

**TWO NEW SONERILA (MELASTOMATACEAE)
FROM BORNEO**

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*Central National Herbarium, Botanic Garden, Howrah-3, Calcutta****Sonerila rufidula* Nayar, sp. nov.**

Affinis *S. tenuifoliae* Bl., sed forma foliorum, petiolis minoribus, floribus solitaribus differt.

Herba erecta ca 25 cm alta (teste collectore). Caulis quadrangularis, ad nodos incrassatus, glaber, rubescens, parce setosus. Folia subaequalia, anguste oblonga vel elliptico-oblonga, 10—18 mm × 2.5—3.5 mm, basi cuneata, apice acuminata, margine valde serrata, glabra, in sicco rubescentia, 3-nervia, nervis principalibus subtus distinctis, venulis transversis absentibus, chartacea; petiolus 1.5—3 mm longus. Flores solitari, pedicellus 7—8 mm longus, glaber, rubescens. Calycis tubus campanulatus, 5—6 mm longus, 1.5—2 mm latus, glaber, rubescens, dentibus triangularibus, 1—1.5 mm longis. Petala elliptico-ovata, 7.5—8.5 mm × 4—4.5 mm. Stamina 3, filamentis 3—3.5 mm longis, antheris 3 mm longis, ad basim sagittatis, connectivo inappendiculato. Stylus filiformis, 7—8 mm longus, glaber, rubescens, stigmatate capitato. Capsula trigona, 5—6 mm longa, glabra; pedicellus 10—12 mm longus.

TYPUS: *Colletete 764* (K).

Herb, erect, about 25 cm tall. Stem quadrangular, thickened at the nodes, becoming reddish, glabrous or sparsely setose. Leaves subequal, narrowly oblong or elliptic-oblong, 10—18 mm × 2.5—3.5 mm, base cuneate, apex acuminate, margin very much serrate, glabrous, becoming reddish, 3-nerved, main nerve distinct on the undersurface, transverse veins absent, chartaceous; petiole 1.5—3 mm long. Flowers solitary, pedicel 7—8 mm long, glabrous, becoming reddish. Calyx tube campanulate, 5—6 mm long, 1.5—2 mm wide, glabrous, becoming reddish, calyx teeth triangular, 1—1.5 mm long. Petals 3, elliptic-ovate, 7.5—8.5 mm × 4—4.5 mm. Stamens 3, filament 3—3.5 mm long, anther 3 mm long, base sagittate, connective inappendiculate. Style filiform, 7—8 mm long, glabrous, becoming reddish, stigma capitate. Capsule trigonous, 5— mm long, glabrous; pedicel 10—12 mm long.

Sonerila rufidula is allied to *S. tenuifolia* Bl. but differs in the size of leaves and in the length of petiole and in having solitary flowers, whereas in *S. tenuifolia* the inflorescence is 3—8 flowered. This new

species is also allied to *S. crassiuscula* Stapf in the size of flowers, stamens and in the presence of reddish tinge on the stem and on the undersurface of the leaf. However, in *S. crassiuscula* the opposite leaves are three to four times unequal, the shape of leaf is elliptic or elliptic-ovate and the undersurface of leaf is strigose. While in *S. rufidula* the opposite leaves are subequal, the shape of leaf narrowly oblong or elliptic-oblong and the undersurface of leaf is mainly glabrous.

Because of the beautiful reddish-purple coloration of the stem, leaves and flowers, this new species is recommended as an ornamental plant. Since this plant grows at an altitude of 2700 m, it is suitable for growing as an ornamental plant in the hill stations of tropical countries. This can be cultivated as a small border plant or as bed plant.

BORNEO. Sabah: Mt. Kinabalu, Eastern shoulder, alt. 2766 m, 30 July 1961, Collette 764 (K).

Sonerila hirtiflora Nayar, *sp. nov.*

Herba adscendens, ca 20 cm alta. Caulis teretiusculus, dense glanduloso-furfuraceus. Folia inaequalia, ovata, 4—5 cm × 2.5—3.8 cm basi truncata vel obliqua, apice subobtusa, margine breviter serrulata, supra puberula, subtus punctata, ad nervos dense glanduloso-furfuracea, inter nervos sparse glanduloso-puberula, supra in sicco viridia, subtus in sicco pallide viridia, 7-nervia, venulis transversis haud conspicuis; petiolus 1—2.8 cm longus, dense glanduloso-furfuraceus. Inflorescentia axillaris, ad 3 cm longa, quam maxime gerens 5 flores, dense glanduloso-furfuracea; pedunculus 1—1.4 cm longus; pedicellus 4—5 mm longus. Calycis tubus campanulatus, 6—6.5 mm longus, dense glanduloso-furfuraceus limbus 3-dentatus, dentibus triangularibus, 0.8—1 mm longis. Petala obovata, 7 mm × 5 mm, venulata. Stamina 3, filamentis 2 mm longis, antheris cordato-ovatis, 1.8 mm longis, connectivo inappendiculato. Stylus 5—6 mm longus, stigmatate capitato.

TYPUS: Chew, Corner & Stainton 1332 (K).

Herb, ca 20 cm tall. Stem terete, densely glandulose furfuraceous. Leaves unequal, ovate, 4—5 cm × 2.5—3.8 cm, base truncate or oblique, apex sub-obtuse, margin minutely serrulate, uppersurface puberulous, undersurface punctate, on the nerves densely glandulose furfuraceous, in between the nerves sparsely glandulose puberulous, uppersurface when dry green, undersurface when dry pale green, 7-nerved, transverse venules not at all conspicuous; petiole 1—2.8 cm long, densely glandulose furfuraceous; peduncle 1—1.4 cm long; pedicel 4—5 mm long. Calyx tube campanulate, 6—6.5 mm long, densely glandulose furfuraceous, calyx limb 5-dentate, teeth triangular, 1—1.8 mm long. Petals obovate, 7 mm × 5 mm, venulate. Stamens 3, filament 2 mm long, anther cordato-ovate, 1.8 mm long, connective inappendiculate. Style 5—6 mm long, stigma capitate.

Sonerila hirtiflora Nayar is allied to *S. decipiens* Bakh. f. of Moluccas, but differs in its densely glandulose nature and larger calyx tube.

BORNEO. Sabah: Mt. Kinabalu, Minosuk Plateau, alt. 1838 m, 20 August 1961, Chew, Corner & Stainton 1332 (K).

ACKNOWLEDGEMENTS

I wish to express my gratitude to Sir George Taylor, Director, Royal Botanic Gardens, Kew, for all facilities during my stay at Kew from 1961—1967. My thanks are due to Director, Botanical Survey of India for his facilities.

In July and August 1972, I spent five weeks on an expedition to Sabah, Sarawak and other palms in the provinces of Sabah and West Sarawak. This central area of Borneo was chosen because expeditions have already been made to South Sarawak in February 1971 and March 1972 and to North Sarawak and Arah with the Kyoto University Expedition in August 1971, and preliminary collections made in this central area would link up collections from the main and peripheral wood lands and considerably to our knowledge of the palm flora of this rich island. After advice from the Department of Nature Conservation in Sarawak and from Dr. M. Jacobs in Edebe, Sarawak (London) had been considered, it was decided to work westward from Kerak Nature Reserve to the east coast near Nipah Panjang to the Pakih Barrier, the main range of Sarawak, to Gunung Rajah Nature Reserve and St. Pagan near Sungai Puch and from there across the western part of the Pakih Barrier to Pakih and Rindilingg, from Rindilingg it was planned to visit the artificial arecife Nature Reserve at Rajah Puch, and then return to Japan by way of Miri, Taba and Miri Tembesi, where reportedly there still exist several for of *B. nayarana* or less cultivated and collecting activities to the adjacent collected Pagan. It was hoped that within the time available a wide area could be covered reasonably and a palm herbarium for central Sarawak made. Two assistants from Bogor accompanied me to help in the difficult task of collecting material. Dedy Purwardi (then because Bogor) and Abdul Hanan (Kebun Raya). These two were also given individual collecting assignments as part of a scheme for training assistants in field botany. Dedy was to collect *Pterocarpus* and Hanan to collect material for growing in the Kebun Raya. Gusto Soewoko, head of Nature Conservation in Sabah accompanied us throughout the expedition.

From Sabah the Kerak Nature Reserve was reached by river boat to Nipah Panjang and by parahu to Sungai Air Hitam at Tanjung Jambay and the open sea, this latter part of the journey being accom-