## A NEW VARIETY OF NEANOTIS MONOSPERMA (WT. \& ARN.) LEWIS [RUBIACEAE] FROM SOUTH INDIA

Neanotis monosperma (Wt. \& Arn.) Lewis elliptico-lanceolatis, acutis et ciliatis; capvar. tirunelvéica A. N. Henry \& M. sulis ca $3 \times 2.5 \mathrm{~mm}$ ( $c a 2 \times 2 \mathrm{~mm}$ in var. Chandrabose var. nov. var. monospermae affinis, tamen differt: floribus, praecipue cymis simplicibus axillaribusque dispositis; lobis calycis $2-2.5 \times 0.7$ mm (ca $0.7 \times 0.5 \mathrm{~mm}$ in var. monosperma),
monosperma), , pilosis, lobis prominentibus calycis coronatis.
Allied to var. monosperma, but differs in . having flowers arranged in mostly axillary, simple cymes; calyx-lobes $2-2.5 \times 0.7-1 \mathrm{~mm}$


Neanotis monosperma var. tirunelvelica Henry \& Chandr.
Figs. 1-5 : 1. Plant. 2. Flower. 3. Flower (corolla removed). 4. Fruit. 5. Seed (dorsal and side views).
(ca $0.7 \times 0.5 \mathrm{~mm}$ in var. monosperma), ellip-tic-lanceolate, acute, ciliate; and capsules ca $3 \times 2.5 \mathrm{~mm}$ (ca $2 \times 2 \mathrm{~mm}$ in var. monosperma), pilose, crowned with the prominent calyx-lobes.
Slender herbs; branches ascending, rooting at lower nodes, pilose. Leaves $1-3 \cdot 5 \times$ $0.5^{-2} \mathrm{~cm}$, ovate, elliptic-ovate or ovate-lanceolate, entire, sparsely pilose, acute or subacute at apex, cuneate at base; petioles up to 1.5 cm long, sparsely pilose, dialated at base; stipules interpetiolar, adnate with the petioles, pectinate with $3-4$ bristles. Flowers subsessile, few in mostly axillary (rarely terminal), simple cymes; peduncles 0.1 .5 cm long, filiform, pilose. Calyx-lobes 4, each 2-2.5× $0.7-1 \mathrm{~mm}$, elliptic-lanceolate, acute, ciliate. Corolla pinkish white, funnel-shaped; tube $3.5-4 \mathrm{~mm}$ long ; lobes 4 , each $1.5 \times 1.5 \mathrm{~mm}$, broadly ovate, acute, reflexed, hairy at the tip. Stamens 4 , inserted on the mouth of corolla-tube ; filaments short, anthers dorsifixed. Disc epigynous, cushion-shaped. Ovary 2-loculed, adnate with the calyx-tube; ovules 2-3 in each locule, on placentas arising from the base of septum; style long;
filiform, bifid; stigma linear. Capsules $3 \times$ 2.5 mm , subglobose, pilose, crowned with calyx lobes, 2 -loculed, dehiscing septicidally. Seeds $2 \times 1.5 \mathrm{~mm}$, brownish black, boat-shaped, palnoconvex, excavated on one face, pitted. (Figs. 1-5).
The holotype Henry 17454 A (CAL) and isotypes Henry ${ }^{1} 7454 \mathrm{~B}-\mathrm{F}$ (MH) were collected from Manjanamparai in Singampatti R. F., Tirunelveli District, Tamil Nadu, South India on 4.9.1963.

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A. N. Henry and M. Chandrabose<br>Botanical Survey of India, Coimbatore

## BUL-BIL SHOOTS IN ARENGA ENGLERI BECC.

Arenga engleri Becc. is a suckering palm of sub-family Caryotoideae. It is monocarpic in nature and inflorescences develop basipetally till the stem exhausts and dies. There is one Arenga engleri cluster in the Indian Botanic Garden, Howrah where in each mature stem vegetative shoots are formed from axillary buds instead of normal inforescences. These axillary buds may be one or more from each leaf axil and in the sequence of development, the central bud opens first followed by the laterals. This
sequence is maintained from buds of the upper most leaf axil. These shoots do not develop into a full grown axillary branch but dry up gradually. Two bul-bil shoots were collected for examining their structure. Each shoot cons:sts of a small axis covered alternately with stiff spathes having tubular bases and oblique open ends, 8 -1I in number. The length of spathes ranges from 3.5 to 13.5 cm , the middle spathe being the longest. The central axis terminates with a dormant bud. These shoots proved

