

New and Interesting Plant Records for Singapore

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Abstract

Botanical collecting trips in Singapore from 1976 to end 1982 resulted in 5 new records and 15 other taxa which are rare and have not been collected here in recent years. Brief notes on these species, including their collecting localities and overall distribution, are included.

Introduction

Since the publication of Ridley's *Flora of the Malay Peninsula* (Ridley, 1922-25) which includes that of Singapore, only Keng's "Annotated List of Seed Plants of Singapore" (Keng, 1973-82, incomplete) is available. Although the Flora of Singapore is quite well-known and was updated by Sinclair (1953, 1956), I have had the opportunity since 1976 to collect and identify many local plant species — 5 of which have not been previously recorded for Singapore and 15 others which are either rare, flower or fruit infrequently, or have not been collected locally for many years. The information presented here is compiled from my own observations and searches in the herbarium, Botanic Gardens, Singapore. It is anticipated that further collecting in Singapore will result in additions to this paper.

Agavaceae

1. *Dracaena maingayi* Hk. f.

This spectacular tree, the height of which I have seen reaching 25-30 m, is perhaps the tallest species for the genus. Although there are several specimens in the Herbarium, collected in Singapore between 1885-1899 by Hullett, Ridley, and Mat, only a few of these trees at Bukit Timah and Labrador Nature Reserves and one from Bukit Kallang from which I collected fruits, are presently known. *Dracaena maingayi* Hk. f. is also known from Pahang, Perak, Malacca, and Johore. Voucher specimen: Maxwell 82-75, 2 Feb. 1982. Plate 1.

Anacardiaceae

2. *Mangifera macrocarpa* Bl.

New Record

This very interesting species was first brought to my attention by my colleague, Mr. Tay Eng Pin, who noticed it at Bukit Timah Nature Reserve early September 1982. I later went with him and another colleague, Encik Sidek bin Kiah, and found several vegetative juvenile specimens 1-4 m tall along Lower Path (Taban Path) in this forest. Subsequent searches in the Herbarium by Encik Mohd. Shah bin Mohd. Noor revealed the identity of this species. The latter has also been observed in the Labrador Nature Reserve.

Mangifera macrocarpa Bl. is, apparently, a very rare species throughout its range and has been found in Cambodia, peninsular Thailand, W. Malaysia (Kelantan, Trengganu, Pahang, and Malacca), Sumatra, Java, Sabah, Kalimantan, and the Anambas and Nunukan Islands. Almost all of the known collections of this species are vegetative, including the few we have here, and, according to several reports, this species rarely produces flowers and fruits (Hou, 1978). Voucher specimen: *Sidek 607*, 9 Sep. 1982.

Apocynaceae

3. *Epigynum forbesii* King & Gamble

New Record

Originally described from Sumatran material, this species is also known from a few collections from Sarawak and W. Malaysia (Kemaman and Johore). It was, therefore, surprising to find this species, a woody climber, along the margins of the swamp forest at Nee Soon. So far I have been unable to find other specimens of this rare species at Nee Soon or any other place in Singapore. Voucher specimen: *Maxwell 82-148*, 23 Apr. 1982. Plate 2.

Araceae

4. *Raphidophora sylvestris* (Bl.) Engl. var. *montana* (Bl.) Nicols.

This variety is frequently seen creeping up tree trunks in the evergreen forest at Bukit Timah Nature Reserve and in the swamp forest at Nee Soon. It has been collected at Chua Chu Kang by Goodenough in 1890 and by Ridley at the Bukit Timah Nature Reserve in 1899 and Bukit Panjang in 1905. My collection from the Nee Soon swamp forest is a flowering specimen and is, apparently the most recent addition of flowering/fruiting material to our herbarium since Ridley's collection in 1905. This variety is also found in Perak, Penang, and Malacca. Voucher specimen: *Maxwell 82-149*, 23 Apr. 1982.

Euphorbiaceae

5. *Neoscortechinia kingii* (Hk. f.) Pax & Hoffm.

New Record

This inconspicuous tree is known from scattered locations throughout W. Malaysia and has often been collected in swamp forests. The first record of this species from Singapore was fruiting material found at the Nee Soon swamp forest in December 1981 by two of my colleagues (*Shah and Ali MS 4157*). I later found fruiting material of this tree in the same area on 17 February 1982 (*Maxwell 82-44*) and female flowers were collected from the same tree on 23 April 1982 (*Maxwell 82-150*). This species is also known from Sarawak and Kalimantan. Plate 3.

Fagaceae

6. *Lithocarpus wallichianus* (Lind. ex Hance) Rehd.

Although this species is common in peninsular Thailand and W. Malaysia, it



Plate 1: *Dracaena maingayi* Hk. f., branch full of orange-red fruits. Photo by Mr. Hugh Tan.

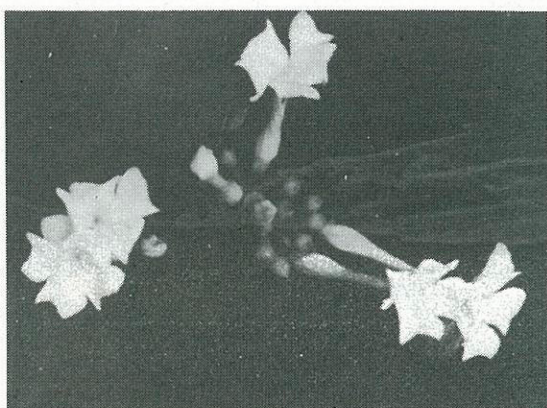


Plate 2: *Epigynum forbesii* K. & G., part of inflorescence showing the cream-coloured corollas. Photo by Mr. Hugh Tan.



Plate 3: *Neoscortechinia kingii* (Hk. f.) Pax & Hoffm., fruiting branches at Nee Soon. Photo by Dr. B..C. Stone, 24 Aug. 1982.

Plate 4: *Aeschynanthus wallichii* R. Br., upper part of plant showing the bright red corolla; photo by Mr. Hugh Tan.



Plate 5: *Memecylon cantleyi* Ridl., showing buds, open flowers, and fertilized flowers where the petals and stamens have fallen off. The white calyces and vivid blue of the petals and filaments, are quite attractive. Photo by Mr. Hugh Tan.



Plate 6: *Memecylon excelsum* Bl., branch with flowers and developing fruits. Photo by Dr. Ivan Polunin.

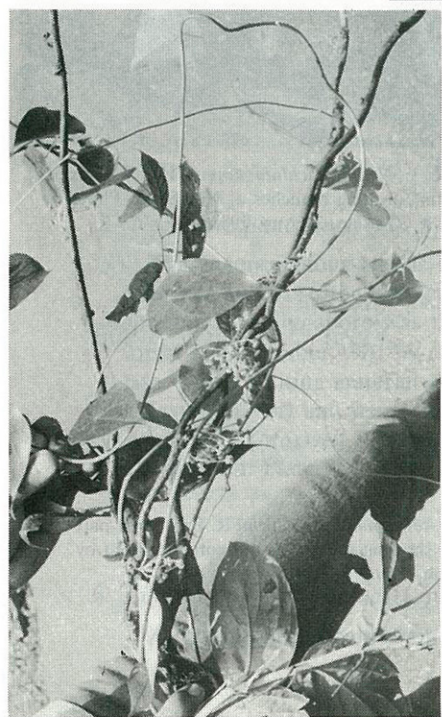


Plate 7: *Stephania capitata* (Bl.) Spreng., leafless lower stems with inflorescences and with leaves on the upper part. Photo by Dr. B.C. Stone.

has only been collected on a few occasions in Singapore. There are several specimens of this small tree in the herbarium — all collected by Ridley between 1889-1898 from Pulau Ubin, Changi, and Jurong. The material that I collected from Seletar Reservoir, near the Singapore Zoological Gardens on 26 August 1982, is apparently the only other collection of this rare species from Singapore. Voucher specimen: *Maxwell 82-241*.

Gesneriaceae

7. *Aeschynanthus wallichii* R. Br.

The earliest collection we have of this species from Singapore was gathered by Ridley at Kranji in 1889. The few other specimens from Singapore were collected at Chua Chu Kang (Mandai), Bukit Timah forest, and Jurong. Up to now, the most recent collection is from the swamp forest at Nee Soon and was made by Sinclair in 1948. This species is known from Trengganu, Perak, Malacca, and Johore, as well as Sarawak and Sumatra. This is a very rare and colourful species on account of its bright red corolla, and was found by me as a creeping/climbing vine on a tree trunk on 19 March 1982 (*Maxwell 82-80*) in the swamp forest at Nee Soon. Plate 4.

Lauraceae

8. *Litsea lancifolia* (Roxb.) Hk. f.

This understorey tree is known from southern Thailand and W. Malaysia (Perak, Pahang, Kelantan, Selangor, and Johore) where it is, apparently, very rare. The species is in record for Singapore by specimens collected by Mat at Seletar in 1894 and by Ridley at Bukit Panjang in 1900. My specimen was collected on 19 March 1982 in the evergreen/swamp forest at Nee Soon near the Rifle Range. Voucher specimen: *Maxwell 82-78*.

9. *Litsea ridleyi* Gamb.

This species, apparently only known from Singapore, is an understorey tree which has been collected at Changi by Goodenough in 1892 and in the Reservoir woods in 1983, along Holland Road by Hullett in 1893, and at Bukit Mandai by Ridley in 1892 and 1900. It was not until 1976 that another flowering or fruiting collection was made (Shah & Samsuri 3946) followed by a staminate collection which I made on 28 February 1982 (*Maxwell 82-61*) at the Bukit Timah Nature Reserve. This species is undoubtedly very rare and probably can only be found in the Bukit Timah forest and perhaps in the Catchment Area since its other collecting habitats have been destroyed.

Malpighiaceae

10. *Aspidopteris concava* (Wall.) Juss.

This woody climber, known from southern Burma, W. Malaysia (Kedah, Penang, Perak and Malacca) and Sumatra; is known from Singapore by two collections made by Ridley at Bukit Mandai (in 1892, fruits) and at Chua Chu

Kang (in 1894, flowers). The specimens that I collected in the open, disturbed undergrowth bordering the swamp forest at Nee Soon were in flower. I have been unable to find fruits of this very rare species on return visits. Voucher specimen: *Maxwell* 82-46, 17 Feb. 1982.

Melastomataceae

11. *Memecylon cantleyi* Ridl.

This small understorey tree is only known in Singapore from the evergreen forest at the Botanic Gardens, where it was first collected and described by Ridley in 1907. Our herbarium has several collections from the type locality of this species but it wasn't until earlier this year that I was able to collect material in flower (15 March 1982, *Maxwell* 82-68) and in fruit (19 April 1982, *Maxwell* 82-139) of this very rare species and from the same tree. I know of only two individuals of this species here.

Memecylon cantleyi Ridl. is known from Thailand, throughout W. Malaysia, and Simeulöe Island near Sumatra. Plate 5.

12. *Memecylon excelsum* Bl.

New Record

A single individual of this elegant tree species, one of the tallest in the genus in the Malay Peninsula, was found near Bukit Kallang on 27 August 1981 and has been observed to produce either flowers or fruits throughout most of the year. This species is also known from Nicobar Island, throughout the Malay Peninsula, Simeulöe Island, Mentawai Island (west of Sumatra), Sabah, and Kalimantan. It is well-represented in our herbarium and it seems unusual that it should be so rare in Singapore (*Maxwell*, 1980). Voucher specimen: *Maxwell* 81-202. Plate 6.

13. *Pachycentria maingayi* (Cl.) Maxw.

This epiphytic shrub, with swollen, myrmecophyllous (ant-inhabited) roots has been collected on a few occasions in Singapore by Maingay, Goodenough, and Ridley from Kranji, Bukit Timah forest, and a few other locales. Prior to my collection from the Singapore Zoological Gardens on 28 December 1976, the most recent specimen in the Herbarium was collected by Ridley in 1894 from Chua Chu Kang. Unfortunately, the plant at the zoo has since been destroyed due to "development" of the area. I do not know of any other place in Singapore where this species can be found, it is however, known from many scattered locales throughout W. Malaysia. Voucher specimen: *Maxwell* 76-825.

14. *Sonerila heterostemon* Naud.

Even though I have noticed a few small, immature specimens of this very colourful herb along the streams at the Bukit Timah Nature Reserve, I did not see flowering or fruiting material of this species until 21 October 1982. *Sonerila heterostemon* Naud. is very common throughout the Malay Peninsula and is also known from Sarawak and Sumatra. The plant is readily distinguished by

having six stamens and asymmetric leaf blades which are dark green with whitish dots on the upper surface and pale green with purple veins on the underside. Specimens of this species were collected at Bukit Timah in 1885 (Hullett), 1889 (Ridley), and 1928 (Holttum) as well as at Changi in 1892 (Ridley). My collection (*Maxwell 82-277*) is the most recent of this rare species in Singapore that our herbarium has.

Menispermaceae

15. *Stephania capitata* (Bl.) Spreng.

This inconspicuous and very rare, cauliflorous vine was collected in Singapore on several occasions by Ridley and Goodenough between 1889 and 1905 at Bukit Mandai, Seletar, Chua Chu Kang, and along Sungei Jurong. Apparently, my specimen collected in the Nee Soon swamp forest is the only collection we have from Singapore since 1905. This species is well-represented in our herbarium and is known from southern Thailand, throughout W. Malaysia, Sumatra, Java, Sarawak, Sabah, and the Philippines. Voucher specimen: *Maxwell 82-234*, 24 Aug. 1982. Plate 7.

Myristicaceae

16. *Myristica cinnamomea* King.

Although this tree species is known from throughout the Malay Peninsula, the East Coast of Sumatra, Sarawak, Brunei, Sabah, Kalimantan, and Mindanao; it is very rare in Singapore. The only specimens of this species from Singapore in the Herbarium are four collections (three with flowers and one with fruits) which were gathered by Ridley and Goodenough between 1881 and 1894 from Bukit Mandai, Changi, Sembawang, and Sungei Buloh. The specimens of this species that I collected in the evergreen forest of the Bukit Timah Nature Reserve along the Boundary Path below the Hindhede Hut on 11 November 1982 were in fruit. Voucher specimen: *Maxwell 82-288*.

Piperaceae

17. *Piper malaccense* C. DC.

New Record

This inconspicuous species, with an erect growth form, was found in the shaded swamp forest at Nee Soon on 29 July 1982 (*Maxwell 82-199*). There are in the Herbarium only a few collections of this apparently uncommon species from Negri Sembilan, Malacca, and Johore. Voucher specimen: *Maxwell 82-199*.

18. *Piper pedicellosum* Wall. ex C. DC.

This species was described from material collected in Singapore in 1822 and, apparently, has not been gathered here since. None of the original specimens is at our herbarium but there is material from Perak, Pahang, Selangor, Malacca, and Johore. It is also found in Assam and the Andaman Islands.

Piper pedicellosum is a climbing species and was found in fruit along the margins of the secondary forest at Bukit Kallang on 23 August 1981. Voucher specimen: *Maxwell 81-201*.

Rubiaceae

19. *Hedyotis trinervia* (Retz.) Roem. & Schult.

Ridley collected the only known specimen of this prostrate herb from Singapore at Gelang (Geylang) in 1896. I found this attractive species in an open, sandy area on Pulau Sudong on 28 November 1982. There are in the Herbarium a few collections of this apparently uncommon/rare species from Pahang, Perak, Province Wellesley, Penang, Sabah, and Sarawak; with further distribution in Sri Lanka, India, Sumatra, and Java. Voucher specimen: *Maxwell 82-295*.

Sterculiaceae

20. *Byttneria maingayi* Mast.

A common woody climber in Singapore in the past, as evidenced by the collections made by Cantley, Hullett, Goodenough, and Ridley between 1885 and 1894, this species has not, apparently, been recorded from Singapore since that time. Flowering collections were made at the swamp forest at Nee Soon on 26 February 1982, but fruits were not seen during subsequent visits on any of the plants originally observed. This species is also known from Penang, Malacca, and Johore. Voucher specimen: *Maxwell 82-59*.

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