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Short Communication

A new combination in *Clematicissus* Planch. (Vitaceae)

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When the genus *Cissus* was revised (Jackes 1988) the decision was made to retain the species *Cissus opaca* F.Muell. in the genus until molecular studies indicated its true affinities. *Cissus opaca*, an eastern Australian species, shares a number of morphological features with the Western Australian species *Clematicissus angustissima* (F.Muell.) Planch., and with the South American species *Cissus tweedieana* (Baker) Planch. These features are: a vine or sprawling shrub; tuberous roots; great variation in size and shape of adult leaves even within the same population; inflorescences arise from one or both branches of a leaf-opposed tendril and flowers are 5-merous. Many of these characteristics are also exhibited by both subspecies of *Rhoicissus tridentata* (L.f.) Wild & Drumm (Urton et al. 1986). *Clematicissus angustissima* can be distinguished from *Cissus* by the 5-merous flowers, the presence of the inflorescence arising on the tendrils and the structure of the endosperm., as well as from most species of *Cissus*, as currently circumscribed, by the compound leaves and the fruit which often has more than 1 seed; features also shared by *C. opaca*. *Cissus opaca* also exhibits considerable variation in leaf morphology between juvenile and adult leaves in young plants arising from seed as well as in aerial parts developing from the resprouting of the underground tuber; this leaf polymorphism is particularly noticeable for individuals growing in moist situations.

Phylogenetic analyses by Rossetto et al. (2002) using sequence data from plastid (the *trnL* intron) and nuclear (ITS1) DNA strongly supported a clade comprising *Cissus opaca* and *Clematicissus angustissima* as being separate from the other Australian species analysed. Thus a new combination is required. Subsequent studies indicate that *Cissus tweedieana* forms a clade sister to *Clematicissus* along with *Cissus striata* Ruiz & Pav., another South American species (Rossetto et al. submitted). A study by Soejima & Wen (2006) indicated that *Cissus striata* was closely related to several species of *Rhoicissus*. Further studies, particularly molecular and developmental, are required to resolve these relationships.

Clematicissus opaca (F.Muell.) Jackes & Rossetto ***comb. nov.***

Basionym: *Cissus opaca* F.Muell., *Trans. & Proc. Philos. Inst. Victoria* 3: 23 (1859). Holotype: Brigolow [sic] scrub of eastern Australia (MEL 539836).

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Key to the species of *Clematicissus*

Flowers in a loose umbel, endosperm in transverse section W-shaped, New South Wales and Queensland ..... ***C. opaca***

Flowers in a contracted umbel or head, endosperm in transverse section U-shaped, Irwin District Western Australia ..... ***C. angustissima***

Both species are illustrated in Austrobaileya 2(5): 497 (Jackes 1988) and Austrobaileya 3(1): 102 (Jackes 1989) respectively.

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