intermedium</i> var. <i>pubescens</i> Charoenphol <i>var. nov.</i>

A varietate typica differt pubescentia dimidiae partis superioris inflorescentiae.

It differs from the typical variety in being pubescent in the upper half part of the inflorescence.

I would like to thank Mrs. Fox Maule (Bot. Mus. Copenhagen) for the latin diagnosis.