G. S. Giri* & M. P. Nayar*: A new species of Sonerila
(Melastomataceae) from India

In the course of revisionary studies of the family Melastomataceae of India, the authors came across some materials under the genus Sonerila Roxb. These interesting materials did not match with any of the Indian species. Critical studies revealed that they are quite distinct from other species of the genus Sonerila so far described. The new species is described here with illustrations. The SEM studies of the seed coat has been carried out for the new species and for the species allied to it.

Sonerila talbotii Giri et Nayar, sp. nov. (Fig. 1)

Affinis S. versicolorae Wt. & Arn. sed foliis minoribus equilateralibus, apice acutis vel subrotundatis, calycis tubis pilosis, capsulis brevioribus 3-4 mm longis indistincte costatis differt.

Typus: Karnataka, North Canara, Aug. 4, 1883, W. A. Talbot 561 (Holo-
typus, CAL).

Small herbs, attaining 6-25 cm high, bulbous at base, bulb small, stem and branches weak, indistinctly quadrangular, reddish, sparsely to densely hairy, particularly at the younger parts. Leaves simple, usually opposite-decussate, ovate-lanceolate to lanceolate, (1.2-)2.0-3.0(-4.5) × (0.75-)1.0-1.5(-1.8) cm, base acute to subrounded, apex acute to shortly acuminate, pinnately veined, 4-5 pairs of secondary nerves arising from the midrib, margin indistinctly serrate or subentire, both surface scattered hairy, hairs whitish, minutely white spotted, both sides of leaves remain green or turn dull green on drying, membranous; petioles (2-)4-8(-10) mm long, puberulous. Inflorescence terminal or axillary from the upper leaf axils, 4-10 flowered, scorpoid raceme, puberulous, bracts subulate. Flower 3-merous; pedicel 3-6 mm long, gradually merging with the base of ovary, puberulous. Calyx-tube urceolate, 4-5 mm long, conical, scattered hairy, lobes broadly triangular, 0.5×0.75-1.0 mm, scattered hairy on the

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margin and dorsal side, midrib not prominent. Petals narrowly oblong, 8-10 × 2-3 mm, apex attenuate, dorsally with a few hairs on the midrib, rose or purple in colour. Stamens remain near the base of the petals, filaments 4-5 mm long; anthers gradually narrowed into a long beak, 5-6 mm long, pore apical, round. Ovary glabrous; style 8-10 mm long, stigma capitate. Capsules ovoid, enclosed
by the fruiting calyx-tube; fruiting calyx-tube widened above, indistinctly 3-ribbed, 3-5×2.5-4 mm, usually glabrous or rarely with a few hairs at the base when young. Seeds many.

Fls. & Frts. Simultaneously from July to September.
Seed morphology (SEM studies)

*Sonerila versicolor* Wt. & Arn. (Fig. 2 A–C)

Seeds small, ellipsoid, 0.75 × 0.25 mm, dark brown to black in colour, raphe remaining out into a lateral appendage; dorsally covered with small and large tubercles (Fig. 2A). Large tubercles are pyramidal with a broad base and a rosette head. Boundaries of epidermal cells remain indistinct. Small round pusticles appear in between the large pyramidal tubercles (Fig. 2B). The exposed surface in between the small pusticles remain rugose (Fig. 2C).

*Sonerila talbotii* Giri et Nayar (Fig. 2D–F)

Seeds small, ellipsoid, 0.5 × 0.25 mm, dark brown in colour, raphe remaining out into a lateral appendage, dorsally covered with small and large tubercles (Fig. 2D). Large tubercles are of different sizes and usually oval or round in shapes, surface of the large tubercles covered with small pusticles. Boundaries of epidermal cells usually distinct and lined with large pusticles (Fig. 2E). The exposed surface in between the small pusticles remain smooth (Fig. 2F).

Distribution. India: Karnataka, North Canara, Aug. 4, 1883, Talbot 561

Tab. 1. Comparison of various characters in *Sonerila talbotii*, *S. versicolor* and *S. rheedii*.

<table>
<thead>
<tr>
<th></th>
<th><em>S. versicolor</em></th>
<th><em>S. talbotii</em></th>
<th><em>S. rheedii</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plants</td>
<td>Erect, attaining upto 75 cm high or more, without a bulbous base</td>
<td>Erect, small, 6–25 cm high, with a bulbous base</td>
<td>Usually decumbent</td>
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<tr>
<td>Leaves</td>
<td>Ovate to broadly ovate, 5–9 × 3–4.5 cm, base distinctly unequal-sided, margin serrate, densely hairy particularly on the upper surface</td>
<td>Small, ovate-lanceolate to lanceolate, 2–3 × 1.0–1.5 cm, base acute to subrounded, equal-sided, subentire to indistinctly serrate, scattered hairy on both surfaces</td>
<td>Ovate to broadly ovate, 6–10 × 3–5 cm, base rounded, equal-sided, margin serrate, densely hairy particularly on the upper surface</td>
</tr>
<tr>
<td>Calyx-tube</td>
<td>Glabrous</td>
<td>Pilose</td>
<td>Pilose</td>
</tr>
<tr>
<td>Anthers</td>
<td>With a distinct narrow beak</td>
<td>With a distinct narrow beak</td>
<td>Broadly triangular, without a distinct narrow beak</td>
</tr>
<tr>
<td>Capsules</td>
<td>Large, 8–10 mm long, triangular, distinctly 3-ribbed</td>
<td>Small, 3–4 mm long, cup-shaped, indistinctly ribbed</td>
<td>Small, 3–4 mm long, cup-shaped, indistinctly ribbed</td>
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</table>
(Holotype); Maharashtra, Ankola, Aug. 25, 1953, J. C. Dhruna 202 (Paratype, CAL).

Notes. The new species is closely allied to S. versicolor Wt. & Arn., but can be easily distinguished by a number of characters. By the nature of its small capsules it is related with S. rheedii Wt. & Arn. A distinguishing key is given in Tab. 1 for easy identification.

The new species is named after its collector W. A. Talbot, a remarkable collector and a pioneer worker for the Southern and Western Indian plants.

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Indiaの植物の再検討中に Sonerila の1新種を発見したので、S. talbotii として記載した。植物体の基部がバブル状に膨らむ点や、葉、がく筋、軸、さく果の形質などで、近縁の S. versicolor および S. rheedii と区別される。また、S. talbotii と S. versicolor における種皮の走査電子顕微鏡像についても比較した。