



## *Muelleria*

Plant and Fungal Taxonomy and Systematics

### *Instructions for authors*

*Muelleria* is printed in April-May each year by the Royal Botanic Gardens Victoria. The journal publishes research on Southern Hemisphere plant, algal and fungal taxonomy and systematics, particularly that relating to Australia.

Acceptable submissions include: taxonomic revisions; phylogenetic and biogeographical studies; short papers describing new taxa (including overseas members of genera represented in the indigenous flora of Australia), documentation of nationally significant new records, or resolutions of nomenclatural matters; historical analyses relevant to taxonomy and systematics; and any other research contributing to our knowledge of plant, algal or fungal diversity. Special issues or reviews can be considered upon discussion with the Editor in Chief. Book reviews are included as space permits. All papers undergo external peer review.

### **Costs**

There are no page charges for images.

A PDF version of the paper will be provided to the authors after the paper is published online (on the RBGV webpage).

### **Manuscript submission**

Submissions must be presented in clear and concise English, strictly observing the required layout and typographical conventions set forth in this document and in the provided Author Template. Submit all material, including illustrations and tables, by Dropbox, Filemail (or equivalent secure file transfer service), e-mail or on a USB stick to:

The Editor, *Muelleria*  
Royal Botanic Gardens Melbourne  
Birdwood Avenue, Melbourne, VIC 3004, Australia  
[muelleria@rbg.vic.gov.au](mailto:muelleria@rbg.vic.gov.au)

You must provide full contact details for the main author, including e-mail address and telephone number.

Submission of an article implies that the submitted work has not been published previously, that it is not under consideration for publication elsewhere, that its publication is approved by all authors, and that it will not be published elsewhere in the same form without written consent from the Royal Botanic Gardens Victoria.

### **Review process**

Each paper submitted to *Muelleria* will be initially assessed by the Editor in Chief. If deemed appropriate for the journal, the paper will be assigned to an Editor who will be responsible for selecting reviewers, liaising

with only the designated corresponding author, approving revisions, and for making recommendations to the Editor in Chief. Authors are asked to provide the names of 2–4 potential reviewers with specialist knowledge of the subject of their papers. Reviewers must be based at different institutions to the author(s). All Editor decisions are final.

## Proofs

Once a paper is accepted—following completion of the review process—it is considered to be in its final form. The Production Editor will send one set of page proofs in PDF format to the corresponding author to be checked for any layout or editing issues. Only minor changes will be accepted at this stage. Amended proofs must be returned promptly to the Production Editor so that publication of the paper or volume is not delayed. If you will not be available to review the proofs yourself, please provide an alternative contact.

## Publishing online

Papers in *Muelleria* are published online when they are ready for publication, with a printed volume containing recently published papers produced on a rolling cycle (typically in April/May). The date of publication will be the date upon which these papers appear on the RBGV *Muelleria* webpage. For any papers that appear first in print, the date of publication will be the publication date of the printed volume.

## Copyright

The Royal Botanic Gardens Victoria retain the copyright to all published papers. However, papers may be freely disseminated by authors for academic and teaching purposes, and authors may self-archive PDF files. Any queries regarding the use of illustrations or images should be directed to the Editor in Chief. The copyright of botanical illustrations resides with the relevant artist.

## Manuscript preparation/style

Authors must adhere to the following guidelines when preparing manuscripts for submission. It may also be helpful to refer to the most recent volume of *Muelleria* for further style guidance. Any further queries regarding style and layout should be directed to the Production Editor at [muelleria@rbg.vic.gov.au](mailto:muelleria@rbg.vic.gov.au).

## General formatting

Manuscripts should be left-aligned, with left and right margins of 2 cm.

You should prepare your manuscript using Microsoft Word as tracking is used during the peer review process. You must use the [Muelleria template provided on our website](#) to style your manuscript.

### Headings

Four main heading levels are used:

**Heading level 1** [bold, left-aligned, 12 pt]

**Heading level 2** [bold, left-aligned, 10 pt]

**Heading level 3:** [bold italics, 10 pt, indented, followed by text on the same line]

**Heading level 4:** [italics, 10 pt, indented, followed by text on the same line]

### Main body of text

Body text must be 10 pt Times New Roman. All text is to be formatted with the style in which it is to be published, i.e., **bold** or *italic*. The bold and italic styles are not to be used for emphasis. The first paragraph in each section should be not be indented. Indent subsequent paragraphs by one tab space.

Do not add footnotes unless absolutely necessary. If retained, such notes will be inserted either as footnotes or as endnotes at the Editor's discretion.

### Spellings and abbreviations

- Use consistent British English (ISO en-GB) as per the Oxford spelling standard (e.g., ageing, analyse, behaviour, catalogue, centre, colour, defence, programme ("program" for computer code), traveller etc.). The exception is for the suffix *-ize* and its derivatives, which *Muelleria* currently maintains in its *-ise* form (realise/globalisation) for consistency.
- Compass directions should be spelt out and compound forms hyphenated in the main text (south-east, north-west etc.), but may be abbreviated in tables and specimen citations (SE, NW etc.)
- Names of months should be given in full in the main text and abbreviated as follows in tables: Jan., Feb. Mar., Apr., May, June, July, Aug., Sept., Oct., Nov., Dec. See 'Specimen information' below for the correct citation of collecting dates.
- Define non-standard abbreviations at their first occurrence in the main text and also in the abstract.
- Do not use abbreviations (such as abbreviated genus names) at the start of a new sentence. Likewise, the first mention of a genus name in a new paragraph should be written in full.

### Numbers and measurements

- Use only SI units.
- Include a space between the numeral and the SI unit (i.e., 10 mm, not 10mm). The degrees symbol for temperature is part of the SI unit and is associated with the temperature unit, not the numeral (i.e., 10 °C, not 10° C) as per BIPM rules. For the degrees, minutes and seconds of plane angles, the degrees symbol is attached to the numeral (i.e., 36° 42' 16", not 36 ° 42 ' 16 ").
- Use an en-dash (–), not a hyphen (-), between spans of numbers (e.g., pp. 248–276; 10–12 cm) (the keyboard shortcut for an en-dash is Alt+0150).
- Use a multiplication sign (×), not the letter 'x' to denote hybrids or, e.g., magnification.
- Use the micro sign (μ), not the letter 'u' to denote the unit prefix for the factor of 10<sup>-6</sup>.
- Ensure that decimal places are rounded to significant figures (i.e., do not include additional decimal places that give a false indication of the accuracy of measurements).
- Outliers from the main range of measurements can be placed in parentheses, with the mean given in italics where desired, e.g., (14.5–)17.5–19.5–21(–24) μm. Authors are encouraged to indicate the number of measurements made, e.g., '(n=65)'.
- In the main text, numbers up to and including ten should be spelt in full unless followed by a unit of measurement, or where confusion would otherwise result. Avoid using numbers at the start of sentences; if it is unavoidable, they should be spelt out.

## Structure and content

### Title

The title should be concise and informative to facilitate indexing by automated search tools. For taxonomic papers, indicate the family or higher taxon group to which genera or species belong. Do not include authorities of scientific names or formulae. Common abbreviations that are well understood (DNA, ITS, sp. etc.) may be included.

### Author information

The title should be followed by the authors' names and affiliations. Indicate author affiliations with a superscript number immediately after the author's name and in front of the appropriate address. Provide the full postal address of each affiliation, including the country and postal code. Include an e-mail address for the corresponding author.

### Abstract

The abstract should be concise (no more than **120 words** in length) and cover the scope of the work and its findings. All new names and combinations made in the paper must be explicitly given in the abstract. Species and genus names in the abstract must be accompanied by their nomenclatural authorities.

### Keywords

Include three to five keywords that are not used in the title, and which will assist in electronic retrieval of your article.

### References

Only include references that are cited in the text. See the instructions below for how to format references.

### Appendices

Appendices are discouraged, but if required (e.g. for complete lists of specimens examined), they should be placed after the references and should follow the relevant formatting guidelines for tables etc.

### Index

An index to taxa is useful if the paper is very long and deals with many taxa and synonyms.

## Scientific names

All scientific names at generic rank and below must be accompanied by authority name (per IPNI standard author form) in the abstract and when first introduced in the main text. Genus names should be given in full when first used in the paper, and at the start of each new section. Where a name is repeated, the genus name can be abbreviated to its initial letter, except at the start of a new sentence or paragraph, or if two or more genera that begin with the same letter are being discussed in the same section. Authority names should not be included in titles, headings and captions.

Scientific names above generic rank are not italicised.

## Vouchers and identifiers

### Botanical specimens

Botanical voucher material should be deposited in an institution listed in *Index Herbariorum*. If specimens cited in the manuscript are to be lodged at the National Herbarium of Victoria (MEL), the author should contact the Collections Manager ([pina.milne@rbg.vic.gov.au](mailto:pina.milne@rbg.vic.gov.au)) to make arrangements for material to be accessioned and MEL numbers issued before submitting the manuscript.

References to botanical vouchers should be indicated by the accepted acronym for the institution. Either the collecting number or accession number should be cited for each specimen; if there is no collecting number, or if the specimen cited is a type, the accession number must be cited.

### Molecular data

*Muelleria* requires generated sequences and alignments to be deposited in publicly available databases such as GenBank or TreeBASE prior to publication. Accession numbers for sequences and alignments must be included in contributions, but may be added at the final revision stage.

### New fungi names

To be validly published, new names and new combinations for fungi (including lichenised fungi) must be accompanied by an identifier issued by a recognised repository (such as Fungi Names, *Index Fungorum* or Mycobank). This identifier may be added at the final revision stage.

## Figures and tables

Figures and tables must be provided as separate files (e.g., Figure1.tiff, Figure2.tiff, Table1.doc etc.).

- Do not embed figures or tables in the main manuscript document.
- Do embed figure and table captions in the manuscript document, as directed below.

## Captions

Figure and table captions should be listed at the end of the manuscript on a separate page to the main text. Use lower-case letters to denote different parts of a figure, both on the plate and in the text. Genus names should be spelt out in full the first time they appear in each caption.

## Size

Figures and tables may be single (7 cm) or double (14 cm) column width in portrait orientation, or single column width (18 cm) in landscape orientation. The height of the figure or table must allow room for the caption within the full page size (21 cm x 14 cm).

## Figure format

Figures should be in TIFF or JPEG format, with an *effective* resolution of  $\geq 600$  dpi for photographs (at print size, most images with an *actual* resolution of 300 dpi should be suitable).

When taking photographs for submission with manuscripts, every effort must be made to achieve the highest possible quality of photograph, taking into consideration lighting, depth of field and clarity of the subject matter. Photographs of parts of herbarium specimens should clearly illustrate diagnostic features.

Images of whole herbarium sheets are discouraged; full botanical illustrations are preferred. Line art should be submitted at the highest possible resolution (ideally 1200 dpi) in order to maximise reproduction quality.

## Table format

Use bold type for table headings and indent subheadings. Table notes should be listed directly below the table. If the table predominantly contains words, indicate notes using superscript numerals. Conversely, if the table predominantly contains numbers, use superscript lower-case letters to indicate notes.

## Keys

Keys are presented at full-page width and are left-aligned. Couplet numbers and taxon names should be in bold font style. Include a line space (i.e., two carriage returns) between each couplet. See a recent issue for an example of the preferred key layout.

## Taxonomic data

Nomenclature and taxonomic citations must follow the rules and recommendations of the most recent [International Code of Nomenclature for algae, fungi and plants](#).

Book titles must be abbreviated following [Taxonomic literature II](#) (Stafleu & Cowan 1976–1986), and journal citations in the synonymy must follow [Botanico-Periodicum-Huntianum](#) (Lawrence et al. 1968; Bridson 1991).

Author names must follow the standard abbreviations in the [International Plant Names Index](#) (IPNI) author database, taking care to preserve the absence of spaces in said abbreviations (e.g., J.Sm., L.G.Adams). If the author is not listed in IPNI, the surname must be spelt out in full, preceded by all initials, each followed by a period and no spaces, e.g. 'F.L.Erickson'.

Designations of herbaria should follow [Index Herbariorum](#) (Thiers 2019+).

## Information hierarchy

Information in the Taxonomy section may include, as required, new scientific names and typification, synonymies, descriptions, illustration citations, specimens examined, distribution, ecology, phenology, conservation status, and etymological information, as well as any additional notes.

## New scientific names

New scientific names should be presented in bold italics, followed by the author citation in normal type, then an indication of the rank or new combination in bold, e.g. ***Lecidella flavovirens*** Kantvilas & Elix, **sp. nov.**

According to the Melbourne *Code*, a Latin description or diagnosis is no longer required for new taxa; authors are strongly discouraged from including Latin for this purpose as Latin descriptions will not be included. There is no requirement to include a separate diagnosis in addition to the English description, but a differential diagnosis which compares key distinguishing features of the taxon against similar and/or closely related taxa should be provided.

## Nomenclatural citations

The following nomenclatural citations can be listed in separate paragraphs after the current taxon name, where applicable. Nomenclatural citations must be listed in chronological order. Works cited here do not need to be listed in the references unless they have also been cited elsewhere in the paper.

- **Accepted name**—include the author and publication details after the name.
- **Synonyms**—homotypic synonyms based on the same type as the accepted name should be listed before the type citation in the same paragraph. For heterotypic synonyms, the type citation should be included in the same paragraph as the relevant synonym(s).
- **Misapplied names**—list misapplied names in a separate paragraph.

## Type citation

The type specimen(s) should always be cited, and location and accession number always included (even if the collecting number is provided). Matters of typification may be treated within this paragraph, or in a

separate paragraph under the heading ‘Typification’ following the description of the taxon.

If no specimen(s) exactly match the citation and the assignment of types is not straightforward, the verbatim type citation should be included prior to the citation of the specimen(s). Enclose the citation in single quotation marks. When lectotypes, neotypes or epitypes are designated for the first time, this should be indicated by a statement to that effect (e.g., ‘(lectotype, here designated)’).

## Illustrations

If illustrations are cited, use the *Muelleria* Heading 4 style for the illustration heading. If the illustration is not under the accepted name, cite the synonym, e.g. ‘Costin et al. *loc. cit.* p. 201 as *Helichrysum rutidolepis*; Murphy & Dowling *loc. cit.* p. 50 as *Helichrysum scorpioides*’.

## Taxon descriptions

Taxon descriptions should follow on from the nomenclatural citations. The main morphological characters should be italicised in the taxon description:

*Perianth segments* 10–17 mm long, 4–10 mm wide, concave, apex acute to obtuse, often shortly apiculate; *dorsal sepal* ovate; *lateral sepals* lanceolate to ovate, slightly asymmetric; *petals* ovate; *labellum* elliptic to oblanceolate, usually slightly smaller than other segments.

## Specimen information

Specimens examined should be listed under a separate heading at the end of the taxon description. No more than 20 specimens per taxon should be cited. Material from different countries is arranged alphabetically by country. Different states or counties are separated by a full stop. Below state level, order citations by collector. Specimens from the same geographical division should be separated by a semicolon.

Use ‘s.n.’ to indicate where no collecting number is given. Where there is no collecting number, ensure you include the herbarium accession number. For transparency, accessions seen by the authors must be designated by an ‘!’, those studied via virtual herbaria must be indicated by ‘photo’ with the relevant herbarium indicated, while specimens that have not been seen must be indicated ‘n.v.’ [*non vidi*—not seen]. Collecting dates must be formatted as ‘day.month.year’, with the month given in Roman numerals, e.g. 16.iv.2013. Collectors’ names and collecting numbers should be in italics.

For example:

***Specimens examined:*** QUEENSLAND. Mundubbera, 1.5 km W of ‘Mimosa’ Homestead, 6.ix.1985, *D.I. Turner 2243 and R.T. Gott (BRI [n.v.], MEL!)*. VICTORIA. Victoria Gap, N of Gap Track, 1.x.1967, *A.C. Beauglehole 17343 and M. Corrick (MEL!, photo K!)*; corner of Serra and Syphon tracks, 22.x.1976, *P. Matthews s.n. (MEL 524561!)*.

## Rare and threatened taxa

In order to help protect vulnerable populations, precise distribution data of rare or threatened taxa should neither be given in the designation of types, nor listed under ‘Specimens examined’.



## Acknowledgements

Any supporting individuals or organisations not listed as authors who have supported or facilitated the research should be acknowledged. This is especially true for sources of funding such as grant bodies, as well as issuers of permits for research and/or material collections. If no external funding was awarded, this should also be indicated. It is also important to openly identify any conflicts of interest, identifying any external parties who might be perceived to have directly or indirectly influenced the contents of the manuscript. If no conflicts of interest exist, simply state “The authors declare no conflicts of interest”.

## References

### In-text citations

Cite references in text as, e.g., Walsh (1992), Brown and Murphy (2004); for three or more authors, the first author’s surname is listed and followed by ‘*et al.*’ in italics. Cite multiple references in order of publication, separate references with a semicolon and use an ampersand (&) between authors’ names: (Kuntze 1891; Lawrence et al. 1968; Allan 1979, 2000; Jarman 1990; Lewis & Entwisle 1995a, 1995b).

### Reference list

References should be listed alphabetically by author, then chronologically. Single author references are listed before multi-author references authored by the same first-author. More than one reference from the same author(s) in the same year must be identified by the letters ‘a’, ‘b’, ‘c’, etc., placed after the year of publication. All authors should be listed. References should be formatted with a hanging indent. Works cited in the nomenclature sections do not need to be listed in the references, unless they have also been referred to elsewhere in the paper.

### Books

Allan, H.H. (1961). *Flora of New Zealand*. R.E. Owen, Government Printer: Wellington.

Elix, J.A. and Ernst-Russell, K.D. (1993). *A catalogue of standardized thin-layer chromatographic data and biosynthetic relationships for lichen substances*, 2nd edn. Australian National University: Canberra.

Briggs, J.D. and Leigh, J.H. (1988). *Rare and threatened Australian plants*, revised edn. Special Publication No. 14. Australian National Parks and Wildlife Service: Canberra.

### Book chapters and conference proceedings

Ahti, T. and Kashiwadani, H. (1984). ‘The lichen genera *Cladia*, *Cladina* and *Cladonia* in southern Chile’, in H. Inoue (ed.), *Studies on the cryptogams of southern Chile*, pp. 125–149. Kenseisha Ltd: Tokyo.

Hayman, P.T. and Collett, I.J. (1996). ‘Estimating soil water: to kick, to stick, to core or computer?’, in M. Asghar (ed.), *Proceedings of the 8th Australian Agronomy Conference, Toowoomba*, p. 664. Australian Society of Agronomy: Toowoomba.

### Floras

Floras in a series should be cited in book format.

Entwisle, T.J. (1996). ‘*Acacia*’, in N.G. Walsh and T.J. Entwisle (eds), *Flora of Victoria* **3**, 586–656. Inkata Press: Melbourne.

Gilmore, S.R. (2006). 'Philonotis', in P.M. McCarthy (ed), *Flora of Australia* **51**, 265–270. ABRIS: Canberra/CSIRO Publishing: Melbourne.

### Journal articles

Do not include part or issue numbers unless the pagination starts again in each issue; where it is included there should be no space between volume and issue number. Highlight the journal volume number (and issue, if necessary) in bold. Include digital object identifiers (DOIs) at the end of the citation where available, but do not include a full stop after the doi.

Pickett, J.W., Smith, N., Bishop, P.M., Hill, R.S., Macphail, M.K. and Holmes, W.B.K. (1990). A stratigraphic evaluation of Ettingshausen's New England Tertiary plant localities. *Australian Journal of Earth Sciences* **37**, 293–303.

Spencer, R.D. and Cross, R. (2009). Energy and emissions: horticulture to the rescue. *Australian Horticulture* **107(5)**, 44–45.

Torabinejad, J, Caldwell, M.M., Flint, S.D. and Durham, S. (1998). Susceptibility of pollen to UV-B radiation: an assay of 34 taxa. *American Journal of Botany* **85**, 360–369. doi: 10.2307/2446329

Thompson, J. (1976). A revision of the genus *Tetratheca* (Tremandraceae). *Telopea* **1**, 139–215.

### Theses

Jarman, S.J. (1975). *Experimental taxonomy on the family Epacridaceae*. PhD thesis, The University of Tasmania, Hobart, Tasmania.

### Legislation

*Environment Protection and Biodiversity Conservation Act 1999* (Cwlth).

*Flora and Fauna Guarantee Act 1988* (Vic.).

### Websites

AVH (2014). *Australia's Virtual Herbarium*, Council of Heads of Australasian Herbaria <<http://avh.chah.org.au>>. Accessed 02 Jan. 2019.

Thiers, B. (2019+). Index Herbariorum: a global directory of public herbaria and associated staff. New York Botanical Garden's Virtual Herbarium <<http://sweetgum.nybg.org/science/ih>>. Accessed 01 Jan. 2019.

VicFlora (2019). Flora of Victoria, Royal Botanic Gardens Victoria <<https://vicflora.rbg.vic.gov.au>>. Accessed 07 Feb. 2018.

### Citizen science observations

Stirton, C. (2007d). *Xylocopa* visiting flowers of *Psoralea pinnata*, observed 31st December 2007. *iSpot: share nature*. The Open University. <<http://www.ispotnature.org/node/478085>>

### Computer programs

Swofford, D.L. (2000). *PAUP. Phylogenetic analysis using parsimony*, version 3.1.1. Illinois Natural History Survey: Champaign, USA.