

A new edition of the ‘Published works of Ferdinand J. H. Mueller’: bibliographical issues and questions of effective publication of ostensible preprints

A.M. Lucas¹

¹13 Horseshoe Bend, Paignton, Devon TQ4 6NH, United Kingdom; e-mail: arthurlucas@mac.com.

Abstract

A new edition of the list of Ferdinand (von) Mueller’s published works has been prepared, based upon that originally published in *Muelleria* in 1978 and 1984, and then later revised in 1998. The new edition is one of several supporting documents prepared by the editors of the von Mueller Correspondence Project (<https://vmcp.rbg.vic.gov.au/>). The bibliographic implications of multiple contemporary republications of Mueller’s articles and his use of extra-prints are discussed. Mueller’s widespread use of extra-prints is examined and factors to be considered in determining effective publication status are discussed and exemplified.

Keywords: bibliography, reprints, extra-prints

Introduction

A new edition of Mueller’s publication list (<https://vmcp.rbg.vic.gov.au/text/static/apparatus/muellers-publications/>) has been published 45 years after the first edition (Churchill et. al. 1978). Since then, access to literature sources has become much easier, including especially to non-scientific literature such as newspapers that are of major importance in understanding the reach of Mueller’s views and interests. Digitised page images make it possible to produce a bibliography without having to be based in a library and using inter-library loans. Specialised aggregators such as the Biodiversity Heritage Library (<https://www.biodiversitylibrary.org/>) are well known, as is the non-specialist Internet Archive (<https://archive.org/>), but tools that allow searching of traditional library catalogues, especially those that give links to digital versions of holdings, are also important. The *Karlsruhe Virtual Catalog* (<https://kvk.bibliothek.kit.edu/>) is a generally useful international meta-catalogue of this type. For newspapers, the digitisation project of the Australian National Library (<https://trove.nla.gov.au/newspaper/>) and equivalents for other countries are invaluable, provided one uses a variety of search terms to compensate for un-proofed text generated by Optical Character Recognition. ‘Miiller’, ‘Muellor’, ‘Muollor’ and similar variants were routinely used as search terms, but no such variant would have picked up items where the name was rendered ‘Hneuer’ or ‘Slvtoil’sr’, noticed when searching for ‘government botanist’, or ‘Baron von’.

I remain impressed, however, by the excellent coverage of the botanical literature achieved by the 1978 editors (Maroske (2018) discusses Sinkora's role). Although there are some new technical items, most of the additions are from newspapers in Australia, New Zealand, the United Kingdom and the United States, mainly California. They illustrate the importance Mueller gave to applied botany, with many items on poisonous plants and suggested crops, and to exploration. Newspapers were also tools to help him recruit potential collectors via advertisements and letters to editors.

Preparation of the edition of Mueller's correspondence and the discovery, facilitated by digitisation projects, of reviews of his works in journals and newspapers, has enabled more accurate publication dates to be determined for many items. To allow easy access to the new information in situations where the older numbers have been cited in publications, this new edition follows the pattern established in Home *et al.* (1998) to cross-reference old bibliography numbers for the approximately 350 items that have been re-dated, including around 40 that were re-dated in 1998. Similarly, items re-published in full or in substantial part have been mutually cross-referenced by using a 'see also' note. Almost 850 of the around 2,800 substantive entries are additional publications, leaving a still impressive number of around 2,000 titles, almost double the number in the first edition in 1978.

A new section has been added to this updated edition to list spurious attributions of authorship, many from contemporary sources, especially Knapp (1877) and *Repertorium annum*. These are not discussed further here, as the section 'Spurious attributions' in the new edition included with the *Correspondence* (Home *et al.* 2023+, Apparatus, Mueller's publications) includes full details.

Bibliographic issues

Several issues arose when the editors were revising Mueller's bibliography, more properly considered as a 'publication list' since it excludes literature about him. What to include seems to be obvious – anything published that Mueller wrote should be listed. However, that is a difficult demarcation criterion. This of course is not a problem unique to Mueller:

Readers of bibliographies are typically so thankful for what they find that they are all too quick to forgive for

what they miss, leaving it incumbent on the compiler to work out with God the particulars on what really belongs there: how much of the decision deserves to be explained in the introduction (and God has probably been rather too forgiving in this matter), and how much can be accommodated under the simple pragmatic rule of "err on the side of inclusion." (Krummel 1988, p. 244).

In Mueller's case several different kinds of demarcation problem arose where judgement was necessary.

Should, for example, interviews and reports of speeches qualify? The bibliography includes several speeches, and one interview that appears in five versions (see item 79.09.04).¹ These were included as they are valuable evidence of Mueller's opinions and activities, especially outside botany and applied botany. But to be included they needed to be, as far as could be judged, close to verbatim records: summary reports of speeches were excluded.

What about advertisements? Some Mueller placed himself, asking for specimens; others are quotations from his publications, used by merchants extolling their wares. The first category is clearly relevant, being explicitly written for publication: see, for example, 48.09.01, where Mueller sought subscribers to *exsiccatae* he intended to prepare, and 60.01.03, the call for live specimens of 'the AUSTRALIAN MAGPIE and LAUGHING JACKASS' to be sent to Britain by the Acclimatisation Society of Victoria. The latter appeared almost daily in the same newspaper for nearly a year, but the repeat insertions are not individually listed, with a note to that effect in the entry. The second category is less clear-cut, but two instances are included, 69.04.02 in a Western Australian newspaper, that quotes from 69.01.03 to support the claims of a manufacturer of 'patent chemical manures', and 80.08.04, an extract from 76.12.04, used in an advertisement of a Sydney seed merchant in the *Los Angeles Herald*. They are, in essence, equivalent to other partial republications, issues with which are discussed below.

Mueller was an active translator, both of articles – for example 63.10.05 in a farmers' journal, and 69.01.01 in the *Australian Medical Journal* – and of one phytochemical book, 78.06.09, which he expanded. He

¹ When pointing to exemplifications of criteria, citations to Mueller's publications use the number given to the item in the file in <https://vmcp.rbg.vic.gov.au>; elsewhere the entry number is given as well as the standard citation.

was often translated, for example versions of his essay on the vegetation of Victoria (61.10.02) appeared in German (61.13.09) and French (61.13.10). All known contemporary translations are listed, and notes but not individual listings made of modern translations – for example the translation by Darragh of 50.11.01 (supplementary material to Maroske & Darragh 2016) – although an exhaustive search has not been made for similar items.

Letters ‘to the Editor’ are unproblematic, as intended for publication. Similarly, letters to third parties that were then forwarded for publication are included automatically, whether they were supplied by a Government official, for example 75.05.04 on the poisonous properties of feed containing darnel seed, or by a private individual, for example, a letter, 92.07.07, sent to E. Leary on the terminology to be used in describing the natural order to which nightshades belonged that Leary published as part of his public argument with another newspaper correspondent. Published quotations from letters, on the other hand, require judgement. It would be absurd to include as a Mueller publication the quotation ‘Is there any state of the *Ficus australis* in Illawarra or elsewhere in New South Wales producing a Banyan-like growth such as occurs in the *Ficus columnaris* of Howe’s Island?’ attributed to him in the introduction to Bennett (1877). However, a quotation from a letter sent to O. W. Sonder used in a note by Sonder to *Hamburger Garten- und Blumenzeitung* (58.04.02) must qualify, as to exclude it would be to hide important details of what European botanists learnt of Mueller’s activities. Similarly, although short, comments solicited by agricultural and horticultural editors of the weekly newspapers on behalf of their correspondents are included when quoted verbatim, for example, 85.02.06, 94.10.03. To omit them would remove evidence of Mueller’s very important, very visible, role in public service.

Reprints and republications

Republications of whole articles are automatically included. Some, such as those in German periodicals of articles that Mueller published in the *Victorian Naturalist*, were undoubtedly forwarded by him (compare 89.04.04 with the source 89.03.02). It is less clear whether Mueller or the editors of the republishing journal translated

those that were printed in German; for example, the editors of *Hamburger Garten- und Blumenzeitung*, who added a commentary to 85.01.04, may also have translated it from the source in 84.10.03.

Judgement is required, however, when a republication is an extract of another item. Some are unproblematic, for example the serial republication of Mueller’s *Introduction to botanic teachings...* (77.08.01) in California as 77.11.04 and linked items and in New South Wales as 78.01.02 and following articles. (For the circumstances of the NSW republication see Lucas *et al.* 2006, section 3.3, especially pages 42–43.) By contrast, *Suggestions on the maintenance, creation and enrichment of forests* (79.05.06) was widely reviewed, often with short quotations, and was summarised in 1883 in *Just’s Botanischer Jahresbericht* **8**, 392–394. These short extracts and summaries are not given their own entries, although very substantial extracts from the work are listed, for example 79.07.05, which embeds the extracts in an editorial on forest policy for Western Australia.

Especially problematic are extracts from the various editions of *Select extra-tropical plants* (editions cross referenced under 76.12.04). These titles comprise entries under species names, with notes on economic value, geographic origin, culture notes and the like. Where the source is acknowledged and complete entries are given, these have been included when they are items in their own right but usually excluded when they are very short and used as part of another article. Most problematic is where they seem to be a *de novo* contribution, which might seriously mislead readers into thinking that the work described had been recently conducted. For example, in the *Colac Herald*, 29 November 1887, p. 3, the following comment was printed in a discussion of cocksfoot grass:

no other (European) grass can be compared to it for copiousness of yield, particularly if the soil contains a fair quantity of lime; its nutrition being first class. The chemical analysis made very late in spring by Mueller and Rummell gave the following results:—Albumen, 1.87; gluten, 7.11; starch, 1.05; gum, 4.47; sugar, 3.19 per cent.

This looks like a new piece of information, but the data are taken from the entry ‘*Dactylis glomerata*’ in either Mueller (1881), p. 101 (entry 81.01.04), or the next Australian edition (Mueller 1885, p.115, entry 85.12.03). Such items are not included in the publication list, and if found by readers cannot be taken at face value but need

to be critically examined for their provenance. Anything attributed to Mueller in newspapers relating to plants of economic value after the publication of the first version, *Select plants (exclusive of timber trees)* (Mueller 1872, entry 72.07.01) should be compared with his final edition of *Select extra-tropical plants* (Mueller 1895, entry 95.08.04), and if dating of the comment is critical, traced back through earlier editions.

Modern 'print on demand' versions, widely advertised on bookseller websites, and of problematic legitimacy as often taken from on-line images on digitisation sites, have not been included. Nor have legitimate non-contemporary reprints of some works been listed; for example, the 1974 facsimile reissue of the complete *Fragmenta phytographiae Australiae* by Asher has been omitted. (It contains the first privately printed fascicle, 58.03.01, not the reprinted version issued with 58.06.01 – see Darragh & Lucas, (2015)).

Proofs and extra-prints

The specific epithet in the original publication is *Tatea subacaulis* whereas in this leaflet it is "*Tatea acaulis*". This has misled many botanist (*sic*). A.A. Munir. 29.xi.1983. (Final part of a note attached to K1067682)

Munir's note, drawing attention to two versions of a text by Ferdinand von Mueller, exemplifies the bibliographical problems posed by proof sheets and extra-prints. How should proof sheets be handled when they are known to have been sent to correspondents by Mueller? How should intended publications known by the existence of copies of proofs or extra-prints be treated if they were never formally published, or if they were published elsewhere, explicitly based upon texts received from Mueller? These questions are relevant not just for bibliographers but also for nomenclaturists, because considerations of 'effective publication' under the *International Code of Nomenclature for algae, fungi, and plants* (Turland et al. 2018) (previously the *International Code of Botanical Nomenclature*; hereafter 'the Code') arise from these cases.

Extra-prints of published articles. We know that Mueller was anxious to see his work in print quickly, and to receive printed copies as soon as possible. For example, he asked Otto Tepper in a letter of 20 February 1882 'How often does the Adelaide Royal Society publish and does the author receive his extra reprints right after

the printing of the paper?'² He asked a similar question about being able to receive extra-prints at his expense if a paper was submitted to the Linnean Society of New South Wales.³ Especially, but not only, after his *Fragmenta* ceased publication with 82.12.03,⁴ it is very likely that the great majority of his papers published in journals were distributed as extra-prints, not just the few that were so listed in the 1998 edition of his bibliography. For example, we know that Tepper received a prepublication copy of the extra-print of 96.10.01 with a letter from Mueller written in the margin, for after Mueller's death in October 1896, Tepper so annotated a copy that Mueller had sent on 18 September.⁵

The majority of known distributions of extra-prints bear neither a date of despatch nor one of receipt, but the example of the sheet received by Tepper indicates that at least some of them were distributed before the item was formally published, in this case in an issue dated 1 October. The five volumes of Mueller's 'Opuscula' at Kew contain many items, some annotated as presentation copies without dates to Joseph or William Hooker or to George Bentham, as well as some that were originally presented to others who were not based at Kew. For example, there is a copy of 60.04.07, the *Report on the resources of the Colony of Victoria* (Royal Society of Victoria, 1860) inscribed by Mueller 'To his Excellency Sir Geo: Gray, K.C.B.'. The National Library of Australia holds a substantial number of reprints or proofs, mainly in the series of 'pamphlets' collected by each of the bibliographers E.A. Petherick and J.A. Ferguson, as well as by the collector Rex Nan Kivell. The majority of these are not listed in the Home *et al.* (1998) edition of Mueller's publications. Many are inscribed by

2 State Herbarium of South Australia, Plant Biodiversity Centre; Mueller Correspondence project translation. Mueller's question is a little odd, as earlier that year 82.01.02 had been published in the Society's journal. All letters cited here are included in the Mueller Correspondence Project collection; the archival location of the original is given in the notes.

3 Ferdinand von Muller to Edward Ramsay, 22 March 1880, (ML MSS.562, Letters to E. P. Ramsay 1862–91, Mitchell Library, State Library of New South Wales).

4 According to Mueller, the majority of the edition of this part was destroyed in the 1882 fire in the Government Printing Office, and although Mueller hoped to continue the series, and into it to 'collect what became lately scattered', no more parts were issued (Mueller to Robert Brain, 22 May 1889, M89/6614, unit 501, VPRS 3992/P inward registered correspondence, VA 475 Chief Secretary's Department, Public Record Office, Victoria; Mueller to George Bentham, 8 November 1882, RBG Kew, Kew correspondence, Australia, Mueller, 1882–90, ff. 38–39).

5 Ferdinand von Mueller to Otto Tepper, 18 September 1896, Tepper's MS copy at RB MSS M198, Library, Royal Botanic Gardens Victoria.

Mueller, but they very rarely have a date of presentation. Petherick evidently acquired, presumably in London, many items once owned by the former Governor of Victoria, Henry Barkly, to whom Mueller continued to send reprints, the latest being a copy of 96.14.02, his joint paper with Tate.⁶ Some, such as the leaflet noted by Munir in the Kew herbarium, are undoubtedly proofs, not extra-prints of the final article.

The general lack of distribution dates posed a problem for compiling the current edition of Mueller's publications. Should an effort be made to include all items for which a proof or extra-print is known to exist? If not, how should the very small number of such items listed in the earlier editions be dealt with?

It would be misleading to admit automatically any newly found extra-prints. Doing so would inflate unrealistically the number of Mueller's publications, and without distribution dates would not add value. We also 'deleted' the existing items, unless there was very strong evidence that it would be misleading to do so. 'Deletion' decisions are noted against the original bibliography number to allow comparability between editions, but a comment has been added: 'No explicit evidence has been found that proofs or extra-prints were distributed significantly before [bibliography number] was published'. If there is a strong possibility that copies were provided when the item was read to a Society but not issued as part of its *Transactions* or *Proceedings* until much later, they were not deleted but an annotation made. For example, 83.13.08, which was read at the meeting of the Royal Society of New South Wales on 5 December 1883 must have been distributed as an offprint before the volume of the Society's transactions in which it appeared was issued in August 1884: it was effectively republished in *Botanisches Centralblatt* in June (84.06.04). Similarly, the comment in the entry for 91.08.03 reflects the judgement that it is almost certainly a proof of Mueller's paper read to the Royal Society of Tasmania on 17 August 1891, a copy of which was sent to *Botanisches Centralblatt* in time for it to be published on 7 October 1891 (91.10.03), well before it was published in the Society's journal in June 1892 (92.06.02).

⁶ Inscribed 'To Sir Henry Barkly GCMG, K.C.B., FRS with regardful remembrance from Ferd. von Mueller' (National Library of Australia, PETHpam 533).

Warning about effective publication of items.

Some of the items listed in the 1978 and 1998 editions of Mueller's publications are citations of extra-prints or 'galley proofs' of items also listed as an item in the relevant issue of the journal. A few of these items have a note stating that 'Further investigation may be required to determine whether the names were effectively published according to Article 29 of the International Code of Botanical Nomenclature (1972).'

Most of the problematic items refer to copies of versions of items that were not published as intended or expected. This is especially true of eight items destined for Wing's *Southern science record* in issues that never appeared. The earlier editions of Mueller's bibliography included the warning but gave no evidence that the items had been distributed, merely asserted that they had been. The working folders at MEL used to prepare these editions are of little help, only occasionally giving evidence of provenance of the copy held. It is, in principle, possible that the copies were received from the publishers by Mueller but not distributed in a way that would meet the criteria for effective publication. The editors therefore decided that where evidence of the existence of a copy other than at MEL was available it should be given in the note to the entry. Two examples suffice:

Firstly, item number 84.13.18, where the entry is: [Extra-print] Definitions of some new Australian plants. *Southern Science Record*, **3**: 281-282. [This issue of the journal was never published. However, the article was distributed as an 'extra-print' by December when it was reported as being received by the *West Australian* (Perth), 30 December 1884, p. 3. It is summarised in *Just's botanischer Jahresbericht* **12**, Abt. 2: 204. There is a copy in the Australian National Library 'Botany leaflets', PETHpam 538, with a printed heading 'From Wing's "Southern Science Record," Vol. iii, pp. 281, 282.' A full Latin description of *Dipteranthemum* and the species *D. crosslandii* is given by Daniel Oliver in *Icones plantarum*, **16**, (1886), t. 1541, citing as the author of the name 'F. von Mueller in Wing's *Southern Science Record*, iii, p. 281' A copy of the extra-print is attached to specimen K357034.]

In this case, only *Dipteranthemum crosslandii* of the three new species described was published in a journal, albeit not the one for which it was prepared. The other two names were *Trianthema glossostigmum* and *Wehelia staminosa*.

At the time the publication list was being revised, APNI entries for *Trianthema glosostigmum* and for *Dipteranthemum crosslandii* each had the comment:

As stated by R.W.Home *et al.* (eds), *Regardfully Yours* 1: 637-638 (1998), Mueller's paper in the *Southern Science Record* volume 3 was not published in the journal. Mueller distributed the paper as page proofs and it is here considered effectively published under ICN Art. 29 (Melbourne Code, 2012)⁷

Based purely on the evidence in the 1998 edition of Mueller's publication list, these seemed suspect conclusions; they have now been deleted from APNI.⁸

The additional evidence provided in the entry in the present edition is more supportive of distribution of the text by Mueller. But distribution to collectors and correspondents is not sufficient evidence of effective publication: much depends on a careful analysis in terms of the criteria in the current *Code*: 'Publication is effected, under this Code, by distribution of printed matter (through sale, exchange, or gift) to the general public or at least to scientific institutions with generally accessible libraries' (Turland *et al.* 2018), Article 29). Any analysis to determine effective publication of *Dipteranthemum crosslandii* must consider whether part of the paper attached to an herbarium sheet, (i.e., not part of the Kew Library) when it is not known whether the whole extra-print was sent to Kew or only the page with the description, and a copy with unknown provenance now in the National Library of Australia, together constitute sufficient evidence of its having been placed in a qualifying location.

The other species described in the paper, *Wehlia staminosa*, was discussed by Craven (1987), p. 156:

The original description of *Wehlia staminosa* was included in a paper due to be published in Volume 3 of *Southern Science Record*. Apparently the pages allocated to Mueller's paper were not included in the printing run and the paper was not actually published in the journal.⁹ Mueller, however, received 'extra-prints' and these were

distributed to some of his botanical correspondents. In this manner his new names have been published effectively under Article 29 of the International Code of Botanical Nomenclature ('extra-prints' are held in at least BRI, G and MEL, and probably are in K also). Mueller must have been satisfied with this unorthodox method of disseminating information as the paper does not seem to have been republished in a more formal fashion.

I have not found a copy of the whole item at Kew in Mueller's 'Opuscula' or attached to the sheets K821957 or PERTH01624644.¹⁰ Unless the copies in Brisbane and Geneva have a clear provenance showing that Mueller sent copies of 84.13.18 to a 'generally accessible library', there is no evidence that supports Craven's judgement.

Secondly, item number 85.11.02:

[Unpaginated extra-print] Definitions of some new Australian plants. *Southern Science Record*, new series, 1. [This issue of the journal was never published. However, the republication in *Botanisches Centralblatt* in December, as '(From Wing's "Southern Science Record". Vol. 1 New Series 1885. Nov.)' indicates that Mueller sent a copy of the extra-print before the scheduled date of publication in Victoria. There is a copy of the sheet in the Australian National Library 'Botany leaflets', PETHpam 538.] [see also 85.12.05]

and its associated item 85.12.05:

Definition of some new Australian plants. *Botanisches Centralblatt*, 24(12-13): 373-374. [in Churchill *et al.* (1978) and Home *et al.* (1998) as 85.13.18] [see also 85.11.02]

In this case Mueller's descriptions were published, even though the intended publication was aborted. Nomenclaturists would need to consider whether a copy of the extra-print sent to the German journal, and the one in the National Library of Australia in a copy with unknown provenance and unknown date of distribution, is sufficient to satisfy the conditions for effective publication in the earlier print when considering the publication date of *Hibbertia holtzei*, *Tribulus forrestii* and *Babbagea scleroptera*. All three names were listed in APNI¹¹ as published in *Southern science record* and for the last two also in *Botanisches Centralblatt*, but without any warning about the fact that the issue of *Southern science record* listed was never published. The argument

7 Here and below the entries quoted from the on-line APNI were accessed on 21 September 2022.

8 All three names were listed in the hard-copy version of APNI (Chapman, 1991) as being validly published without any editorial commentary on the publication status of the paper in which they appeared. Anna Monro (CANB) suggested that the entries were probably made by analogy with the way *Wehlia staminosa* was treated after a subsequent re-examination of Craven (1987) (e-mail to Arthur Lucas, 30 October 2018).

9 This is a misunderstanding of the publication history of the *Record*: the complete issue was missed, not just Mueller's paper, see Barnard (1899).

10 A sheet from Herbarium Gardenerianum donated in 1970 to PERTH by the Benedictine Community of New Norcia.

11 APNI entry under *Babbagea scleroptera*, the source documents give the name as *Babbagea scleroptera*.

might also have to consider how much weight, if any, is to be given to Mueller himself later listing the *Southern science record* as the place of publication of these species (Mueller 1889, pp. 1, 22, 51 respectively, entry 89.12.03) (see below).

Uncorrected proofs A third example, taking us back to the quotation at the head of this section, concerns a different issue, whether a proof known to have been amended before formal publication can be considered to be effectively published. Consider 83.04.07:

[Proof sheets] Diagnoses of a new genus and species of Verbenaceae from Arnheim Land. [In his letter of 27 April 1883 to Ralph Tate, the editor of the journal, Mueller acknowledged receipt of the proofs, which Tate had sent to him before the paper was read on 1 May 1883. In his letter to Tate of 25 May 1883 Mueller requested an amendment, to change *Tatea acaulis* to *T. subacaulis*. That change, along with some other corrections in the description and the title, was made before publication in the journal. However, in his species listing in 84.03.06 and subsequently in 89.12.03, Mueller used his original name *Tatea acaulis*, as in the proof sheets, rather than the formally published *Tatea subacaulis*. There is a copy of the proof at Kew, accompanying K1067682. The specimen has one of Mueller's labels, with the name 'Tatea acaulis', annotated at Kew 'Rec^d 5/83', although it is not clear whether the proof sheet accompanied it. Another specimen, K1067681, with Tate's label using *T. subacaulis*, is annotated 'Com. R. Tate, 7/1884'. There is a copy of the proof in the Australian National Library 'Botany leaflets', PETHpam 538.] [see also 83.12.04]

and the associated 83.12.04:

Diagnosis of a new genus of Verbenaceae from Arnheim's Land. *Transactions and Proceedings of the Royal Society of South Australia*, 6: 33-34. [see discussion at 83.04.07]

There are two points of interest here. Firstly, which of the names has priority, the one in the proof sheets, or the one in the journal reflecting Mueller's considered(?) decision? It might be relevant that the copy at MEL of the proof sheet is a photocopy of the photocopy at AD supplied by K. In addition, Merrill (1951, p. 75) cited the name as *T. acaulis*, perhaps suggesting that there was a proof sheet at Harvard, but his 1950 note attached to K1067681 means that he saw that sheet, and thus the Kew copy of the proof. Munir (1984, p. 8), unknowingly but mistakenly described as a 'preprint' what Mueller referred to as 'the proof'. Once again, is there sufficient evidence here to consider the proof sheet effectively

published, based on the proof attached to the herbarium sheet and a copy with unknown provenance and date of distribution in the Australian National Library? Secondly, if the proof sheet can be sustained as effectively published, is it appropriate to give priority to a name rejected by the author before it was formally published in the issue of the journal? Would that be compatible with the *Code*?

After considering these and similar examples the editors decided that it is beyond the scope of the bibliography to make decisions about whether items in it are effectively published and whether the taxon names given in them are validly published under the *Code*. That is a task for botanists, not historians. However, it is important to include these items in the new listing in some form as they would otherwise become 'fugitive publications'.

Proofs and extra-prints as effective publication

Once the decision was taken to include problematic proofs and extra-prints without attempting to determine whether they were effectively published, Mueller's practices ceased to be a bibliographic issue *per se*. However, preparing the third edition of Mueller's bibliography has inevitably meant considering the related literature. Thus, nomenclaturists considering the validity or priority of *Tatea acaulis* / *subacaulis* might consider the weight that can be placed on Mueller's use of the proof-sheet name in his second *Census* (Mueller 1889). The example suggests that Mueller listed the names when he had a commitment to publish but did not revise his index at final appearance of the journal. This is consistent with his treatment of the names mentioned in proofs or extra-prints that were not published in the intended source: three are outside the geographic range of the *Census*; one is a comment on an earlier name by Cunningham, one is not indexed, and the remainder are cited from non-existent *Southern science record* issues.¹² Names first printed in the gatherings of the planned but never completed second

¹² Of these, Mueller did not publish elsewhere the names in 86.04.03 (*Euphorbia corynoclada*, *Melaleuca quadrifaria*, *Tristania longivalvis*, *Panax macdowallii*), but they are listed in *Just's Botanischer Jahresbericht* 14 Abt. 2, 218, (1886), as No. 608a, although the *Panax* is given as *P. madonelli*. Unusually, this *Panax* is not listed in either edition of his *Systematic census* ... (83.03.04, 89.12.03).

volume of *The plants indigenous to the Colony of Victoria* are treated in the same way. For example, in his *Census* the place of publication of *Acacia oswaldi* is 'F.M. Plants of Vict. ii, 24'. We know that sheets were sent successively to Bentham as they were printed,¹³ and were quoted by him in Bentham (1863–1878), volume 2, which also cites the re-publication in Mueller's *Fragmenta*. For our example, *A. oswaldi*, in his *Census* Mueller also cited Bentham vol. 2, p. 384, and *Fragmenta*, volume 4, p. 5.¹⁴

On the face of it, Mueller, who was concerned, almost obsessed, with priority, intended to rely on these versions for the dates of his names. But that neglects his considered request to change the name of *Tatea acaulis* / *subacaulis*. Can a judgement of his intentions form part of a consideration of effective publication?

While not their main argument, Court, Cowan & Maslin (1994, p. 316) argue that although certainly distributed, the new names in the first 5 sheets of vol. 2 (in Mueller's bibliography as 63.13.06) of *The plants indigenous to the Colony of Victoria* were not effectively published under the 1988 *Code* as 'it appears to us unlikely that Mueller had any intention of making generally available to anyone the first few pages of an aborted publication, certainly not "to the general public" or "to botanists generally"'. Contrast this with the views of Craven (1987) quoted above: 'Mueller must have been satisfied with this unorthodox method of disseminating information as the paper does not seem to have been republished in a more formal fashion'. 'Intentions' are not part of the criteria in the current or earlier versions of the *Code* and it is difficult to see how they could be if the *Code* is to be clear.

Court, Cowan & Maslin implicitly acknowledge that the requirement for effective publication must depend upon the status of the recipient when the author distributed the text. Kew Gardens Library became state property and implicitly available to the public after William Hooker's collections comprising 'over 1 million

herbarium specimens, 4000 volumes of publications, and about 29,000 letters dating from 1810 from over 4400 correspondents, bound in 76 volumes' were bought for the nation from William's heir Joseph Hooker in 1866 (FitzGerald 2004). It is certainly now accessible to both 'botanists generally' and 'the general public', but it would make nonsense of the *Code* if the five 63.13.06 sheets containing descriptions of *Acacia* species magically become effectively published as the status of the library changed. Similarly, effective publication of the material prepared for the *Southern Science Record* but never published there surely cannot have been effected when Petherick deposited his collection at the National Library of Australia from 1909. It is theoretically possible that he may have acquired some from a qualifying library, and secure provenance might show that a copy was originally deposited appropriately. However, provenance would be nigh impossible to establish for the National Library of Australia copies: the Library has no record of where Petherick originally acquired the items.¹⁵

Questions of effective publication must address several issues where evidence is difficult to obtain. The mere existence of copies outside MEL is not sufficient. I have not contacted all institutions that might hold copies of proofs or extra-prints to fully address the provenance questions in any specific case. However, the default condition surely must be that the effective publication is the journal where an item first appeared, whether the one originally intended or not, and that in cases where items exist only in the form of proofs or extra-prints, they must be considered 'not effectively published' unless very good provenance consistent with all the criteria of the *Code* is established. Hence the warning in the publication list:

inclusion in Mueller's publication list ... does not in itself establish that the item has been 'effectively published'.

Fragmenta phytographiae australiae.
Disconcertingly, individual fascicles of this major work

¹³ Mueller to Bentham, 23 July 1863, RBG Kew, Kew correspondence, Australia, Mueller, 1858–70, ff. 110–111. Although copies have not been seen, Mueller almost certainly sent sheets to Sonder in Hamburg for distribution, see Mueller to Carl von Martius, 12 August 1863, Martuisiana, II, A, 2, Handschriften-Abteilung, Bayerische Staatsbibliothek, München.

¹⁴ In addition to place and date of first publication of each species, the only literature Mueller cites in his *Census* is Bentham (1863–1878) and his own *Fragmenta*: he argued that by quoting the *Fragmenta* and *Flora Australiensis* 'all needful indications [of the literature] are afforded' (Mueller (1883, p. vi).

¹⁵ Petherick, despite being an excellent cataloguer and bibliographer, did not keep detailed information on his own acquisitions or create a catalogue of his collection. They were most likely acquired by Petherick when he was based in London, probably prior to his bankruptcy in 1894, but could also have come into his collection after his return to Australia in 1908' (e-mail: Petherick Librarian (Andrew Sergeant) to R.W. Home, 13 February 2020). See also the entry for Edward Augustus Petherick in the *Australian Dictionary of Biography*, <http://adb.anu.edu.au/biography/petherick-edward-augustus-4393>, accessed 21 September 2022.

could appear also to be problematic. In 1883, questions were raised about the distribution of Mueller's publications. In response to a question from James Service, the Premier of Victoria, the Government printer, John Ferres, reported that 500 copies of the *Fragmenta* were printed, and distributed 'To Departments, Visitors from other Countries, Horticultural Societies – on authorised requisitions, and by sale'. Ferres was reporting on the bound volumes, and Mueller provided additional information, including the comment:

of the loose numbers which constitute each volume of the fragmenta gradually, 25 copies are extraprinted, when ever each number appears, and given to me by Mr Ferres for use in my office and for sending to the principal amateurs at the time contributing unpaid to our collections. Each volume of the fragmenta requiring and having required from 2 to 4 years for its elaboration, with one or two exceptions.¹⁶

Two days later, Mueller corrected this statement:

I have since learnt from my Assistant, that in later years we had received also 100 copies of the loose parts, altho' (so far as my memory carries me) we got only 25 copies of the separate unbound parts of the earlier volumes, the larger later requirements having arisen from the gradually augmented demands by botanic correspondents now nearly all over Australia and also widely abroad.¹⁷

Given the number of collectors acknowledged in a typical fascicle, it seems unlikely that 25 copies would allow libraries to have received copies of the fascicles as they were printed. So, especially for the early years, it could be that fascicles may not have been distributed in a manner which meets the criteria of the *Code*.

However, we know that, at least for volume 1, institutions received copies of individual fascicles as issued, see for example the description of a copy at the Linnean Society of London in Darragh & Lucas (2015, p. 303). We also know that the *Transactions and proceedings of the Royal Society of Victoria* records receipt of fascicles of the first seven volumes, and the first fascicle of the eighth (72.03.01), presented as they were published.¹⁸ Fascicle 94 (82.12.03), the only one

issued of volume 12, was included in a list of donations during 1882 to the Library of the Royal Society of New South Wales 1883.¹⁹ Furthermore, fascicles were being received at Kew. George Bentham received the text 'regularly transmitted to me as printed' (Bentham 1884, p. 305). Of course, although working at Kew, Bentham was a private individual, and it is not at all clear whether fascicles received by him after Kew library became a national establishment would have been made available to users of that Library. Bentham complained that 'the 4th and 5th vols of your Fragmenta have only come to us in the loose sheets sent to Sir W. Hooker as they came out and sometimes in proofs which appear to have been afterwards altered so that we have some difficulty in making them up complete.'²⁰ However, the language he uses suggests that Bentham did work collaboratively with the Hookers, and copies may have been available to those who wanted them. Similarly, in 1880 Mueller told Joseph Hooker that 'I send once more 89 & 91 of the frag', that is, two years before the bound volume containing them was ready. The language again suggests that individual fascicles were routinely sent to Kew.²¹

Provided that libraries of societies, maintained for the benefit of members, and after 1865 the State-supported Kew library, qualify as 'generally accessible', there can be no doubt that the fascicles were effectively published as they were issued.²²

Acknowledgements

My co-editors of the revised publication list, and in their role as editors of *Correspondence of Ferdinand von Mueller*, have over many years provided direct or indirect assistance in considering the questions raised here. Rod Home checked files at MEL and read and commented on a penultimate draft. Anna Monro (CANB), who has responded to questions about how particular names have been treated in APNI, stimulated many of the

16 John Ferres to James Service, 8 May 1883; Mueller to James Service, 15 May 1883 (both P83/334, unit 4, VPRS 1163/P inward correspondence, VA 1123 Premier, Public Record Office, Victoria).

17 Mueller to Ebenezer Thomas, 17 May 1883 (Unit 4, VPRS 1163/P1 inward correspondence, VA 1123 Premier, Public Record Office, Victoria).

18 See, for example, the reports of the meeting of the Society on 21 August 1864 and 13 May 1872, *Transactions and proceedings of the Royal Society of Victoria*, respectively **6**, liv and **10**, 211.

19 *Journal and proceedings of the Royal Society of New South Wales*, **16**, 264.

20 George Bentham to Mueller, 19 April 1867 (RB MSS M4, Library, Royal Botanic Gardens Victoria).

21 Mueller to Joseph Hooker, 10 August 1880 (RBG Kew, Kew correspondence, Australia, Mueller 1871-81, ff. 285-286).

22 Although *Papuan plants* was issued in parts, as well as a bound edition for volume 1 (77.13.14), it is also unproblematic: parts are known to have been issued to public libraries (Report of the meeting of the Ballarat Public Library Committee, 6 June 1876, *Ballarat star*, 7 June 1876, p. 2).

thoughts here, and I have benefited from the careful reading by the *Muelleria* referees. As always, I am grateful to Paula Lucas for her critical reading of drafts. I of course am responsible for the interpretation of their comments.

References

- APNI (2023+, continually updated) Australian Plant Name Index. Available online: <https://biodiversity.org.au/nsl/services/search/names> (accessed 21 September 2022).
- Barnard, F.G.A. (1899) The Southern Science Record. *Victorian Naturalist* **16**, 112–113.
- Bennett, G. (1877). Notes on banyan fig trees. *Gardeners' chronicle new series* **8**, 105–106.
- Bentham, G. (1863–1878) *Flora australiensis*. Reeve: London.
- Bentham, G. (1884) On the joint and separate work of the authors of Bentham and Hooker's "Genera Plantarum". *Journal of the Linnean Society. Botany* **20**, 304–308.
- Chapman, A. D. (1981) *Australian plant name index*, vol. 1–4. Australian Government Publishing Service: Canberra.
- Churchill, D.M., Muir, T.B. and Sinkora, D.M. (1978). The published works of Ferdinand J.H. Mueller (1825–1896). *Muelleria* **4**, 1–120.
- Churchill, D.M., Muir T.B. and Sinkora, D.M. (1984) The published works of Ferdinand J.H. Mueller (1825–1896). Supplement. *Muelleria* **5**, 229–248.
- Court, A.B., Cowan, R.S. and Maslin, B.R. (1994) Mueller's "Plants indigenous to the colony of Victoria": is volume 2 effectively published? *Nuytsia* **9**, 315–318.
- Craven, L.A. (1987) A revision of *Homalocalyx* F.Muell. (Myrtaceae). *Brunonia*, **10**: 139–158.
- Darragh, T.A. and Lucas, A.M. (2015) Two states of fascicle 1 of Mueller's *Fragmenta phytographiae australiae*. *Archives of natural history* **42**, 301–307.
- FitzGerald, S., (2004) Hooker, Sir William Jackson (1785–1865). *Oxford dictionary of national biography*. Available online: <http://www.oxforddnb.com/view/article/13699> (accessed 18 March 2020).
- Home, R.W., Lucas, A.M., Maroske, S., Sinkora, D.M. and Voigt, J.H. (eds) (1998). *Regardsfully yours: selected correspondence of Ferdinand von Mueller*, Vol. 1. Lang: Bern.
- Home, R.W., Darragh, T. A. Lucas, A.M., Maroske, S., Sinkora, D.M., Wells, M. and Voigt, J.H. (eds) (2023+) *The correspondence of Ferdinand von Mueller*. Available online: <https://vmcp.rbg.vic.gov.au/>
- Knapp, J.A. (1877) Baron Ferdinand von Mueller: eine biographische Skizze, *Zeitschrift des Allgemeiner Österreichischer Apotheker-Verein* **15**, 597–612.
- Krummel, D.W. (1988) The dialectics of enumerative bibliography: observations on the historical study of the practices of citation and compilation. *The Library Quarterly: Information, Community, Policy* **58**, 238–257.
- Lucas, A.M, Maroske, S. and Brown-May, A. (2006) Bringing science to the public: Ferdinand von Mueller and botanical education in Victorian Victoria. *Annals of Science* **63**, 25–57. doi.org 10.1080/00033790500365389
- Maroske, S. (2018) Doris Martha Sinkora (1927–2017) – herbarium curator, phycologist, historian of botany. *Australasian systematic botany society newsletter* **174**, 33– 35.
- Maroske, S. and Darragh, T.A. (2016). F. Mueller, 'The Murray-scrub, Sketched Botanically', 1850: A Humboldtian Description of Mallee Vegetation. Supplementary material. *Historical Records of Australian Science* **27**, 41–46. doi.org/10.1071/HR16001
- Merrill, E.D. (1951). Tatea F. Mueller (*Pygmaeopremna* Merrill) and *Premna* Linnaeus. *Journal of the Arnold Arboretum* **32**, 73–78.
- Mueller, F.J.H. von (1872) *Select plants (exclusive of timber trees) readily eligible for Victorian industrial culture, with indications of their native countries and some of their uses*. Acclimatisation Society of Victoria(?): Melbourne.
- Mueller, F.J.H. von (1881) *Select extra-tropical plants readily eligible for industrial culture or naturalisation, with indications of their native countries and some of their uses*. New South Wales edition (enlarged). T.H. Richards Government Printer: Sydney.
- Mueller, F.J.H. von (1883). *Systematic census of Australian plants, with chronologic, literary and geographic annotations. Part 1. – Vasculares*. M'Carron, Bird & Co.: Melbourne.
- Mueller, F.J.H. von (1885) *Select extra-tropical plants readily eligible for industrial culture or naturalisation, with indications of their native countries and some of their uses*. New Victorian edition, revised and enlarged. John Ferres Government Printer: Melbourne.
- Mueller, F.J.H. von (1889) *Second systematic census of Australian plants, with chronologic, literary and geographic annotations. Part 1 – Vasculares*. McCarron, Bird & Co.: Melbourne.
- Mueller, F.J.H. von (1895) *Select extra-tropical plants, readily eligible for industrial culture or naturalisation, with indication of their native countries and some of their uses*. Ninth edition, revised and enlarged. Robt. S. Brain, Government Printer: Melbourne
- Munir, A.A. (1984) A taxonomic revision of the genus *Premna* L. (Verbenaceae) in Australia. *Journal of the Adelaide Botanic Gardens* **7**, 1–43.
- Royal Society of Victoria (1860) *Report on the resources of the Colony of Victoria*. John Ferres Government Printer: Melbourne.
- Turland, N.J., Wiersema, J.H., Barrie, F.R., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Kusber, W-H., Li, D-Z., Marhold, K., May, T.W., McNeill, J., Monro, A.M., Prado, J., Price, M.J. and Smith, G.F. (eds.) (2018) *International Code of Nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017*. Regnum Vegetabile 159. Glashütten: Koeltz Botanical Books. doi.org/10.12705/Code.2018.