STUDIES IN MALESIAN VITACEAE VIII. A NEW SPECIES OF AMPELOCISSUS FROM THE PHILIPPINES

A. LATIFF

Department of Botany, Universiti Kebangsaan Malaysia, 43600 UKM Bangi, Malaysia

SUMMARY

Ampelocissus madulidii, a new species from Eastern Samar Island, the Philippines, is herein described. It is compared with its nearest allies, A. pterisanthella and A. complanata (both from Sarawak, Borneo).

INTRODUCTION

In revising the genus Ampelocissus in Malesia, one interesting and undescribed species from eastern Samar Island in the Philippines has been encountered in the Rijksherbarium, Leiden, and is published here. Some nine species of Ampelocissus have been described from the Philippines, six of which are endemic. With the addition of this new endemic species the number for the Philippines becomes ten (Latiff, 1985).

Planchon (1887) and Suessenguth (1953) recognised four sections in the genus: section *Ampelocissus* Planch., section *Kalocissus* (Miq.) Planch., section *Eremocissus* Planch., and section *Nothocissus* (Miq.) Planch.

Ampelocissus sect. Ampelocissus is characterised by a thyrsoid and cymose type of inflorescence, and occurs in tropical Africa, Asia, and Australasia; sect. Kalocissus is characterised by a panicle of either racemes or spikes and occurs in tropical Asia and Australia, while sect. Eremocissus, which is characterised by a simple racemose inflorescence, is confined to tropical America, especially the West Indies. Sect. Nothocissus has been elevated to a generic status (Latiff, 1982a).

The axes of the inflorescences in all species of Ampelocissus are somewhat slender and tubular except in two species, A. pterisanthella (Ridley) Merr. and A. complanata Latiff. In these endemic species of Borneo both the primary rachis and secondary axes are somewhat flattened, simulating those of the inflorescence of Pterisanthes (Latiff, 1982b). All other characters are similar.

Ampelocissus madulidii Latiff, spec. nov. - Fig. 1.

Liana caulis gracilibus striatis rubro-tomentosis ca. 0,3 mm diametro, foliis simplicibus tenuiter coriaceis ovato-oblongis, apice acuminato, basi cordata, margine sinuato-spinuloso, venis primariis

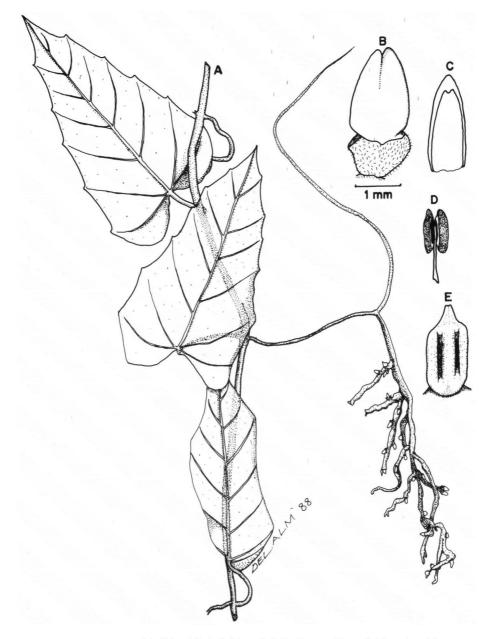


Fig. 1. Ampelocissus madulidii Latiff. A. habit, \times 0.5; B. flower; C. petal; D. anther; E. gynoecium (from Madulid PNH 118367).

utroque latere 7–9; lamina 10,2 ad 15,4 cm longa et 5 ad 6,4 cm lata, supra (glabra?) scraba sed nervis rubro-tomentosis, subtus dense arachnoidea; petiolo 2,7–3,5 cm longo dense rubro-tomentoso. Cirrhi simplices ca. 8 cm longi. Inflorescentiae paniculatae ex spicis vel racemis constans ca. 10 cm longae, axibus secundaribus complanatis, pedunculo ca. 4,2 cm longo, ramis primariis ca. 2,5 cm longis, floribus subsessilibus vel sessilibis 4-meribus, calycibus ca. 1 mm diametro subcupulifor, mibus truncatis, petalis oblongis obtusis ca. 2 mm longis, flamentis ca. 1,8 mm longis filiformis, disco plus minusve ovoideo longitudinaliter 4-sulcato, antheris oblongis ca. 0,6 mm longis et 0,4 mm latis, stylo brevi stigmate minuto manifeste lobato. Bacca ignota. — T y p u s : *D.A. Madulid et al. PNH 118367* (field no. 1400), eastern Samar, Barrio Sta. Rita, Balangiga, May 1971 (L, holo; PNH, iso).

Liane. Stem slender, striate, c. 0.3 cm diameter, covered with woolly reddish tomentum. *Leaves* simple, thin coriaceous, ovate-oblong, apex acuminate, base cordate, margin sinuate with bristles; nerves 7–9 pairs; rough above, densely arachnoidhairy below; 10.2–15.4 cm long, 5–6.4 cm wide; petiole 2.7–3.5 cm long, densely tomentose. Tendril simple, c. 8 cm long. *Inflorescence* a panicle of spikes or racemes, membranaceous, c. 10 cm long, secondary rachis flattened. Peduncles c. 4.2 cm long; primary branches of inflorescence c. 2.5 cm long. *Flowers* subsessile or sessile, 4-merous. Calyx c. 1 mm diameter, subcupuliform, truncate. Petal oblong obtuse, c. 2 mm long. Filament c. 1.8 mm long, filiform; disc more or less ovoid, longitudinally 4-sulcate. Anther oblong, c. 0.6 mm long, 0.4 mm wide; style short; stigma minute, manifestly lobed. *Fruits* and *seeds* not observed.

Distribution. Philippines, eastern Samar.

E c o l o g y. This species was collected from a clearing of lowland dipterocarp forest at c. 300 m altitude.

Ampelocissus madulidii is hereby tentatively put in sect. Kalocissus. Its nearest allies are doubtless A. pterisanthella (known from three collections from Sarawak, Borneo) and A. complanata (known from a single collection from Sarawak). The three species can be differentiated as follows:

1a. Leaves simple; flowers subsessile or sessile A. madulid	i
b. Leaves compound; flowers pedicellate	2
2a. Leaf blade obovate, 7.2-7.8 cm long, 3-3.7 cm wide; nerves 4 or 5 pairs	
A. pterisanthell	a
b. Leaf blade lanceolate, 5.5-5.9 cm long, 1.4-1.7 cm wide; nerves 3 pairs	
A. complanat	a

It seems too premature to speculate on the possible relationship within sect. *Kalocissus* as these three species are known from either their holotypes only or from too few specimens. At present sect. *Kalocissus* is thought to consist of species with the following diversity of inflorescence:

Group 1 – Inflorescence consists of a panicle of spikes; flowers are sessile on secondary axes; calyx saucer-shaped (A. cinnamomea, A. ochracea, A. poly-thyrsa, A. thyrsiflora, A. gracilis, etc.).
 Distribution: Sumatra, the Malay Peninsula, Java, Borneo, the Philippines, and Papua New Guinea.

- Group 2 Inflorescence consists of a panicle of racemes; flowers are short-pedicelled on secondary axes; calyx subcupuliform (e.g. A. pedicellata, A. dolichobotrys).
 Distribution: Borneo and the Philippines.
- Group 3 Inflorescence consists of a panicle of pseudo-lamellae; flowers are short-pedicelled or sessile on flattened axes simulating lamellae; calyx subcupuliform (A. pterisanthella, A. complanata, and A. madulidii).
 Distribution: Borneo and the Philippines.

In an effort towards improving the infrageneric classification of the genus it would be appropriate to view Group 1 and Group 2 above as two new subsections of sect. *Kalocissus* and Group 3 as constituting a separate and new section. The third group may be considered a link between *Ampelocissus* sect. *Kalocissus* and *Pterisanthes* sect. *Pterisanthes*. Morphologically, *A. pterisanthella*, *A. complanata*, and *A. madulidii* are still within the delimitation of *Ampelocissus*, but they stand nearer to *Pterisanthes* in their inflorescence morphology. Its geographical position, confined to Borneo and the Philippines, is very interesting as it coincides with the supposed centre of diversity for *Ampelocissus* and *Pterisanthes*.

ACKNOWLEDGEMENTS

I am grateful to Prof. Dr. C. Kalkman, Director of the Rijksherbarium, Leiden, and the staff of the Rijksherbarium for the use of herbarium facilities, and in particular to the late Prof. Dr. C.G.G.J. van Steenis, who made my visit to Leiden possible. I particularly thank Dr. B.C. Stone, Department of Botany, Academy of Natural Sciences of Philadelphia, for his criticism of the manuscript and also for the Latin diagnoses, Dr. D.A. Madulid (after whom the species is named) for making his collection notes available, and Mr. Razali Jaman for drawing the figure of Ampelocissus madulidii.

REFERENCES

- LATIFF, A. 1982a. Studies in Malesian Vitaceae. II. Nothocissus: A new Malesian genus. Fedn. Mus. J. n.s. 27: 69-74.
- 1982b. Studies in Malesian Vitaceae. III. A new species of Ampelocissus from Borneo. Fedn. Mus. J. n.s. 27: 75-77.
- 1985. Vitaceae of the Philippines: their taxonomic and geographic affinities. Paper presented at the Pacific Science Association Inter-Congress, Manila, February 1985 (mimeo).
- PLANCHON, J.E. 1887. Monographie des Ampélidées vrais. In: A. de Candolle, Monog. Phan. 5, 2: 306-654. Paris.
- SUESSENGUTH, C. 1953. Vitaceae. In: A. Engler & K. Prantl, Die natürlichen Pflanzenfamilien ed. 2, 20d: 235-329. Berlin.