






## PERSPECTIVE ARTICLE

# *Eucalyptus* was not the problem: A response to “The genus problem – *Eucalyptus* as a model system for minimising taxonomic disruption” by Nicolle & al.

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**Abstract** In a recent perspective paper in *Taxon*, Nicolle and coauthors advocate a broad circumscription of the Australian genus *Eucalyptus* (Myrtaceae), based on six “rules” for delimiting plant genera. The current consensus, established through the Australian Plant Census (APC), is a three-genus classification system (*Angophora*, *Corymbia*, *Eucalyptus*) that has been widely accepted for almost 20 years. We argue that their application of the “rules” to eucalypts is questionable as it sometimes uses misleading or misinterpreted evidence, and misrepresents the current status of eucalypt taxonomy.

**Keywords** *Blakella*; generic delimitation; hybridisation; monophyly; reproductive isolation; taxonomic disruption

## ■ INTRODUCTION

A recent perspective paper in *Taxon* (Nicolle & al., 2025) recommended a very broad circumscription for the important Australian genus *Eucalyptus* L’Hér. (Myrtaceae), based on six “rules” that the authors argue should be applied in all studies delimiting plant genera. Nicolle & al. (2025) used said rules to promote the notion that the genera *Angophora*, *Blakella*, *Corymbia*, and *Eucalyptus* should be classified into a single genus—*Eucalyptus* L’Hér. The perspective warrants a reply on two fronts: first, to address some inaccuracies in the paper on the current state of eucalypt taxonomy in Australia; second, to address the application of the suggested rules to the eucalypts. These issues are important given that two recent taxonomic

revisions of eucalypts published (Crisp & al., 2024; Nicolle, 2024) proposed widely divergent classifications.

## ■ CURRENT CONSENSUS ON EUCALYPT TAXONOMY IN AUSTRALIA

Key to the perspective of Nicolle & al. (2025) is an assessment of the taxonomic status quo for a genus, given that they enjoin taxonomists to maintain the status quo as much as possible. Nicolle & al. (2025) make statements that are somewhat misleading by ignoring the majority consensus for almost 20 years reached by Australian botanists concerning generic limits in the eucalypts.

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In Australia, a formal process of taxonomic consensus on the application of names and delimitation of plant taxa was commenced in 2005 with the development of the “Australian Plant Census” (APC, available at <https://biodiversity.org.au/nsl/services/search/taxonomy>; see also Entwisle, 2002, 2003). The APC provides an agreed national vascular plant taxonomy and provides the taxonomic backbone for national systems such as the “Australasian Virtual Herbarium” (AVH, available at <https://avh.ala.org.au>). Agreement on accepted names and delimitations in the APC is reached by majority consensus amongst all major Australian herbaria, with any (very rare) cases of failure to agree adjudicated by the national peak body, Council of Heads of Australasian Herbaria (CHAH). The APC is an ongoing and dynamic process as new taxonomic treatments and classifications are made and published. Of course, it is not a requirement that all individual taxonomists agree with the consensus decision of the APC; rather, it represents a considered majority view.

At its inception, the consensus taxonomy developed through the APC process accepted three genera of eucalypts: *Corymbia* K.D.Hill & L.A.S.Johnson, *Angophora* Cav. and *Eucalyptus* L’Hér., guided by EUCLID (Slee & al., 2006), which had accepted the revision of Hill & Johnson (1995). The APC taxonomy of eucalypts has not changed since 2006. In contrast, Nicolle & al. (2025) claim that *Corymbia* has been “variously accepted and [is] somewhat controversial”. “Varilyously” is an inappropriate term to describe the overwhelming use of the three-genus classification over the past 30 years by taxonomists, phylogeneticists, ecologists and eucalypt enthusiasts in published material including informally published classifications (e.g., Nicolle, 2022), field guides and reference books (e.g., Ritter, 2014; French & Nicolle, 2019), phylogenetic analyses (e.g., Ladiges & al., 1995; Parra-O. & al., 2009; Jones & al., 2016; Schuster & al., 2018; Thornhill & al., 2019; McLay & al., 2023), taxonomic work (e.g., Nicolle & Jones, 2018) and vegetation reports (e.g., Bell, 2004; Bell & Stables, 2012). The main (and possibly only) proponent, in print, for a one-genus classification for *Eucalyptus* in the past 30 years, prior to Nicolle & al. (2025), was Brooker (2000). Problems with Brooker’s classification and the reasons why a multiple-genus classification of eucalypts is preferable were outlined by Ladiges & Udovicic (2000). Furthermore, Brooker adopted the three-genus classification in EUCLID (Slee & al., 2006), the most widely used interactive identification key to eucalypts, which he co-authored.

Nicolle & al. (2025) state that “The most recent classification of the eucalypts (Nicolle, 2024a) has also already reverted to the one-genus classification of Brooker (2000)”. This skews the perspective in respect of the least disruptive way to deal with the non-monophyly of *Corymbia* s.l. The current classification recognised and used in Australia is the three-genus system. The claim is incorrect that the one-genus system is accepted, and this leads to Nicolle & al. underestimating the name-changes needed under the one-genus system, and overestimating for the other systems. By claiming that the

one-genus system is “accepted”, Nicolle & al. are ignoring, or even by-passing, the APC process that has served the Australian plant taxonomic community so well, and could be indicating to readers that the APC should not be followed (thereby undermining the APC).

## ■ THE APPLICATION OF GENUS-LEVEL “RULES” TO THE EUCALYPTS

Nicolle & al. (2025) propose a set of “rules” that they argue should be applied whenever a demonstrably non-monophyletic genus is revised. Applying these “rules”, they argue for sinking the three currently recognised genera into a broadly circumscribed *Eucalyptus* s.l. Here, we address each of their arguments based on the proposed “rules” and show that they are not supported by evidence. We do not address “Rule 4” (that retypification should be used whenever possible to minimise nomenclatural disruption to binomials) as it is not relevant in the case of eucalypt genera. Note that we use “rule” in quotes, as they cannot be applied unambiguously in practice and comprise no more than general recommendations or “rules-of-thumb”.

**“Rule 1: If a genus is found to be non-monophyletic, then actions to render it monophyletic should minimise current and future taxonomic disruption”; and “Rule 2: If a genus is already monophyletic, maintain the status quo”.** — These two “rules” essentially advocate minimising current and future disruption to binomials, and only making changes where required. We agree that this is a worthy goal and a factor that should be considered in both taxonomy and nomenclature. However, the way Nicolle & al. (2025) apply the rules to the eucalypts is open to question.

Since 2006, there has been no published objection that challenged the APC position of the three genera *Angophora*, *Corymbia* and *Eucalyptus*, until the proposal by Crisp & al. (2024) to raise *C.* subg. *Blakella* to genus level prompted Nicolle (2024) to synonymise all eucalypts into *Eucalyptus*. One of the major arguments used by Nicolle & al. (2025) to justify this action was that it would result in the fewest changes to “the status quo”. They accept (p. 499) that the status quo is the three-genus classification, as used in the APC and internationally (e.g., “Plants Of the World Online”, POWO – <https://powo.science.kew.org/>, and the “International Plant Names Index”, IPNI – <https://www.ipni.org/>). However, the calculations Nicolle & al. (2025) show for “taxonomic disruption” are based on the pre-1995 two-genus eucalypt classification (*Angophora* + *Eucalyptus*). If the calculations are, instead, based on the currently accepted three-genus classification, then synonymising the three genera into *Eucalyptus* actually results in more changes than erecting a fourth genus, *Blakella* (Table 1). Of course, as with all genera, the four eucalypt genera could be split further: for example, the three subgenera of *Blakella* as classified by Crisp & Cook (in Crisp & al., 2024) could be raised to genus rank. However, there is no advantage in doing this, and we do not recommend it.

There is no doubt that *Angophora* is monophyletic (e.g., Schuster & al., 2018; Thornhill & al., 2019; Crisp & al., 2024). *Angophora* was erected as a genus, separate from *Metrosideros* Banks ex Gaertn., in 1797 (Cavanilles, 1797).

The first *Angophora* had been described as *Metrosideros costata* Gaertn. by Gaertner (1788), with *Metrosideros* being used at that time as a catch-all genus for Myrtaceae from Oceania, which also included genera now recognised as

**Table 1.** Suggested classification systems for eucalypts in the literature, and the potential effects of their implementation compared with the current Australian Plant Census (APC) classification. Where information in the present paper differs from Nicolle & al. (2025), the two alternative perspectives are provided.

Classification	Australian Plant Census status	Transfers	Genus/Genera (support in phylogenies)	Binomials to be changed from current accepted classification <sup>1</sup>	Nicolle’s taxonomic disruption definition	Ease of differentiating genera in field
<b>Three-genus classification</b> ( <i>Angophora</i> , <i>Corymbia</i> , <i>Eucalyptus</i> ) of Hill & Johnson (1995)	Current APC classification (since 2006)	None. Current eucalypt classification	<i>Angophora</i> (strong support for monophyly), <i>Eucalyptus</i> (strong support for monophyly), <i>Corymbia</i> (strong support for non-monophyly)	Current APC classification	n/a	<b>Nicolle &amp; al.:</b> Some difficulty <b>This paper:</b> No comment
<b>One-genus classification</b> of Brooker (2000)	Not accepted in APC (considered in 2006)	Incorporate <i>Angophora</i> and <i>Corymbia</i> into <i>Eucalyptus</i>	<i>Eucalyptus</i> (moderate support for monophyly – many studies have found equivocal support for monophyly)	<b>Nicolle &amp; al.:</b> 10 <b>This paper:</b> 107	Minor	<b>Nicolle &amp; al.:</b> No comment <b>This paper:</b> Extremely difficult. Everything is <i>Eucalyptus</i> so no one character to define the genus. Some characters can be confused with <i>Syn-carpia</i> , <i>Stockwellia</i> and <i>Lophostemon</i>
<b>Four-genus classification</b> of Crisp & al. (2024)	Not yet considered by APC	Retain <i>Eucalyptus</i> and <i>Angophora</i> . Split <i>Corymbia</i> sensu K.D.Hill & L.A.S.Johnson into <i>Corymbia</i> s.str. and <i>Blakella</i>	<i>Angophora</i> (strong support for monophyly), <i>Blakella</i> (strong support for monophyly), <i>Corymbia</i> (strong support for monophyly), <i>Eucalyptus</i> (strong support for monophyly)	<b>Nicolle &amp; al.:</b> 36 <b>This paper:</b> 36	Major	<b>Nicolle &amp; al.:</b> Extremely difficult <b>This paper:</b> Somewhat difficult if buds not present. Relatively easy if sections identified first
<b>Two-genus classification</b> ( <i>Angophora</i> , <i>Eucalyptus</i> )	Considered by Thornhill & al. (2019) but new combinations not published	<i>Angophora</i> re-circumscribed to include <i>Corymbia</i> and <i>Blakella</i>	<i>Angophora</i> (strong support for monophyly), <i>Eucalyptus</i> (strong support for monophyly)	<b>Nicolle &amp; al.:</b> 97 <b>This paper:</b> 97	Major	<b>Nicolle &amp; al.:</b> Some difficulty <b>This paper:</b> No comment
<b>Three-genus classification</b> ( <i>Angophora</i> , <i>Blakella</i> , <i>Eucalyptus</i> )	Considered by Nicolle & al. (2025) but new combinations not published	<i>Angophora</i> re-circumscribed to include <i>Corymbia</i> s.str., remaining <i>Corymbia</i> transferred to genus <i>Blakella</i>	<i>Angophora</i> (strong support for monophyly), <i>Blakella</i> (strong support for monophyly), <i>Eucalyptus</i> (strong support for monophyly)	<b>Nicolle &amp; al.:</b> 97 <b>This paper:</b> 69 <i>Corymbia</i> s.str. and 38 <i>Blakella</i> need new combinations	Major	<b>Nicolle &amp; al.:</b> Very difficult <b>This paper:</b> No comment

<sup>1</sup>Based on currently accepted binomials in APC.

*Eucalyptus*, *Melaleuca* L. and *Kunzea* Rchb., among others. *Angophora* was never included in *Eucalyptus* until Brooker (2000), but this synonymy was not accepted by the APC or POWO. So, if *Angophora* were to be recognised as a synonym of *Eucalyptus*, then a demonstrably monophyletic genus that has been recognised for two centuries would be lost. This contradicts Nicolle & al.'s (2025) “Rule 2—If a genus is already monophyletic, maintain the status quo”.

The issue of non-monophyly among the eucalypts is not with *Eucalyptus*, but with *Corymbia* as it was delimited under the accepted three-genus classification by Hill & Johnson (1995). As first noted by Sale & al. (1996) using chloroplast genes, in later studies using a few nuclear and chloroplast loci (Steane & al., 1999; Udovicic & Ladiges, 2000; Whittock & al., 2003; Bayly & al., 2013; Schuster & al., 2018; Thornhill & al., 2019), and most recently using multiple nuclear genes (Crisp & al., 2024), *Corymbia* s.l. is not monophyletic because *Angophora* is nested within it. There are three options for dealing with the non-monophyly of *Corymbia*: (1) accept the proposed elevation of *C.* subg. *Blakella* to generic rank, as per Crisp & al. (2024); (2) expand the concept of *Eucalyptus* to one that has not been accepted before by synonymising all three genera (as per Brooker, 2000 and Nicolle, 2024); or (3) synonymise *Angophora* and *Corymbia* while retaining *Eucalyptus* s.str. (as suggested by Thornhill & al., 2019). Raising *Blakella* to genus level requires the fewest changes in currently accepted binomials (36 changes, Table 1), whereas adopting a single broad genus requires the most changes (107, Table 1). Note that we count here changes in *currently accepted* binomials, rather than simply counting the numbers of new nomenclatural combinations. Raising *Blakella* to genus level also allows continued recognition of *Eucalyptus*, as currently accepted, and is thus consistent with Nicolle & al.'s “Rule 2—If a genus is already monophyletic, maintain the status quo”.

**“Rule 3: Larger genera are preferable to smaller genera”.**—Nicolle & al. (2025) use their “Rule 3”, that “larger genera are preferable to smaller genera”, to argue that it is better to synonymise all eucalypts into a very broadly defined *Eucalyptus* than to recognise four genera. The “rule” is based on their claim that “larger genera are less likely to be found to be non-monophyletic, and are therefore more taxonomically stable, than smaller genera” (p. 498). This argument is flawed.

Support (evidence) for monophyly requires shared derived characters (synapomorphies) that can be scored (e.g., DNA and morphological synapomorphies) and that differentiate the group of interest from its closest relatives. The more synapomorphies a clade has, the stronger the likelihood of finding support for its monophyly (using, e.g., bootstraps, posterior probabilities, gene concordance factors, etc.). It is thus branch length (character change) between clades that affects the likelihood of finding support for monophyly. There are no theoretical or practical reasons to suggest that branch lengths are related to clade size: a clade of any size can have a very long stem and thus strong support for its monophyly, or a very short stem and weak or no support. This can be seen

in relation to eucalypts: the stem separating the eucalypts from their common ancestor with *Arillastrum* Pancher ex Baill. is very short, and the stems for all other genera are longer (Crisp & al.'s, 2024: fig. 2). Crisp & al.'s (2024) table 1, which reports the support values for monophyly of the various clades, shows that *Eucalyptus* s.l. (all eucalypts in one genus) has the lowest support for monophyly of all the alternative genus-level classifications for eucalypts, and statistical tests did not exclude the possibility that *Arillastrum* might be nested within the eucalypt clade. If Nicolle & al.'s “Rule 3” were to be followed, then *Arillastrum* should be synonymised with *Eucalyptus* to produce a larger genus (“bigger genera preferred”) because this clade has less likelihood of being found to be non-monophyletic. However, this would compromise the ability to readily recognise the genus, contrary to Nicolle & al.'s (2025) “Rule 5”.

**“Rule 5: Genera should have distinctive and identifiable field traits that distinguish them from one another”.**

—This “rule” is likely to be one that most appeals to non-systematists, and it should be considered from the worthy perspective that, ultimately, taxonomy is for users. However, the discussion in Nicolle & al. (2025) confounds two issues, classification and identification, by claiming that it is important that a genus has distinguishing features that allows its identification under field conditions, even without the species being known or readily identifiable. Specifically, the authors claim that all members of a genus should have at least one feature that differentiates them in the field from all members of other genera (at least from closely related ones with which they might be confused) and, furthermore, that this character should be visible at all times. If such a rule were to be applied to other Australian plant genera, multiple new synonymies would need to be made (e.g., *Casuarina* L. and *Allocasuarina* L.A.S.Johnson, *Leptospermum* J.R.Forst. & G.Forst. and *Kunzea*, and *Brachychiton* Schott & Endl. and *Sterculia* L.). Further, if eucalypts were to be synonymised into a single, broadly circumscribed genus, there would be no single, defining, macroscopic field characteristic for that genus, with many features being shared with *Syncarpia* Ten., *Stockwellia* D.J.Carr & al. and/or *Lophostemon* Schott.

There is no dispute about all genera under the four-genus classification (*Eucalyptus*, *Corymbia*, *Blakella*, *Angophora*) being evolutionarily and genetically distinct—the support for monophyly is very strong. Nicolle & al. (2025) apply “Rule 5” to argue against the four-genus classification by implying that there is no distinguishing field characteristic for *Blakella*, yet, as described by Crisp & al. (2024), there is a field-visible trait that distinguishes *Blakella* from *Corymbia* s.str.—the outer (sepaline) operculum is not fused with the inner (petaline) operculum in *Blakella* (Fig. 1). The outer operculum falls off before anthesis in most *Blakella* leaving an opercular scar on the bud, whereas both opercula fall off at anthesis in *Corymbia* s.str. so there is no scar. In *B.* sect. *Maculatae*, the outer operculum is sometimes retained until anthesis but the inner and outer opercula can be readily separated, unlike in *Corymbia* s.str. It is true, as pointed out by Nicolle & al.

(2025), that this feature is not visible on sterile (non-flowering) plants, but many genera in many families in Australia and throughout the world lack simple distinguishing features when sterile. Applying this “rule” across the board would cause chaos.

However, without looking at the operculum, most naturalists would be able to distinguish a ghost gum (*B.* sect. *Blakella* – smooth bark, or at least upper trunk smooth; scar on flower buds; leaves with no visible oil glands), a yellow bloodwood (*B.* sect. *Naviculares* – loose, thinly flaky, thick yellowish bark; scar on flower buds) or a spotted gum (*B.* sect. *Maculatae* – smooth barked, often with pits; adult leaves concolorous) readily from a red bloodwood (*Corymbia* s.str. – no scar on flower buds; usually rough barked; adult leaves strongly penniveined and usually discoloured; inflorescence compound terminal and showy; fruits conspicuously woody and urceolate) based largely on features of their bark, leaves or fruits. That is, there is no requirement to even consider genus first in

identifying the species. If one can recognise a species in a section or series (ghost gum, spotted gum, yellow jacket, or red bloodwood), it is automatic that the genus is known. From an identification and species-recognition point of view, there is no problem. The recognition and identification processes are made even easier with multi-entry keys, and have become even more efficient with the assistance of image- and pattern-recognition AI. Indeed, the frequently used multi-entry key for eucalypts, EUCLID (Slee & al., 2020), which uses the three-genus classification, identifies directly to species with no requirement to first identify to genus. Thus, even if the distinguishing characteristic for the genus *Blakella* were not available because of the reproductive status of the plant, the EUCLID key still allows accurate identification to species, and hence to genus, and could readily deploy the four-genus classification in a future edition.

“Rule 6: Genera should be reproductively isolated”. — Nicolle & al. (2025) do not provide a logical argument for why reproductive isolation should be considered in delimiting



**Fig. 1.** Examples of the eucalypts under the proposed four-genus classification. Clockwise from top left: buds and fruit of *Angophora hispida* (Sm.) Blaxell (photo AHT). Buds show free sepals on the rim of the hypanthium, and the petals are free and folded over the stamens. A ribbed, thin-walled fruit is seen on the left. Buds of *Blakella eximia* (Schauer) Crisp & L.G.Cook showing the thin outer (sepaline) operculum shedding early, leaving a scar (photo Damien Andrew). Buds and flowers of *Corymbia ficifolia* (F.Muell.) K.D.Hill & L.A.S.Johnson (photo LGC). There is no opercular scar on the bud and the double operculum sheds as one. Buds of *Eucalyptus drummondii* Benth. showing scar left after shedding of outer (sepaline) operculum (photo LGC).

genera (“We believe [...]”, p. 499) but claim that genera should be delimited in such a way that all hybrids or putative hybrids are intra- rather than inter-generic. Most current taxonomists apply the philosophy of Hennig (1966) in delimiting genera and higher levels of classification: that is, taxa should be monophyletic groups (clades) that are defined by one or more synapomorphies, and that plesiomorphies are uninformative about membership of a group. The ability to hybridise is a plesiomorphic trait that can be carried forward into descendent clades until such time as one or more synapomorphies evolve that disrupt the formation of hybrids. Consequently, it has been well argued (e.g., Funk, 1985) that the ability of distantly related clades to occasionally form hybrids is not informative about the relationship between those clades because the ability to hybridise is a plesiomorphic trait.

Irrespective of whether such a “rule” should be applied, the claims by Nicolle & al. (2025) about putative hybridisation among genera under the three- or four-genus classification needs to be addressed. In any case, there is no convincing evidence for recent gene flow (introgression) between *Corymbia* s.str. and *Blakella* under natural conditions.

As highlighted by Nicolle & al. (2025), some currently recognised species of eucalypts are known to hybridise naturally (e.g., McKinnon & al., 2001; Flores-Rentería & al., 2017). Eucalypts exhibit a full spectrum of reproductive and genomic compatibilities, including full reproductive compatibility (panmixis in co-occurrence) and hybrid formation without further mixing of gene pools (F1 formation without back-crossing) (e.g., Rutherford, 2020; Fahey & al., 2022). The outcomes of hybridisation provide information about compatibility and evolutionary trajectory, so need to be considered if using hybridisation as a criterion for generic delimitation.

There are many reasons why hybrids might be possible between both closely and distantly related taxa (e.g., consider the Bateson–Dobzhansky–Muller model; Orr, 1996) but, above all, the test of whether taxa are distinct entities depends on whether hybrids contribute to the evolutionary trajectory of either group. If there is no back-crossing, then the taxa are reproductively isolated and on independent trajectories. That is, taxa are isolated and distinct if, even though an F1 individual might be produced, it does not (or cannot) backcross to either parent or with others of the F1 generation.

The first example of hybridisation referred to by Nicolle & al. (under “Rule 3”) is of hybridisation between species in different series of *Eucalyptus* s.str. They do not indicate how this relates to genus circumscription other than to state that, if such series were elevated to genus-level, then there would be a problem. To our knowledge, no one has ever advocated such a scenario.

Nicolle & al. (2025) claim (p. 504 and footnote to their table 1) that there are putative hybrids of *Corymbia gummifera* (Gaertn.) K.D.Hill & L.A.S.Johnson × *Blakella maculata* (Hook.) Crisp & L.G.Cook, and *C. intermedia* (R.T.Baker) K.D.Hill & L.A.S.Johnson × *B. maculata*, citing Hill & Johnson (1995) and Schuster & al. (2018), and that this negates the distinctiveness of *Corymbia* and *Blakella* as genera. Schuster

& al. (2018) did not make any new claims about these hybrid combinations but simply cited Hill & Johnson (1995) as a basis for a figure summarising hybridisation inferred by previous studies. Additionally, the phylogenetic trees of Schuster & al. (2018) do not show any evidence of recent hybrids between *Corymbia* s.str. and *Blakella*, which would manifest as the sharing of haplotypes or alleles. However, the non-monophyly of *Blakella* and *Corymbia* s.str. in the chloroplast DNA phylogeny indicates that there might have been introgression in the past.

In the case of the putative hybrids of *Corymbia gummifera* × *Blakella maculata* (= *Eucalyptus nowraensis* Maiden) discussed by Hill & Johnson (1995), there is no evidence of advanced hybrid formation, rather that occasional putative F1 individuals of *C. gummifera* × *B. maculata* may be found where the two species are in contact in southern New South Wales, with no evidence of backcrossing or production of an F2 generation (Hill & Johnson, 1995). That is, the taxa are likely reproductively isolated and distinct. Other putative natural hybrids of *B. maculata* are mentioned in the forestry literature (e.g., Shepherd & Lee, 2016) but, again, all are hybrids within *Blakella*.

## ■ THE IMPORTANCE OF THE AUSTRALIAN PLANT CENSUS

The APC is an important achievement of the Australian botanical community. It represents a continental-scale consensus on the accepted names and circumscriptions of all Australian vascular plant taxa, and as such provides a basis for a nationally accepted taxonomy for conservation and other uses. The consensus view captured in the APC considers many factors, and balances utility and ease of use with taxonomic rigour and scientific veracity.

Of course, not all taxonomists will agree with the consensus (indeed, all are free to disagree with it), but the great majority accept it. At the time of publication of this paper, the current APC consensus for the eucalypts is the three-genus classification. The Australian botanical community will consider the position of Crisp & al. (2024) to segregate *Blakella* from *Corymbia* s.l., and the one-genus classification of eucalypts (Brooker, 2000), to decide by consensus whether or not to adopt the former. Until such a determination is made, we recommend that it would be premature and ill-advised to use the one-genus classification of eucalypts (Brooker, 2000) recommended by Nicolle & al. (2025).

## ■ SUMMARY

The currently recognised three-genus classification of the eucalypts needs to change because *Corymbia* is not monophyletic. Two alternative systems have been published: a single-genus classification with *Angophora* and *Corymbia* both synonymised into *Eucalyptus* (Brooker, 2000;

Nicolle, 2024), and a four-genus system that raises *C.* subg. *Blakella* to genus level (Crisp & al., 2024). The single genus classification of Brooker (2000) was rejected by Australian and international botanists at the time and the one-genus classification arguments of Nicolle & al. (2025) are questionable. Ultimately, it is up to Australia's herbaria, botanists and broader users to decide which of the systems provides the more useful approach for working with eucalypts.

## ■ AUTHOR CONTRIBUTIONS

LGC, MDC, and AHT devised and wrote the first draft of the manuscript. KRT, MJB, PYL, ARB, PGW, DMC, MW, JGC, SR, EB, RLA, JJB, FJN, TGBM, DEA, NC, PCJ, IRHT, and FU contributed sections for revised drafts. All co-authors critically reviewed and revised drafts of the manuscript.

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## ■ CONFLICT OF INTEREST

Three authors (AHT, LGC, MDC) of this response are authors of the Crisp & al. (2024) proposal to raise *Corymbia* subg. *Blakella* to genus level.

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