



The Gullivers' travels: Thomas Allen Gulliver (1848–1931), Benjamin John Gulliver (1851–1938) and Susannah Gulliver (1857–1938): their contribution to Australian natural history and horticulture

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Abstract: The Gulliver siblings, Thomas Allen Gulliver (1848–1931), Benjamin John Gulliver (1851–1938) and Susannah Gulliver (1857–1938), made a largely unacknowledged contribution to Australian natural history and horticulture. This work provides amended biographical information and assesses their botanical collecting activities and contribution to taxonomic endeavours related to the Australian flora and fauna. Susannah Gulliver's contribution was considerably less significant than that of her brothers and an assessment of her collections and activities is provided. The siblings collected botanical specimens mostly for Ferdinand von Mueller. About 1460 specimens are presently accounted for in Australian and European herbaria, mainly held at Royal Botanic Gardens Victoria (MEL) and Royal Botanic Gardens Kew (K). About fifty taxa (mostly species) of vascular plants, bryophytes, algae and a single lichen were named from specimens based on, or partly based on, specimens collected by the Gulliver brothers. Thomas also gathered zoological specimens from the Norman River region (Gulf of Carpentaria, Queensland) including type specimens of birds and fish. The Gullivers were competent and innovative horticulturists, as demonstrated by the success of their enterprise Acacia Vale Gardens and Nursery in Townsville.

Lectotypes are chosen for the following names based on specimens collected by the Gullivers: *Acacia conjunctifolia* F.Muell., *Chionachne sclerachne* F.M.Bailey, *Dendrobium dicuphum* F.Muell., *Eleocharis nuda* C.B.Clarke, *Kentia wendlandiana* F.Muell., *Marsdenia rhyncholepis* F.Muell. and *Sowerbea alliacea* F.Muell.

Keywords: botanical collectors, Cadell's Northern Territory Expedition, Ferdinand von Mueller, Acacia Vale Gardens, southern Gulf of Carpentaria region, typification

Introduction

As a result of the availability of electronic access to primary resources about the work of taxonomic botanists, their collectors and specimens, researchers have access to previously unpublished letters, newspaper articles, once difficult to obtain copies of parliamentary papers and other relevant reports and publications, plus access to specimen databases held by both Australian and overseas herbaria. Such access has made it possible to more thoroughly investigate the activities of taxonomists and associated collectors and consequently supply often new and more accurate details and corrections for otherwise misleading information that has sometimes unknowingly been perpetuated. This situation applies in some degree to the Gulliver siblings, Thomas Allen Gulliver (1848–1931), Benjamin John Gulliver (1851–1938) and Susannah Gulliver (1857–1938) who were active as natural history collectors in the later decades of the nineteenth century.

Regarding the Gulliver's botanical collecting activities, there have been errors of biography and issues of confused, unclear or incorrect attribution in various accounts, for example Ewart & Davies (1917), Hall

(1984), Willis *et al.* (1986), Desmond (1994), Home *et al.* (1998, 2002), Orchard (1999), Puttock (1999: 297) and Barrett *et al.* (2020). Some notes in the Australasian Virtual Herbarium entries are also incorrect (see *Trianthema compactum* among others). These errors may include incorrect birth/death dates, erroneous and misspelt names, travel itineraries and repeats of the statement that both brothers collected during Captain Francis Cadell's Northern Territory Expedition of 1867–1868 (Desmond 1994, citing "Austral. Encyclop. 1965, 446" as his reference; Orchard 1999: 13; Home *et al.* 2002: 793, citing Desmond as their source), when indeed only Benjamin was on that expedition (George 2009).

Examples where mistakes have been repeated include two relating to Bentham's *Flora Australiensis*. Thus, Bentham (1869: 427), citing specimens of *Ipomoea erecta* R.Br. [= *Jacquemontia browniana* Ooststr.] from "near Caledon Bay, B. Geell.", the abbreviated name repeated by Ewart & Davies (1917: 230), and when citing specimens of *Clerodendrum* (as *Clerodendron*) *tomentosum* var. *mollissima* Benth. (Bentham 1870: 63) he referred to "near Caledon Bay, Gulf of Carpentaria, R. Gull", a mistake perpetuated by Munir (1989: 161).

In defence of both Bentham and Munir, in the latter example, the name of the collector on the label of the syntype specimen (MEL98346) is abbreviated as “B. Gull.”. Some of the variants of the brother’s names are due to the difficulty of interpreting handwritten labels (see Tables 5–7).

Despite their productivity, the Gullivers were not included in the main entries of the 2nd edition of Volume 1 of *Flora of Australia* (Orchard 1999) or in the current *Australian Dictionary of Biography*. This paper aims to improve the accuracy of biographical information about the Gulliver siblings, to investigate their collecting activities and highlight their contribution to taxonomic botany and other natural sciences in Australia.

Materials and methods

Biographical data were verified by surviving documents, many of which were held by descendants and made available to the authors, or otherwise in library or archive collections. From the start, this paper was focused on the plants collected by the Gullivers, with collection data compiled from the following databases: National Herbarium of Victoria, Royal Botanic Gardens Victoria (MEL), State Herbarium of South Australia (AD), Australasian Virtual Herbarium (AVH, to May 2023), Royal Botanic Gardens, Kew (K), Plants of the World Online (POWO; <https://powo.science.kew.org>), JACQ (<http://www.jacq.org>) and JSTOR Global Plants (JSTOR-GP; <http://plants.jstor.org>). Physical specimen searches were conducted by herbarium staff at the Queensland Herbarium (BRI), K and MEL on behalf of the authors. Newspaper items were located through the TROVE online search facility. Correspondence was accessed through the Royal Botanic Gardens Victoria (Correspondence of Ferdinand von Mueller) and the Archives and Library, Royal Botanic Gardens Kew (Queensland letters). In the process of accumulating these data we were to become aware of their broader contributions to natural history, including their collection of algae, lichens, birds and fish. With botanical backgrounds an effort was made to thoroughly check for potential nomenclatural problems, including typification, by sourcing all original publications, and many subsequent floras and taxonomic revisions relevant to each plant taxon listed in Tables 5–7. For other taxa we mostly relied on checklists for providing original publication

data and accepted names. For nomenclatural matters we principally referred to the *International Code of Nomenclature for algae, fungi, and plants* (ICN; Turland *et al.* 2018) and *The Code decoded* (Turland 2019), as well as McNeill (2014).

Biographical background

On 31 October 1856, Thomas (Allingham) Allen Gulliver, aged 48, his wife Sarah Jane Gulliver (née Day), aged c. 28, and their children arrived in Melbourne on board S.V. *Startled Fawn* from Deal, England (departed 2 August 1856¹). They were married at St. Anthony, Falmouth, Cornwall on 11 August 1846. Ship manifests and immigration documents listed four accompanying children:² Thomas Allen Gulliver, aged eight years, Benjamin John Gulliver, aged five, Sarah Anne Gulliver, aged three and George (James) Gulliver, aged 21, Thomas’ son by a previous marriage. Soon after arrival in Australia, Thomas (snr) and Sarah Jane had another daughter Susannah (Susan or Susie) who was born at Sandhurst (Bendigo).³ Thomas died intestate, and the probate application made by Sarah Jane listed seven children (excluding George). In addition to the children already mentioned, the other children listed in the probate application were Alfred Arthur Gulliver,⁴ Henry Horatio Gulliver⁵ and Henrietta Louise Edith Charlotte Gulliver.⁶ There were two other children born in Victoria not listed in the probate application, Josiah Gulliver and Charles Gulliver, both of whom had predeceased their father as infants (Table 1).

After arrival in Melbourne, the family went to Bendigo where Thomas tried his luck in the goldfields and later was employed at a station on Campaspe River before settling in Melbourne in 1860.⁷ Thomas took employment as a gardener when the Melbourne Botanic Gardens and adjacent gardens were under the directorship of Victorian government botanist Ferdinand von Mueller, and by 1862 he was reported to be “in charge of the reserve between the botanic garden & the City Bridge”, otherwise known as the Government House Reserve, which also included today’s Domain Parkland and Memorial Precinct.⁸ Strictly speaking, he was not a gardener within the Melbourne Botanic Gardens, although he was accountable to Mueller for most of his career. He held this position up to his death on 1 June 1873. Sarah Jane

1 *The Argus* (Melbourne), Shipping intelligence, 6 Nov. 1856, p. 4.

2 Australia, Victoria, Inward Passenger Lists, 1839–1923. Public Record Office of Victoria, Australia. <https://FamilySearch.org> [accessed: 16 June 2021].

3 BDM Victoria. <https://my.rio.bdm.vic.gov.au/efamily-history>.

4 BDM Victoria. <https://my.rio.bdm.vic.gov.au/efamily-history>.

5 *Brisbane Courier*, Family notices, 17 Oct. 1890, p. 7.

6 VPRS 28/P0002, 11/457. Thomas A. Gulliver: Grant of administration [accessed 17 Mar. 2022].

7 *Bendigo Advertiser*, Municipal Police Court, 14 June 1858, p. 3

8 Ferdinand von Mueller to Clement Hodgkinson, 1862-01-22 [62.01.22a]. R.W. Home, T.A. Darragh, A.M. Lucas, S. Maroske, D.M. Sinkora, J.H. Voigt & M. Wells (eds), *The Correspondence of Ferdinand von Mueller*. <https://vmcp.rbg.vic.gov.au/id/62-01-22a> [accessed: 1 Oct. 2022].

Table 1. Family history data for the Gulliver family, including parents and children.

Family member	Birth date and place	Death date and place
Thomas (Allingham) Allen Gulliver	8 Nov. 1807, Dorchestershire, England	1 June 1873, Melbourne, Victoria
Wife 1: unresolved, possibly Elizabeth Burgess (dates unknown) or Jane Mockridge (1806–1844)	—	—
Elizabeth Jane Gulliver	22 Feb. 1832, Dorsetshire, England	29 Sept. 1873, Footscray, Victoria
George James Gulliver	27 Aug. 1834, Cornwall, England	31 Aug. 1865, Melbourne, Victoria
Wife 2: Sarah Jane Gulliver (née Day)	1828 or 1829, Portsea, England	13 Jan. 1888, Brighton, England
Thomas Allen Gulliver	3 Mar. 1848, Cornwall, England	13 June 1931, Townsville, Queensland
Benjamin John Gulliver	28 Feb. 1851, Cornwall, England	30 Sept. 1938, Townsville, Queensland
Sarah Anne Gulliver	25 July 1852, Cornwall, England	18 Aug. 1924, Brisbane, Queensland
Susannah (Susan or Susie) Gulliver	15 Oct. 1857, Sandhurst, Victoria	2 Feb. 1938, Townsville, Queensland
Josiah Gulliver	24 Feb. 1860, Richmond, Victoria	18 Dec. 1862, Melbourne, Victoria
Charles Gulliver	9 Apr. 1862, Richmond, Victoria	4 Apr. 1872, Melbourne, Victoria
Alfred Arthur Gulliver	28 Apr. 1864, Melbourne, Victoria	9 Apr. 1937, Launceston, Tasmania
Henry Horatio Gulliver	2 July 1866, Melbourne, Victoria	12 Oct. 1890, Townsville, Queensland
Charlotte Henrietta Edith (Ida) Louise Gulliver	5 Feb. 1868, Melbourne, Victoria	19 Aug. 1952, Queensland

returned to England [year not known] where she died in 1888.⁹ Nothing is known of the children's education.

In Melbourne, the family occupied a three-roomed cottage that was “in the reserve on which he [Thomas snr] is engaged being placed at his disposal”.¹⁰ Thomas (jnr) was employed as a gardener in the Melbourne Botanic Gardens and the Government House reserve between 1863 and 1870.¹¹ In February 1866 it was reported that Benjamin was a Garden Boy engaged in general garden work at the Melbourne Botanic Garden.¹² In that same year it is known that Benjamin collected an orchid from “Brighton scrub”. This specimen is held in the National Herbarium of Victoria [MEL1540863] and annotated as “*Pterostylis* 22/6/66. Perhaps new. Brighton scrub. B. Gulliver” and is a syntype for what Mueller later described as *P. mackibbinii* F.Muell., a name now in synonymy under *Pterostylis cucullata* R.Br. In the same year Benjamin, in collaboration with Charles French (1842–1933), who was at that time employed at the botanic gardens as a propagator and glasshouse attendant, gathered a large collection of terrestrial orchids for the gardens. In 1867, at the age of 16, he was appointed by Mueller as the

botanical collector on Captain Francis Cadell's Northern Territory Expedition (see details below). Some accounts incorrectly state that Thomas was the collector or the co-collector during the Northern Territory Expedition but he remained in Melbourne at that time. Benjamin not only collected plants on this expedition (see more below), but sometimes gathered other specimens of natural history. For example, he made a collection of a mollusc at Crocodile Reef, the specimen noted by Cox (1872) in a small publication regarding the distribution of Australian Volutes. Cox identified the species as *Voluta tissotiana* Crosse, 1867. It may be that Benjamin also collected more shells as in the same publication it was acknowledged that “a good many specimens [of *Voluta flavicans* Gmelin, 1791 [= *Cymbiola flavicans* (Gmelin, 1791)]] were got by Dr. Creed and the crew of Cadell's expedition of 1867” and that specimens of this species were in the Melbourne Museum.

Cadell's Northern Territory Expedition returned to Sydney in January 1868. Although some details are known of the employment of Thomas (jnr) in this year, little is known of Benjamin's employment or activities after his return from the expedition. In 1869, Benjamin

9 Brisbane Courier, Family notices, 10 Apr. 1888, p 4.

10 Clement Hodgkinson to Ferdinand von Mueller, 1862-08-18 [62.08.18c]. R.W. Home, T.A. Darragh, A.M. Lucas, S. Maroske, D.M. Sinkora, J.H. Voigt & M. Wells (eds), *The Correspondence of Ferdinand von Mueller*. <https://vmcp.rbg.vic.gov.au/text/Mueller%20letters/1860-9/1862/62-08-18c-final/> [accessed: 1 Oct. 2022; but since then this letter seems to have been removed from the website]. Ferdinand von Mueller to James McCulloch, 1870-10-22 [70.10.22a]. R.W. Home, Thomas A. Darragh, A.M. Lucas, S. Maroske, D.M. Sinkora, J.H. Voigt & M. Wells (eds), *The Correspondence of Ferdinand von Mueller*. <https://vmcp.rbg.vic.gov.au/id/70-10-22a> [accessed: 22 Nov. 2023].

11 Ferdinand von Mueller to James McCulloch, 1870-05-11 [70.05.11f]. R.W. Home, T.A. Darragh, A.M. Lucas, S. Maroske, D.M. Sinkora, J.H. Voigt & M. Wells (eds), *The Correspondence of Ferdinand von Mueller*. <https://vmcp.rbg.vic.gov.au/id/70-05-11f> [accessed: 29 Aug. 2022].

12 Ferdinand von Mueller to James McCulloch, 1866-02-25. R.W. Home, Thomas A. Darragh, A.M. Lucas, S. Maroske, D.M. Sinkora, J.H. Voigt & M. Wells (eds), *The Correspondence of Ferdinand von Mueller*. <https://vmcp.rbg.vic.gov.au/id/66-02-25> [accessed: 22 Nov. 2023].

was reported as contributing “growing plants” to the botanic gardens, and in the same year both he and Thomas made “contributions of museum plants [i.e., herbarium specimens]” (Mueller 1869). From about 1870, there are indications that Benjamin was involved professionally with horticulture in Melbourne as he was elected as a member of the Victorian Horticultural Improvement Society in 1870,¹³ and proposed as a member of the Horticultural Society the same year.¹⁴ Benjamin was also reported as having displayed “some cases of *coleoptera*” at an exhibition of art and industry at the Lennox Street (Richmond) Young Men’s Mutual Improvement Society in 1870.¹⁵ Benjamin moved to Tasmania in late 1870 or 1871 and was engaged in seed collecting/marketing and fruit cropping at a property south of Hobart on Forestier’s Peninsula, which he first leased and then later purchased.¹⁶ He specialised in the collecting and marketing of *Eucalyptus* seeds (Abbott 1876).¹⁷ In a report of the May 1876 monthly meeting of members of the Royal Society of Tasmania there was reference to the “Brothers Gulliver” having collected seed of species of *Eucalyptus* from Mount Wellington. In part of a letter read at the meeting, Benjamin indicated that he had sent 10 lbs of seed from each of the alpine species, Tasmanian Snow Gum (*E. coccifera* Hook.f.) and Cider Gum (*E. gunnii* Hook.f.), and 2 lbs of Urn Gum (*E. urnigera* Hook.f.) seed to Europe since 1874, charging 30 shillings per pound for each species. He also noted that trees of both *E. gunnii* and *E. urnigera* were felled for their seeds, but not *E. coccifera*. It was also recorded that Blue Gum seed was sold for between 7s. and 10s. per pound (Abbott 1876).

Benjamin provided materials for an exhibit at the Philadelphia International Exhibition of 1876, under his own name as well as the Gulliver Brothers, by displaying under the banner of Tasmanian products samples of seeds of *Eucalyptus globulus* (Blue Gum), *Acacia melanoxylon* (Blackwood), *A. mollissima* (Black Wattle) and *A. dealbata* (Silver Wattle) (Tasmanian Commissioners 1875). A donation from “B. Gulliver, Hobart Town. Eighteen kinds of Tasmanian seeds” was received by the Melbourne Botanic Gardens in 1874 (Guilfoyle 1874). Records indicate that the Gullivers

collected plants specimens in Tasmania from 1870 through to 1873 (Mueller 1874, 1876; AVH 2022).

Benjamin married Julia Masters (21 July 1849–31 Aug. 1938) at Emerald Hill, Victoria on 12 Jan. 1875,¹⁸ with three children born in Tasmania: Benjamin Thomas (17 Dec. 1875–6 Nov. 1948), Julia May (4 May 1877–22 Feb. 1879)¹⁹ and Albert Arthur (27 Sep. 1879–6 Oct. 1948).²⁰ Later, another daughter, Margaret Lillian (4 Dec. 1882–5 Sep. 1958) was born in Victoria and a son and a daughter were born in Townsville: Robert Henry Gordon (Bob) (30 May 1885–16 Sep. 1975) and Julia (Birdie) (22 July 1888–31 Aug. 1938).

Nothing is known of Susannah Gulliver’s early years.

Thomas Allen Gulliver in Queensland, 1873 to 1931

While Benjamin (and possibly Susannah) remained in the south, Thomas (jnr), in 1873, took a position in Queensland as a telegraph line repairer after the completion of the telegraph line from Cardwell to the mouth of Norman River in 1872 (Rea 1971; Gribble 1981). The intention was to connect Australia with Europe via an underwater cable from Java to reach the mouth of Norman River. However, this did not proceed, and the connection to an underwater cable was made at Darwin via the overland telegraph line from Adelaide via Port Augusta (Palmer 1903). The route of the Gulf of Carpentaria line, in a westerly direction, was Cardwell, Taylors Creek, Cashmere, Mineral Springs, Junction Creek, Eva Creek, Ada Creek, Etheridge, Gilbert River, Wooleys Lagoon, Carron Creek, Francis’s Lagoon, Rocky Creek, Normanton and Sandy Point.²¹ Some of these place names were used by Thomas on his field collection labels (see more below). Thomas was appointed on 27 May 1873 as an ‘unclassified officer’,²² and had postings at Nebo and St. Lawrence.²³ On 1 Apr. 1874 he was promoted to a ‘classified officer’²⁴ and was posted to Creen Creek and Kimberley (now Karumba).²⁵ In 1875 Thomas took on the role of telegraph station master at Normanton,²⁶ then at Thornborough from 1877²⁷ through to early 1882.²⁸ On 1 July 1882, he was appointed manager

13 *Leader* (Melbourne), Victorian Horticultural Improvement Society, 16 July 1870, p. 24.

14 *The Australasian* (Melbourne), Town news, 18 June 1870, p. 19.

15 *The Argus* (Melbourne), The Lennox-street (Richmond) young men’s mutual improvement society, 5 Aug. 1870, p. 7.

16 *Launceston Examiner*, Advertising, 29 Sep. 1877, p. 8; Libraries Tasmania: Names Index.

17 *The Mercury* (Hobart), Blue Gum seed, 8 Aug. 1874, p. 3.

18 BDM Victoria. <https://my.rio.bdm.vic.gov.au/efamily-history>. accessed 5 Mar. 2022.

19 *Illustrated Australian News* (Melbourne), Births, marriages, deaths, 21 Mar. 1879, p. 46.

20 Libraries Tasmania. Name Indexes; *Townsville Daily Bulletin*, Obituary, 7 Oct. 1948, p. 2.

21 *Brisbane Courier*, The telegraph line to Normanton, 6 Oct. 1871, p. 2.

22 *Queensland Government Gazette*, 1892.

23 *Townsville Daily Bulletin*, Some reminiscences of old time telegraph offices, 11 June 1926, p. 11.

24 *Queensland Government Gazette*, 1892.

25 *Queenslander* (Brisbane), Scientific and useful, 5 Sep. 1874, p. 6.

26 *Pugh’s Queensland Almanac*, for 1877. Thorne and Greenwell: Brisbane.

27 *Pugh’s Queensland Almanac*, for 1878. William Thorne: Brisbane.

28 *Pugh’s Queensland Almanac*, for 1882. William Thorne: Brisbane.

Table 2. Natural history articles and letters by Thomas Allen Gulliver, mostly under the pseudonym “*Nettapus*”. In some of the articles, reference is made to the “*Bush Naturalist*”, a pseudonym for Price Fletcher (1836–1906).

Article title	Newspaper
The Pygmy Goose	<i>The Queenslander</i> , 7 Dec. 1878, p. 301, <i>The Naturalist</i> . https://trove.nla.gov.au/newspaper/page/2240456
The Heron	<i>The Queenslander</i> , 22 Mar. 1879, p. 373, <i>The Naturalist</i> . https://trove.nla.gov.au/newspaper/page/2249553
“A.M.G.’s” snake stories	<i>The Brisbane Courier</i> , 18 June 1879, p. 3 https://trove.nla.gov.au/newspaper/article/896525/73804
“Crocodiles, not alligators”	<i>The Queenslander</i> , 9 Aug. 1879, p. 172, <i>The Naturalist</i> . https://trove.nla.gov.au/newspaper/article/20327794/2251185
The Broad-billed Flycatcher	<i>The Queenslander</i> , 15 Nov. 1879, p. 618, <i>The Naturalist</i> . https://trove.nla.gov.au/newspaper/article/20329553/2251693
Current notes on natural history	<i>The Queenslander</i> , 11 Sep. 1880, p. 330, <i>The Naturalist</i> . https://trove.nla.gov.au/newspaper/page/2246492
The home of the turtle	<i>The Queenslander</i> , 18 Sep. 1880, p. 364, <i>The Naturalist</i> . https://trove.nla.gov.au/newspaper/article/20335565/2246531 ; <i>The Brisbane Courier</i> , 25 Sep. 1880, p. 3.
Current notes on natural history: The Cassowary	<i>The Queenslander</i> , 6 Nov. 1880, p. 588, <i>The Naturalist</i> . https://trove.nla.gov.au/newspaper/article/20336443
Current notes on natural history: The Rain-bird; The Cassowary’s helmet	<i>The Queenslander</i> , 22 Jan. 1881, p. 106, <i>The Naturalist</i> . https://trove.nla.gov.au/newspaper/article/20704759/2250190 ; <i>The Brisbane Courier</i> , 22 Jan. 1881, p. 3.
Artesian wells	<i>The Queenslander</i> , 21 Jan. 1882, p. 88. https://trove.nla.gov.au/newspaper/article/19781947/2248214

of the telegraph office in Townsville,²⁹ and in 1896 as Officer-in-Charge (Gribble 1981). In 1904, he took a position in Brisbane as assistant manager of telegraphs,³⁰ but returned to Townsville in 1905 to be postmaster.³¹ He remained at Townsville post office until he resigned in April 1911 and retired in May 1913.³² It has been stated that Thomas was “one of the most prominent Telegraph officers in Queensland”, with his long 38-year career acknowledged as being “varied and creditable” (Gribble 1981). Indeed, he was held in high esteem by some of his acquaintances, as reported in January 1878 on his departure from Normanton: “Mr. T.A. Gulliver received this week a very elegant silver claret jug and cup, which were forwarded to him by his numerous friends in Normanton, in testimony of their esteem for him as a gentleman, and in recognition of valuable services rendered to many sick and injured people during his sojourn in that district”.³³

Concurrent with his roles in the telegraph and postal department, Thomas pursued interests in horticulture and experimental agriculture. He developed a 40

acre (16 hectare) property at Roseneath [sometimes incorrectly referred to as Rosemead] to the west of Townsville, experimenting with tropical crops and breeding a number of award-winning mango cultivars.³⁴ He was a regular contributor of natural history articles to the *Queenslander* and the *Brisbane Courier* [1878–1882], mostly under the pseudonym of *Nettapus* (Table 2).³⁵ Mueller (1885) indicated that Thomas was instrumental in acquiring specimens collected in New Guinea in 1884 by the naturalist Erik Gustaf Edelfelt.³⁶ Mueller wrote that Edelfelt was “an emissary of Thomas Gulliver, Esq., F.L.S., of Townsville, who made large monetary sacrifices, to obtain thus some new scientific material from New Guinea”. To commemorate Thomas’ contribution in this regard, Mueller (1885) named a species of New Guinea oak as *Quercus gulliveri* F.Muell. [= *Lithocarpus celebicus* (Miq.) Rehder].

Living plants or cuttings of crotons (*Codiaeum* spp.), were amongst those supplied by Edelfelt to the Gullivers.³⁷ Crotons became a speciality of Gulliver’s Acacia Vale Gardens.³⁸ There is circumstantial evidence

29 *Pugh’s Queensland Almanac*, for 1883. Gordon & Gotch: Brisbane.

30 *Telegraph* (Brisbane), Post and telegraph, 23 Mar. 1904, p. 6.

31 *Commonwealth of Australia Gazette*. Government gazette appointments and employment. 9 Sep. 1905, p. 766.

32 *Commonwealth of Australia Gazette*. Commonwealth public service. 22 Apr. 1911, p. 1330.

33 *Brisbane Courier*, [Editorial], 28 Jan. 1878, p. 2.

34 *Queenslander* (Brisbane), Notes on the north country. III, 6 Feb. 1892, p. 262.

35 *Queensland Figaro* (Brisbane), Personals, 9 June 1883, p. 6.

36 This surname was variously spelt as Edelfelt, Edelfeld or Edelfeldt.

37 Benjamin Gulliver to Joseph Hooker, 24 Jan. 1883. Records of the Royal Botanic Gardens, Kew (as filmed by the AJCP)/Fonds DC/File DC/171/1-471/Item ff.1-471/Queensland Letters. item 286.

38 *Brisbane Courier*, A northern nursery garden. Acacia Vale, Townsville, 6 Jan. 1888, p. 3.

that Edelfelt collected orchids that were subsequently grown at Acacia Vale Gardens. In correspondence to Henry Ridley in 1888, Mueller wrote: “Herewith, dear Mr Ridley, I beg to send you fragments of two Papuan orchids, taken from plants in the horticultural establishment of Mr Benj. Gulliver of Townsville, after whom I should like one to be named, the large-flowered spec. of *Dendrobium* seemingly being new”.³⁹ However, no species of *Dendrobium* or other New Guinea orchids named after Benjamin Gulliver are known in the literature.

Thomas Gulliver’s natural history collections

During his employment in the Norman River district, Thomas found time to observe and collect birds and other animal life. His involvement was explained in correspondence sent by his brother-in-law James Thorpe⁴⁰ in 1877 to the taxonomist Dr. Albert Günther, Keeper of Zoology at the Natural History Museum, London. Thorpe wrote requesting identifications of “a box containing various specimens of fishes, frogs and crabs found by my brother in law Mr. T.A. Gulliver on the Norman River Gulf of Carpentaria Northern Queensland. As the species are not known here you would oblige him, myself, and the Brisbane Museum (to which they have been presented) by naming them by the number attached to them, and then remitting them by any opportunity ... Mr. Gulliver is telegraph station master at Normanton and is an ardent naturalist and botanist”.⁴¹

In regards to Thomas’ activities, Ramsay (1878) made a passing reference that “small collections have been made at the Gulf of Carpentaria, and surrounding districts, by Messrs. Broadbent, Gulliver, and Inspector Armit” but it seems likely that Thomas’ bird collections from the Norman River region first came to the notice of the general public and other ornithologists in an account by Silvester Diggles (1817–1880), a musician, artist and amateur entomologist and ornithologist (Marks 1963; Fisher 2003; Pigott 2004, 2010). In 1876, a lecture by Diggles on Australian birds was given at a meeting of the Queensland Philosophical Society and published in the *Brisbane Courier*.⁴² Some of the article referred to Thomas Gulliver and his collections: “I have now the pleasure of informing you that an undoubtedly new species of *Poephila* has been sent to our friend the secretary of this society by Mr. Gulliver from Normanton. That gentleman also forwarded to the museum a considerable number of birds, some being of rare and desirable kinds”. Diggles proposed the name *Poephila atropygialis* Diggles, 1876 [= *P. cincta atropygialis* Diggles, 1876; Black-throated Finch] for that species. In addition, he wrote that another

discovery among the birds sent by Mr. Gulliver was a new *Acanthiza*. For that, Diggles proposed the name *Acanthiza flavigaster* Diggles, 1876 [= *Gerygone olivacea olivacea* Gould, 1838; White-throated Gerygone]. The newspaper article in the *Brisbane Courier* was soon reprinted in the *Transactions of the Queensland Philosophical Society* under the title ‘Some new birds and rare species of birds’ (Diggles 1876). Some taxonomists have accepted the *Brisbane Courier* as the place of publication of the new names, whilst this has been rejected by others who cite the *Transactions of the Queensland Philosophical Society* as the place of valid publication.

An inventory of bird material held in the Queensland Museum in 1876 listed the type specimens of both species as being held there, but in a search Ingram (1987) noted that he had failed to locate them. Diggles mentioned some of the other birds he had received from Gulliver, including the Green Pygmy-goose, Mangrove Robin, Pied Heron, Pied Monarch, Red-winged Parrot and Weebill.

The following year Castelnau & Ramsay (1877) published a paper concerning a collection of birds from the Norman River, Gulf of Carpentaria, which Castelnau had secured for his museum. They presented a list of 106 species, and while doing claimed authorship of the name *Poephila atropygialis*, taking exception to the account by Diggles in the *Brisbane Courier*, stating that “merely proposing a name and pointing out a difference in a newspaper can scarcely be looked upon as describing the species. We trust our friend will take this hint in the kindly spirit it is meant; and when he again favours us with the announcement of any new species, we hope they will be fully described”. However, as noted above, the newspaper article had already been reprinted.

Castelnau & Ramsay also described *Epthianura crocea* Castelnau & Ramsay, 1877, the Yellow Chat, and *Zosterops gulliveri* Castelnau, 1877 [= *Z. luteus luteus* Gould, 1843] the Silvereye, from specimens listed as coming from “Norman River, Gulf of Carpentaria. From Mr. Gulliver’s collection” (Longmore 1991). In the same paper they also described a possible new species of *Haematopus* (Oystercatchers), suggesting “it comes nearest to *H. fuliginosus* Should this species prove to be undescribed we propose for it the specific name of *ophthalmicus*.” The description was obtained from a specimen collected from Bountiful Island and was also from Gulliver’s collection. The taxon is now considered to be a subspecies of the Sooty Oystercatcher, *Haematopus fuliginosus ophthalmicus* Castelnau &

39 Ferdinand von Mueller to Henry Ridley, 1888-03-29. R.W. Home, T.A. Darragh, A.M. Lucas, S. Maroske, D.M. Sinkora, J.H. Voigt & M. Wells (eds), *The Correspondence of Ferdinand von Mueller*. <https://vmcp.rbg.vic.gov.au/id/88-03-29> [accessed: 8 Aug. 2022].

40 Husband of Sarah Anne (née Gulliver), married 12 Dec. 1874. *Brisbane Courier*, Family notices, 21 Dec. 1874, p. 2.

41 J Thorpe (Brisbane): specimen found by J [sic] A Gulliver on Norman River. Original at Natural History Museum, Letters of the Keeper of Zoology Archive. Letter accessed at <https://nla.gov.au/nla.obj-1552675420/view> [accessed: 19 Oct. 2023].

42 *Brisbane Courier*, Queensland Philosophical Society, 5 Aug. 1876, p. 3.

Table 3. Birds described on collections made by Thomas Gulliver. Taxonomically the IOC World Bird List v13.1 (Gill *et al.* 2023) is followed except for using Yellow White-eye (as used in Australia) as the English name for *Zosterops luteus*.

Taxon	Citation and common name
<i>Acanthiza flavigasta</i> Diggles, 1876. [= <i>Gerygone olivacea olivacea</i> (Gould, 1838)]. White-throated Gerygone. [Acanthizidae]	<i>Brisbane Courier</i> . vol. 31, no. 2874, 5 Aug. 1876, p. 3. Reprinted in <i>Proc. Queensland Phil. Soc.</i> 1876: 11. "Another discovery among the birds sent by Mr Gulliver is a new <i>Acanthiza</i> , and I have the pleasure of stating that, though new, it is also found in this neighborhood".
<i>Epthianura crocea</i> Castelnau & Ramsay, EP, 1877. Yellow Chat. [Meliphagidae]	<i>Proc. Linn. Soc. N.S.W.</i> 1: 380. "Hab. Norman River, Gulf of Carpentaria. From Mr. Gulliver's collection".
<i>Haematopus</i> , nov. sp.? [= <i>Haematopus fuliginosus ophthalmicus</i> Castelnau & Ramsay, EP, 1877]. Sooty Oystercatcher. [Haematopodidae]	<i>Proc. Linn. Soc. N.S.W.</i> 1: 384. "Hab. Bountiful Island. The specimen here described is from Mr. Gulliver's collection".
<i>Poephila atropygialis</i> Diggles, 1876 [= <i>Poephila cincta atropygialis</i> Diggles, 1876]. Black-throated Finch. [Estrildidae]	<i>Brisbane Courier</i> , vol. 31, no. 2874, 5 Aug. 1876, p. 3. Reprinted in <i>Proc. Queensland Phil. Soc.</i> 1876: 11. "I have now the pleasure of informing you that an undoubtedly new species of <i>Poëphila</i> has been sent to our friend the secretary of this society by Mr. Gulliver from Normanton".
<i>Zosterops gulliveri</i> Castelnau & Ramsay, 1877. [= <i>Zosterops luteus luteus</i> Gould, 1843]. Yellow White-eye. [Zosteropidae]	<i>Proc. Linn. Soc. N.S.W.</i> 1: 383. "Hab. Norman River, Gulf of Carpentaria. From Mr. Gulliver's collection".

Ramsay, 1877. Birds described from collections made by Thomas Gulliver are presented in Table 3.

Thomas Gulliver is credited as having provided a "collection of native birds from the Norman River", totalling 93 species, firstly for the Sydney International Exhibition of 1879 and then re-exhibited at the Melbourne International Exhibition of 1880–81 (Queensland Commission 1880; McKay 1997).

Thomas Gulliver also collected fish for Castelnau who published two papers in the same year with reference to specimens collected by Thomas. The first of these, Castelnau (1878a), was an account of new and poorly known species obtained by various collectors from Australian sites, and included reference to three fish collected by Thomas from the Norman River: *Scatophagus argus* Linnaeus, 1766, Spotted Scat; *Chatoessus erebi* Günther, 1868 [= *Nematalosa erebi* Günther, 1868], Bony Bream; plus *Kurtus gulliveri* Castelnau, 1878, Nursery Fish, which he described as new to science. Of the latter, the largest specimens examined were a little over four inches long. In the live state, they were reported by Gulliver to be entirely diaphanous, and found in a fresh water pond near the Norman River. It is a remarkable species as the males carry the eggs on a hook that protrudes from its forehead (Berra 2003).

The second paper, Castelnau (1878b), dealt entirely with fish from the Norman River. In the second paragraph of this paper Castelnau clearly stated the source of the collections and paid tribute to Thomas: "Mr. Gulliver, who has resided two years in this settlement [Normanton], and has done much for the zoology of that remote part of Queensland, has sent me two collections of fishes from this river [Norman

River], and Mr. Staiger, the curator of the Brisbane Museum, has placed in my hands a collection he had also received from the same collector. I have thus been able to determine twenty-five sorts, the greater part of which appears to me to be new".

He then listed the names of 25 species covered in his paper before proceeding to provide notes or descriptions for each one. In doing so he covered 14 known species (including *Kurtus gulliveri* and four other species which he had named in earlier publications) and described what he considered to be three new genera and 12 new species.

Whitley (1965), in a biography and bibliography of Castelnau reported that "[T]he Report of the Australian Museum for 1877 acknowledges a large collection from 'Le Comte de Castelnau.' A new fish (*Kurtus gulliveri*) and many birds were included." and that "[I]t may not be out of place to refer to notes on some of Castelnau's type specimens of fishes, since the Count's original descriptions are often, unfortunately, inaccurate or not sufficiently complete for modern purposes. Most of his types appear to be in the Paris Museum, but there are a few in Australian museums". All three of his new genera, *Acanthoperca* Castelnau, 1878 [= *Parambassis* Bleeker, 1874], *Gulliveria* Castelnau, 1878 [= *Glossamia* Gill, 1863] and *Pseudoambassis* Castelnau, 1878 [= *Ambassis* G. Cuvier, 1828] are now not recognised. Of the new species described in the same paper only four are now accepted, the remaining reduced to synonymy or listed as *incertae sedis* (AFD 2023; Kottelat 2013; Gill *et al.* 2018). Fish species described by Castelnau, based on collections by Thomas Gulliver from Norman River, are presented in Table 4.

Table 4. Fish genera and species described by Count Castelnau (1878a, b), based on collections by Thomas Gulliver from Norman River. Taxonomically this table primarily follows an undated article at the Australian Faunal Directory (AFD 2023). Discrepancies between it and FishBase (2023) are noted, and a publication by Kottelat (2013) is referred to.

Taxon	Citation and common name
<i>Acanthoperca</i> Castelnau, 1878 [= <i>Parambassis</i> Bleeker, 1874] [Ambassidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 44 (1878).
<i>Gulliveria</i> Castelnau, 1878 [= <i>Glossamia</i> Gill, 1863] [Apogonidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 45 (1878).
<i>Pseudoambassis</i> Castelnau, 1878 [= <i>Ambassis</i> G. Cuvier, 1828] [Ambassidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 43 (1878).
<i>Acanthoperca gulliveri</i> Castelnau, 1878 [= <i>Parambassis gulliveri</i> (Castelnau, 1878)] Giant Glassfish. [Ambassidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 45 (1878).
<i>Eleotris planiceps</i> Castelnau, 1878	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 49 (1878). Listed as <i>incertae sedis</i> , i.e. “of uncertain placement”; in AFD (2023) and not recognised at FishBase (2023).
<i>Eleotris simplex</i> Castelnau, 1878 [= <i>Hypseleotris compressa</i> (Krefft, 1864)] Empire Gudgeon. [Eleotridae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 49 (1878).
<i>Engraulis nasutus</i> Castelnau, 1878 [= <i>Thryssa hamiltonii</i> (Gray, 1835)] Hamilton’s thryssa. [Engraulidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 51 (1878).
<i>Gobius? sauroides</i> Castelnau, 1878 [Unresolved name]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 48 (1878). Listed as an <i>incertae sedis</i> ; location of holotype unknown and possibly not a gobioid fish; as per AFD (2023) and https://biodiversity.org.au/afd/taxa/Taenioides_anguiliris . Not recognised at FishBase (2023).
<i>Gulliveria fasciata</i> Castelnau, 1878 [= <i>Glossamia aprion</i> (J. Richardson, 1842)] Mouth Almighty. [Apogonidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 46 (1878).
<i>Gulliveria fusca</i> Castelnau, 1878 [= <i>Glossamia aprion</i> (J. Richardson, 1842)] Mouth Almighty. [Apogonidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 45 (1878).
<i>Kurtus gulliveri</i> Castelnau, 1878 Nursery Fish. [Kurtidae]	<i>Proc. Linn. Soc. N.S.W.</i> 2(3): 233 (1878).
<i>Leuciscus? australis</i> Castelnau, 1878 [Unresolved name].	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 51 (1878), “The specimen is very small and not in a very good state, and I may be mistaken about the palatine teeth; all I can see is that I can see none.” The genus is not in Australia and is not included in the Castelnau list at AFD (2023). Not recognised at FishBase (2023).
<i>Pseudoambassis elongata</i> Castelnau, 1878. [= <i>Ambassis elongata</i> (Castelnau, 1878)]. Elongate Glassfish. [Ambassidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 44 (1878).
<i>Pseudoambassis macleayi</i> Castelnau, 1878 [= <i>Ambassis macleayi</i> (Castelnau, 1878)] Macleay’s Glassfish or Macleay’s Perchlet. [Ambassidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 43 (1878).
<i>Scatophagus alternans</i> Castelnau, 1878 (as ‘altermans’). [Scatophagidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 47 (1878), invalid and not initially available as only proposed. Kottelat (2013) accepted the name as validated in Castelnau (1879: 376) and treated it as a synonym of <i>Scatophagus argus</i> (Linnaeus, 1766), the Spotted Scat. In contrast, at AFD (2023) it is treated as <i>Selenotoca multifasciata</i> (Richardson, 1846), the Striped Scat. Both <i>Scatophagus</i> and <i>Selenotoca</i> are members of the Scatophagidae. The name <i>Scatophagus alternans</i> not found at FishBase (2023).
<i>Toxotes carpentariensis</i> Castelnau, 1878 [= <i>Toxotes chatareus</i> (Hamilton, 1822)] Sevenspot Archerfish. [Toxotidae]	<i>Proc. Linn. Soc. N.S.W.</i> 3(1): 47 (1878). The name <i>Toxotes carpentariensis</i> not found in FishBase (2023).

As noted above, Thomas contributed to Australian natural history by occasionally sending letters on the subject to *The Queenslander* and the *Brisbane Courier* (Table 2). They are variable in length and quality and the first of these, signed as T.H. Gulliver, was about the Green Pygmy-goose, *Nettapus pulchellus*, a bird with which he seems to have been very fond of, noting among other things that he tried his best to prevent people in Normanton from shooting them. In subsequent correspondence he adopted the pseudonym "*Nettapus*".

In the article "Crocodile, not Alligators" Thomas wrote about the Freshwater Crocodile, *Crocodylus johnstoni*. Within it Thomas noted that he had procured two fine specimens from the head of the Norman River, "one of which can now be seen in our museum".⁴³ Of his articles, "The Heron" provides a good summary of his zoological activities.⁴⁴ It emphasises the fact that he was sending specimens to the Queensland Museum and gives an idea of the habitat in which he sometimes endeavoured to study and obtain bird specimens. As with so many collectors who shoot their trophies, he liked to remind people of his prowess with the gun.

The Queensland Museum became a significant recipient of Thomas Gulliver's collections. The Museum was founded by the Queensland Philosophical Society in January 1862. Prominent in the foundation were, among others, the naturalists Charles Coxen and Silvester Diggles, who remained actively involved in the Society and, subsequently, the Museum. At the time Thomas was active, Karl Theodor Staiger, in 1873, was appointed the first professional curator of the Museum.

In 1885, Mueller, William Woolls and Robert Fitzgerald, all then fellows of the Linnean Society, London, jointly nominated Thomas as a fellow of the society.⁴⁵ The letter of nomination stated: "We the undersigned propose Thomas Gulliver Esq. Director of the Telegraph Department, Forresterville Qld. for the honor of the fellowship of the Linnean Society, he being well deserving of this distinction by his zealous exertions for the furtherance of zoology and botany in New Guinea and Queensland". His nomination was never ratified because the fee was not paid by Gulliver. He was a consistent contributor to the Queensland herbarium (Bailey 1885) and the Queensland Acclimatisation

Society (Bowen Park, Brisbane)⁴⁶ to which he was elected to the committee of management in 1904.⁴⁷ Thomas' horticultural activities were summarised in the report of a sitting of the Federal Fruit Commission in 1912 in Townsville set up to investigate the fruit growing industry in north Queensland: "Thomas Allen Gulliver, of Hyde Park, retired public servant, said that at present he was amusing himself at his hobby of horticulture. He was growing chiefly mangoes. He had 20 acres under mangoes at Rosemead [correctly Roseneath], about seven miles along the Charters Towers line. He had another place, Acacia Vale, about four miles from town. There were 20 acres there, about ten of which were under mangoes. He had also a few choice trees at his own residence. He grew also strawberries, custard apples and sour sops, but had no bananas. He had had fair success with mangoes".⁴⁸

It is evident that both Thomas and Benjamin were breeding mangoes,⁴⁹ their most successful cultivar was known as Gulliver's Triumph, and described as resembling a Kensington Pride in appearance but with a 'superior' flavour.⁵⁰ Other cultivars developed by the Gullivers included Gulliver's Choice and Gulliver's Pride.

Taking an interest in local politics, Thomas nominated for the Thuringowa Shire Council elections in 1912,⁵¹ and served as a councillor from 1912 to 1915.⁵² He died in Townsville in 1931.⁵³ He never married.

One continuing legacy is the T.A. Gulliver Memorial Prize for Dux of Year 11 at Townsville Grammar School. This prize was established in 1938 by R.W. Burstall who was a beneficiary of Thomas' estate and the funding for the prize was derived from two Australian Bonds, each of ten pounds, the interest on which was to be devoted to the prize (Allen 1990). It was originally a prize for mathematics, but since 1971 has been awarded to the Dux of Year 11 (Helen Bourne, Townsville Grammar School, pers. comm.).

Benjamin John Gulliver in Townsville, 1882 to 1938

Benjamin Gulliver moved from Tasmania to Townsville in about 1882, establishing Acacia Vale Gardens and Nursery on the western outskirts of the town within what was soon after to become the suburb of Aitkenvale

43 *Queenslander* (Brisbane), Crocodile, not alligators, 9 Aug. 1879, p. 172.

44 *Queenslander* (Brisbane), The Heron, 22 Mar. 1879, p. 373.

45 Ferdinand von Mueller to B. Daydon Jackson, 1885-01-25 [85.01.25b]. R.W. Home, T.A. Darragh, A.M. Lucas, Sara Maroske, D.M. Sinkora, J.H. Voigt and Monika Wells (eds), *The Correspondence of Ferdinand von Mueller*. <https://vmcp.rbg.vic.gov.au/id/85-01-25b> [accessed: 28 Aug. 2022].

46 *Queenslander* (Brisbane), Acclimatisation Society, 23 June 1883, p. 989; *Queenslander* (Brisbane), Acclimatisation Society, 12 Sep. 1885, p. 439.

47 *Telegraph* (Brisbane), Acclimatisation Society, 23 Aug. 1904, p. 2.

48 *Townsville Daily Bulletin*, Sittings in Townsville, 21 May 1912, p. 2.

49 *Brisbane Courier*, Mangoes from Townsville, 14 Jan. 1895, p. 4.

50 *Townsville Daily Bulletin*, Gulliver's Triumph mango, weight 3lbs, 4 Jan. 1930, p. 5.

51 *Daily Mercury* (Mackay), Latest telegrams, 12 Jan. 1912.

52 *Northern Miner* (Charters Towers), Shire council elections, 19 Feb. 1915, p. 2.

53 *Townsville Daily Bulletin*, Mr. T.A. Gulliver, 15 June 1931, p. 4.

(Dowe 2022).⁵⁴ It quickly developed into one of the city's premier horticultural businesses and attractions.⁵⁵ Aviaries and a small zoo were also maintained on the property, including a pair of cassowaries and crocodiles.⁵⁶ Benjamin, in what was an ambitious move, proposed supplying plants to Kew Gardens, England. In correspondence of 1883 from Benjamin to director of Kew Gardens, Joseph Dalton Hooker, Benjamin wrote: "Having just started a tropical nursery here I write to ask if I can supply you with living plants of our orchids ferns palms cycads zamias etc. also seeds of our choice trees & shrubs or herbarium collections of our vegetation".⁵⁷ The response, if any, is not recorded. In Pugh's Almanac of 1884 Benjamin was listed as a fruiterer, and nursery & seedsman.⁵⁸

Acacia Vale Gardens and Nursery were located in an area with good soil, excellent water supply and adjoined a number of 'wealthy estates' (Gibson-Wilde 1984). It was one of a small number of horticultural enterprises that were supplying fruit and vegetables to the rapidly growing Townsville, with the population increasing from 5,140 in 1881 to 11,454 in 1886; other significant gardens included Henry Bartels at German Gardens (changed during WWI to Belgian Gardens) and Stuart Creek (Lawson & Lawson 1977). One reporter noted in 1886 that "One of the lions of Townsville is the garden of Mr. B. Gulliver at Acacia Vale, a pleasant drive from the town. Mr. Gulliver was botanist on Cadell's expedition, and is a thorough and indefatigable cultivator of shrubs, fruits and flowers, so that his nurseries and grounds are simply pictures; the climate allowing of the rearing of the most gorgeous flora".⁵⁹

Benjamin regularly entered plants competitively in agricultural shows, such as the first Towers Pastoral, Agricultural and Mining Association show held in Charters Towers in 1883 (Fig. 1). Further indication of the breadth of his horticultural interests are the prizes he received in the seventh annual show in 1889, for the following: "best collection of variegated foliage plants, silver medal ... best collection of growing ferns ... twelve roses, silver medal ... twelve assorted roses, silver medal ... six roses (different kinds) silver medal".⁶⁰

By the late 1880s, Benjamin, in collaboration with Thomas and Susannah, and some of his children, had formed Acacia Vale Gardens and Nursery into a flourishing family business (Dowe 2022) (Fig. 2). However, there were difficulties to be overcome in



Fig. 1. First prize medallion awarded to Benjamin Gulliver for 'Variegated Foliage Plants' at the 1883 Towers Pastoral, Agricultural and Mining Association show in Charters Towers, Queensland. Diameter 51 mm. Private collection.

regard to soil fertility and the availability of water in the gardens. To improve the soil, one newspaper reported that Benjamin "bought from a neighbouring [*sic*] slaughter-yard an immense accumulation of old bones, paying £100 for the privilege of carting them away. These as carted to the nursery were stacked in a large bed 2ft. deep, and were thickly covered with earth; this was at first duly watered, and being flat all the rain penetrated, so that in due time the bones softened from decay. Then he set about trenching the whole of the ground intended either for shrubbery or nursery, and at the same time intermixed with every layer of the soil a heavy dressing of the crushed and decaying bones".⁶¹

There were active exchanges and acquisitions of plants from within Queensland, for example exchanges with Brisbane Botanic Gardens, as 'Mr. Gulliver' (MacMahon 1891), and receipt of plants from the State Nursery at Kamerunga near Cairns, as 'Gulliver' (Cowley 1892). In 1909, it was reported by James Audas, senior assistant at the National Herbarium of Victoria after a study trip through north Queensland, that Acacia Vale was "a show spot lying some four miles to the west of Townsville. I noticed some fine specimens of *Poinciana regia* [*Delonix regia* (Bojer ex Hook.) Raf.],

54 Aitkenvale Estate [Map] (1883). Benwell & Echlin.; Smith and Walker; Brisbane, Qld.: McNaught Litho.

55 *Brisbane Courier*, A northern nursery garden, 6 Jan. 1888, p. 3.

56 *Maryborough Chronicle, Wide Bay and Burnett Advertiser*, A naturalist's camp in north Queensland, 17 July 1886, p. 6.

57 Benjamin Gulliver to Joseph Hooker, 24 Jan. 1883. Records of the Royal Botanic Gardens, Kew (as filmed by the AJCP)/Fonds DC/File DC/171/1-471/Item ff.1-471/Queensland Letters. item 286.

58 *Pugh's Queensland Almanac*, for 1884. Gordon & Gotch: Brisbane.

59 *Australian Town and Country Journal* (Sydney), Queensland of to-day. III, 2 Sep. 1886, p. 19.

60 *Northern Miner* (Charters Towers), Towers Pastoral, Agricultural, and Mining Association, 21 Aug. 1889, p. 2.

61 *Brisbane Courier*, A northern nursery garden, 6 Jan. 1888, p. 3.



Fig. 2. One of the few known photos of Acacia Vale Nursery and Gardens, c. 1906. Published in E.J. Banfield & G.H. Pritchard, *Townsville illustrated* (1906).

and was struck by the particularly fine growth of the cocoanut palms [*Cocos nucifera* L.], which were to be seen here in full bearing ... after spending a delightful hour in the shade of a huge *Robinia* [*Sesbania grandiflora* (L.) Poir.] and partaking of some choice strawberries ... I was compelled to bid a reluctant farewell to the genial hostess, Mrs. Gulliver” (Audas 1909).

Taking an interest in community affairs, Benjamin supported and promoted local horticultural activities. He donated plants and seeds to the developing Queen’s Gardens, the first public botanical garden to be established in Townsville (Hughes 1891, 1892).

As well as Acacia Vale Gardens, the Gullivers established a second garden at Hyde Park, which became the main retail outlet for their business. It was from this location that they traded in cut flowers and potted plants, as well as vegetables and fruit.⁶²

Benjamin maintained an interest in the management of Acacia Vale Gardens into the early 1930s. However, there was conflict between him and son Benjamin Thomas, which resulted in the latter being charged in

1933 with threatening to murder his father.⁶³ Acacia Vale Gardens as well as their properties at Hyde Park started to be sold off in the 1920s. Benjamin, his wife Julia and Susannah remained living at the Hyde Park residence until their deaths in 1938, Susannah in February, Julia in September and Benjamin in October of that year.⁶⁴ Benjamin and Thomas made a small number of botanical collections in the vicinity of Townsville (Cleveland Bay, Magnetic Island) as well as a few other places in north-east Queensland (see details below). A thorough search made by descendants has failed to locate any photos or images of Benjamin John Gulliver.

Susannah Gulliver in Tasmania, 1873, and Townsville, 1876 to 1838

In regard to Susannah Gulliver, a “Miss Gulliver”, confidently assumed to be her, donated bird skins of species from the Gulf of Carpentaria to the Royal Society of Tasmania in Hobart in 1876. The donation was reported as: “From Miss Gulliver – Two prepared skins of the Pied Egret (*Herodias picata*); two ditto of the Green Pygmy Goose (*Nettapus pulchellus*); one of

62 F.G. Carroll to Mrs. J. Gulliver, 2 May 1985. Townsville Regional Council Archives.

63 *Townsville Daily Bulletin*, [Editorial], 7 Mar. 1933, p. 4.

64 *Townsville Daily Bulletin*, Personal, 1 Oct. 1938, p. 6; *Townsville Daily Bulletin*, Vale, Mrs. Ben Gulliver, 13 Sep. 1938, p. 5.

Pink-eared Duck (*Malacorhynchus membranaceus*); one of Little Turtle Dove (*Stictopelia cuneata*)” (Agnew 1876). It is most likely that the specimens were collected by Thomas, as he had moved to Queensland in 1873. At this time, Susannah was residing in Tasmania and she may have forwarded the specimens to the Royal Society in Hobart, thence her name was attached as the donor. There is no evidence that Susannah independently collected natural history specimens (apart from Bryophytes in Tasmania, see below), but it is possible that she assisted Thomas in such activities when he was based in various places in Queensland. In her obituary, it was noted that Susannah (as Susie) “was his [Thomas] constant companion and housekeeper during his long residence in Townsville”.⁶⁵ Her involvement with Acacia Vale Gardens was described as being a “professional florist in a family of flower lovers”.⁶⁶ Like Thomas, Susannah remained unmarried. As mentioned above, she died in early 1938,⁶⁷ the same year as Benjamin and his wife Julia. A thorough search made by descendants has failed to locate any photos or images of Susannah Gulliver.

With regard to botanical collections by Susannah Gulliver, there are at least two specimens that are annotated with ‘Miss Gulliver’ as collector, and are accepted here as her collections. These were collected on Mt Wellington, Tasmania, and are undated. There are no original field labels and the existing secondary labels are in the hand of Sonder (MEL staff, personal communication). The specimens are of the moss *Ptychomnion aciculare* (Brid.) Mitt. [MEL1001306] and the liverwort *Schistochila lehmanniana* (Lindenb.) Steph. [MEL1037844]. The latter was cited in Gottsche (1880) as “*Gottschea lehmanniana* Mount Wellington, Gulliver et Beccari”. There are no known direct references in the literature to the former and the circumstances under which they were collected are not known. However, it can be reasonably suspected that they were collected by Susannah in the company of her brothers, as a suite of bryophyte specimens from Mt Wellington are annotated with ‘Gulliver’ as collector (Gottsche 1880). The brothers also collected a significant number of flowering plants from Mt Wellington (AVH 2022). See below for more details on the Tasmanian collections.

The suburb of Gulliver in Townsville, named in about 1950, commemorates at least one member of the family. One report suggests it was specifically named for Benjamin Gulliver (Matthew 2008) whilst another suggests Thomas Gulliver (Queensland Place Names 2022). The suburb subsumed the area informally known as Acacia Vale, which had expanded out from Acacia Vale Gardens to include a number of surrounding streets and properties.

A summary of the Gullivers' botanical collections

Assemblage 1. — New South Wales, 1867, exclusively the collections of Benjamin John Gulliver collected in March 1867 prior to commencement of the Northern Territory Expedition

To prepare for the Northern Territory Expedition (see Assemblage 2), Benjamin John Gulliver arrived in Sydney during March 1867. Prior to departure, he made a significant number of collections from the Sydney area (Botany Bay, Manly Beach, Port Jackson). Original labels in Benjamin’s hand frequently include location and all but three specimens have labels with dates: two labelled as ‘March 22 Northshore’ and one as ‘March 24 Botany Bay’. A few of the Sydney specimens were later cited by Mueller (1873, 1875). Otherwise, little is known of this assemblage from the point of view of motivation and instruction from Mueller. One new species was described from the collections, *Eugenia cyanocarpa* F.Muell [= *Syzygium oleosum* (F.Muell.) B.Hyland], and is typified by a Benjamin Gulliver specimen (Table 5).

Assemblage 2. — The Northern Territory Expedition (Northern Territory, Western Australia, Timor, Queensland), April 1867 to January 1868, exclusively the collections of Benjamin John Gulliver

In 1863, the colony of South Australia acquired the Northern Territory by annexation from the colony of New South Wales. In what was another investigation of potential settlement locations, Captain Francis Cadell was commissioned to examine the western Gulf of Carpentaria and the north coast of the Northern Territory. Cadell was recognised as a thorough and effective explorer and navigator because of his pioneering survey work on Murray River (Threadgill 1922; Painter 1979; Nicholson 2004; Webster 2017). The prospectus of the Northern Territory Expedition was outlined in a letter from South Australian Chief Secretary Arthur Blyth to Cadell: “... the principal object of your mission to the Northern Territory is to select, as soon as possible, a favorable site for the survey of 300,000 acres of good land, within a reasonable distance of a secure harbor, easily navigable and conveniently situated as a port of call; with a healthy site for a capital, in close proximity to fresh water and timber”.⁶⁸ The underlying impetus to establish a settlement was to assure land-order holders that their pre-paid investments were to be honoured by the South

65 *Townsville Daily Bulletin*, Personal, 3 Feb. 1938, p. 6.

66 *Townsville Daily Bulletin*, The death of Miss Gulliver, 16 Feb. 1938, p. 5.

67 *Townsville Daily Bulletin*, Funeral notice, 3 Feb. 1938, p. 6.

68 Arthur Blythe to Francis Cadell, 22 Feb. 1867. Northern Territory correspondence, South Australia, Parliamentary Paper 79. 1868.

Australian colonial government with a new supply of agricultural and pastoral lands.

After six weeks of preparation, the expedition set sail from Sydney on 1 April 1867, on two vessels, S.S. *Eagle* and tender *Firefly*. The exploring party comprised persons engaged by Cadell in South Australia, Melbourne and Sydney. Among the prominent members were Francis Napier, as engineer and navigator and Dr John Mildred Creed, as medical officer. The original composition of the party did not include a botanist and the details of how sixteen-year-old Benjamin John Gulliver was first appointed to the role of botanical collector and how he joined the expedition remain inconclusive. Ferdinand von Mueller, Victorian Government Botanist and Director of Melbourne Botanic Gardens and at that time the most prominent botanist working in Australia, initiated the inclusion of a botanical collector, later recalling that “[S]ome time previously [to 1890] Mr. B. Gulliver was sent from the Botanic Gardens of Melbourne, by the writer of these pages, on a collecting errand with Captain Cadell’s expedition ...” (Mueller 1890: 74). To offset the costs of having a botanical collector on the expedition, a deal was struck that the proceeds of Gulliver’s collections, i.e. living plants, seeds, botanical specimens etc., were to be shared equally between the Melbourne Botanic Gardens and Adelaide Botanic Gardens, where Richard Schomburgk was director.⁶⁹

There are no known formal accounts of the botanical results of the expedition, either by Gulliver himself or Mueller. Some information can be gleaned from the field collection labels that have survived and accompany the specimens. However, these are invariably only a brief description of the plant and the date and place that the collection was made. Applying identification of the plants to the level of genus or even family appears to have been beyond Gulliver’s capabilities, as evidenced by his simple field collection labels. Otherwise, he was reported to be “a good rider and marksman, and to have a keen eye for specimens, and that he was an acquisition to Captain Cadell’s small staff, and Dr. Mueller anticipates good results from his labours in a remote field, seldom visited hitherto”.⁷⁰ Reports by expedition members, other than Cadell’s official report (see Napier 1876, 1877; Creed 1916), mostly failed to provide any information about Gulliver in his role of botanical collector and gardener during the expedition whilst an informal diary account by the expedition carpenter Dugald Robinson (1867–1868) included a few relevant mentions.

Benjamin Gulliver’s itinerary during the Northern Territory Expedition presented here is deduced from five original sources: Cadell (1867), Robinson (1867–1868), Napier (1876), Creed (1916) and surviving field collection labels that accompany his specimens. Some dates needed to be approximated as those provided in the original sources did not always correlate.

It is likely that Gulliver joined Cadell and his expedition party in either Melbourne or Sydney. It was reported, some weeks prior to departure, that “the exploration party under Captain Cadell, on behalf of the South Australian Government will ... be accompanied by a gentleman selected by Professor Mueller, who will collect botanical specimens and act generally as a scientific associate in the expedition for the joint benefit of the colonies of Victoria and South Australia”.⁷¹ From Melbourne, Cadell sailed on S.S. *Wonga Wonga* on 11 Mar. 1867 for Sydney,⁷² but neither the other expedition members nor Gulliver were listed as fellow passengers.⁷³ After loading supplies and finalising the crew, the expedition departed Sydney on 1 Apr. 1867 with a complement of 25 men. From Sydney, the expedition sailed north, making stops at Newcastle (3–5 Apr.), Brisbane (9–13 Apr.) (from where additional crew members were assigned), Port Denison (Bowen) (18 Apr.), Cleveland Bay (Townsville) (19–20 Apr.) and Cape York (Lizard Island, Cairncross Island, Albany Island, Endeavour Strait) (24–29 Apr.) before heading west to reach the Northern Territory at Wessel Islands (1 May) and Castlereagh Bay (2 May). The expedition followed the coast near Crocodile Islands (4 May) and entered Liverpool River (5 May) with the aim of finding a suitable place to establish a base camp (6–12 May). The following day (13 May), Cadell “formed a camp on shore for the doctor, carpenter, botanical collector, and stockmen who are to be left behind when I go down to Mount Norris Bay ... The collector was to get on with his garden, on a melaleuca flat, close to a little well ...”. Cadell (1867: 2) described the location of the camp as “at the *Beatrice’s* furthest”, in reference to the most inland point on Liverpool River reached by the surveying schooner *Beatrice*, one of the vessels engaged during John McKinlay’s expedition of 1866.⁷⁴ There is no surviving evidence of the camp site but an estimate based on the maps of the *Beatrice* survey indicate that it was in the vicinity of about 4 km north of the present-day road crossing of Liverpool River of the Manangrida Access Road, on the western side of the river.

While Cadell explored the coast and other rivers in the area in S.S. *Eagle* and *Firefly*, Gulliver and the stockmen remained at the camp, from where they took excursions on both the west and east sides of the river. The first

69 *Sydney Morning Herald*, South Australia, 20 Feb. 1868, p. 5.

70 *The Australasian* (Melbourne), Town news, 13 Apr. 1867, p. 18.

71 *Bendigo Advertiser*, Melbourne, 15 Mar. 1867, p. 2.

72 *Argus* (Melbourne), Shipping intelligence, 3 Apr. 1867, p. 4.

73 *Sydney Morning Herald*, Shipping, 14 Mar. 1867, p. 4.

74 Liverpool River and track survey of coast to Cape Stewart by the officers of H.M. Surveying Schooner *Beatrice*, 1866. National Library of Australia. MAP G9041.S12 1866. <https://nla.gov.au/nla.obj-573715693/view> [accessed: Apr. 2022].

crossing to the eastern side of the river was on 14 June when one horse drowned during the attempt (Napier 1876: 38). Exploration of the eastern side included “the young botanical collector” in the party (Napier 1876: 39). It appears that they were only away for a few days, as some of Gulliver’s specimens are labelled from the western side by 20 June (e.g., *Cochlospermum fraseri* and *Melaleuca leucadendra*, among others). Gulliver remained at the camp almost continuously for about two months, and this was where he gathered the major portion of his botanical collections of the expedition. Seven new species were described from his collections from Liverpool River: *Acacia dissonaura* F.Muell. [= *Acacia latescens* Benth.]; *Acacia luehmannii* F.Muell. [= *Acacia sublanata* Benth.]; *Cassia heptanthera* F.Muell. [= *Senna heptanthera* (F.Muell.) Randell]; *Crinum muelleri* Lehmilller & Lykos; *Dendrobium dicuphum* F.Muell.; *Kentia wendlandiana* F.Muell. [= *Hydriastele wendlandiana* (F.Muell.) H.Wendl. & Drude]; and *Sowerbaea alliacea* F.Muell. One excursion away from the river during that time was taken on *Firefly* to Blythe River (c. 29 June) when “[T]he young man, the botanist went with the Mates party” (Robinson 1867–1868: 50). The camp on Liverpool River was subsequently decommissioned (11 July) and Gulliver and the stockmen re-joined the expedition on board the vessels in anticipation of sailing east to the Gulf of Carpentaria.

Soon after commencing to sail along the coast toward the Gulf, S.S. *Eagle* was declared unfit by Cadell and they returned to the estuary of Liverpool River to undertake repairs and cleaning (13–18 July). Gulliver went ashore during this period. Again (19 July), an attempt was made to reach the Gulf, via the inner channels but this proved difficult and a landing was made at Castlereagh Bay (24 July– 4 Aug.), where the horses and most of the party were landed. Gulliver made collections there. In the meantime, Cadell attempted to plot a course into the Gulf, which he did and returned to collect the expedition members left at Castlereagh Bay. Passing Groote Eylandt and Bickerton Island (11 Aug.), the waters of the Gulf were finally entered.

On approaching what they had anticipated was the mouth of Roper River, *Firefly* collided with the aft of S.S. *Eagle* and sank (12 Aug.). There was no loss of life. The following day they reached Maria Island (13 Aug.), where the party landed and Gulliver made collections. From there, Cadell made another attempt to locate the mouth of Roper River, but what they at first surmised to be Roper River was indeed another small river (possibly Limmen Bight River).

Realising that they had been unsuccessful in locating Roper River, they sailed to Sweers Island and landed the party (22 Aug.), where Gulliver made collections. The settlement on Sweers Island at that time consisted of several houses, a lock-up and at least one hotel (Saenger 2005:14). While on Sweers Island, Gulliver transcribed

the names and text on the ‘Investigator Tree’ (Saenger 2005; Collins *et al.* 2020), first carved by Matthew Flinders as a record of the landing on the island during the voyage of H.M.S. *Investigator* in 1802. Other explorers added their names or initials to the living tree over a period of about fifty years. Gulliver wrote of this event: “During the two days we stayed there I made some botanical excursions on the island, securing, amongst others, a specimen of a rare and peculiar red-flowering lily. Here whilst walking along the beach I came upon the tree now called the “explorer’s tree.” It was then growing and in a healthy state”.⁷⁵ The identity of the ‘red-flowering lily’ has not been established as there are no surviving Gulliver collections from Sweers Island that would match such a plant that flowers in August.

From Sweers Island, the whaleboat was used to reach Burketown, via Albert River (24 Aug.). Having replenished supplies, they departed Sweers Island (2 Sep.) to land again on Maria Island (5 Sep.). Another attempt was made to locate Roper River, this time being successful and explored to a distance upstream of about 40 km. Gulliver collected on Roper River (9–10 Sep.). Having completed that part of the mission (14 Sep.), Cadell sailed north passing through Blue Mud Bay, landing on Wood [Woodah] Island (20 Sep.) where Gulliver made collections, and from which later one new taxon was later described: *Bridelia tomentosa* var. *ovoidea* Benth. [= *Bridelia tomentosa* Blume]. Although the precise location is not known (30 Sep.), Robinson (1867–1868: 94) wrote that “some Tamarind trees growing and bearing fruit close by their [Malay’s] camp – our botanist told us as near as he could tell by the size of the trees they were about seventy years growth [...] this place lies near Caledon Bay”. Heading north into Caledon Bay proper, they landed briefly (1–2 Oct.) and Gulliver collected there, from which a new variety of plant was described: *Clerodendrum tomentosum* var. *mollissima* Benth. The next landing was made on Melville Island (3–4 Oct.) where collections were made. Sailing westward along the coast, they made a landing in the lower reaches of Liverpool River (15–26 Oct.) to prepare S.S. *Eagle* for a track toward Victoria River.

After departing Liverpool River, landings were made at Escape Cliffs and Adams Bay (31 Oct.), then sailing via Quail Island (1 Nov.), Anson Bay (3 Nov.) to Victoria River (4–13 Nov.) where Gulliver made collections and from which one new species was described: *Acacia conjunctifolia* F.Muell. From Victoria River, they sailed directly to Timor (19 Nov.). Gulliver collected at Kupang (24 Nov.). In Timor, Robinson (1867–1868: 109) wrote that “our botanist went on shore gathering plants, the Governor sent a native trooper to show him the way among the hills”. Leaving Timor (29 Nov.), they returned eastward to Australia, reaching Booby Island (11 Dec.), and then Somerset (Cape York) (12 Dec.) where they remained for a few days (12–15 Dec.) enabling Gulliver to make collections there and from which two new species were collected: *Randia sessilis*

75 *Brisbane Courier*, The explorer’s tree, 12 Nov. 1889, p. 6.

F.Muell. [= *Atractocarpus sessilis* (F.Muell.) Puttock] and *Tristania longivalvis* F.Muell. [= *Welchiodendron longivalve* (F.Muell.) Peter G. Wilson & J.T. Waterh.]. Sailing along the Queensland coast, they struck a reef (25 Dec.), but survived unscathed, passed Low Isles (26 Dec.) and landed in Cleveland Bay (Townsville) (31 Dec.). Leaving Cleveland Bay (c. 2 Jan. 1868), they landed at Port Denison (Bowen) (6–7 Jan.), Brisbane (14–18 Jan.) and terminated in Sydney (20 Jan.). Here Cadell disposed of S.S. *Eagle* and dismissed the crew, including (it is here assumed) Gulliver. It is most likely that Gulliver returned directly to Melbourne as there is no evidence of an extended stay in Sydney.

Upon Cadell's return to Adelaide (11 Feb.), questions about the results and benefits of the expedition were posed by commentators, politicians and journalists. In regards to the scientific and horticultural results, one newspaper reported that "On Friday, Dr. Schomburgk, the Curator of the Botanic Garden, received the South Australian moiety of the specimens, including seeds, woods, bulbs, and other articles, which had been brought over by the *Coorong*. At present they have not been unpacked, and consequently have not been fully examined".⁷⁶ However, another newspaper reported that "the scientific collector, who was sent by Dr. Mueller with the expedition, has brought in his stock of curiosities, and the South Australian half has come to hand. It certainly looks rather a trifling return for the outlay involved in despatching a competent naturalist, but if there were not more specimens to be procured he is not to be blamed for not bringing them".⁷⁷

There is at least one account of the Adelaide Botanic Gardens having received materials from the expedition. In the minutes of the Board Meeting of 7 Feb. 1868, it was noted that a donation had been received "from Captain Cadell's Northern Territory Expedition, a small collection of dried plants".⁷⁸ A search of the donations and acquisition register of the Adelaide Botanic Garden's Museum of Economic Botany does not indicate that any other materials were received from the expedition. Otherwise, there are no known official accounts or reports about acquisitions by director Schomburgk of materials or specimens as part of the arrangement with Mueller and the Melbourne Botanic Gardens. Of the specimens collected by the Gullivers presently held in AD, only a few were collected during the Northern Territory Expedition, the others are from Tasmania and New South Wales (AVH 2022). It is most likely that all the specimens were sent from Melbourne to Adelaide sometime after the completion of the expedition as they have been annotated by Mueller (pers. comm. R. Barker, Apr. 2022).

There are about 360 known collections of vascular plants made by Benjamin Gulliver during the Northern

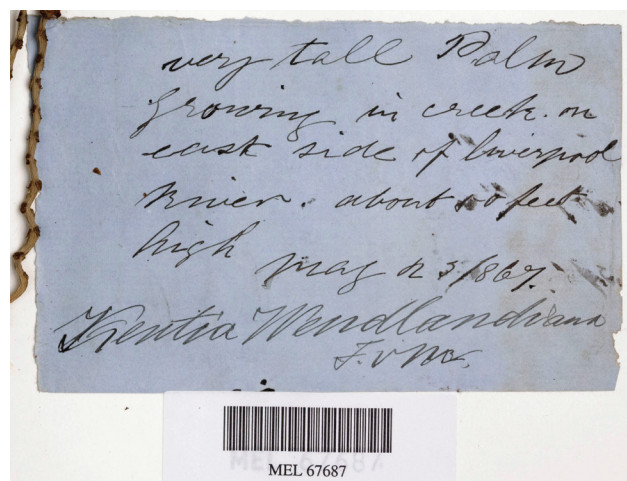


Fig. 3. Benjamin Gulliver's handwriting on a field-collection label for *Kentia wendlandiana* F.Muell. [= *Hydriastele wendlandiana* (F.Muell.) H. Wendl. & Drude] from the Northern Territory Expedition in 1867. The lower species name '*Kentia wendlandiana* FvM' is in Ferdinand Mueller's hand.

Territory Expedition. No bryophytes or algal specimens were collected. Gulliver's specimens are mostly of a high standard, including both leaf and reproductive material. The expedition specimens that have surviving field labels prepared by Gulliver usually include the date, location and a brief description, in a mostly legible hand (Fig. 3).

About one-half (c. 190) of his collections from the Northern Territory Expedition were made at Liverpool River, understandable as that is where he was encamped for two months (13 May–11 July). Other significant numbers were collected at Castlereagh Bay (c. 30), Caledon Bay (c. 30), Roper River (c. 20) and Cape York (c. 20), whilst moderate numbers were collected at Wood Island (c. 15), Maria Island (c. 15), Melville Bay (c. 10), Vanderlin Island (c. 10), Cleveland Bay (c. 15) and Port Denison (c. 15). Type specimens collected by Benjamin John Gulliver during the Northern Territory Expedition are presented in Table 5.

Assemblage 3. — Tasmania, 1870–1873, collections mostly of Thomas Allen Gulliver and Benjamin John Gulliver, but also Susannah Gulliver

The Gullivers' Tasmanian collections amount to about 590 specimens. With many collections, it is not possible to confirm the actual collector, as very few original labels have survived although there are secondary labels available. It is also evident that about 155 specimens are only recorded as being from Tasmania without specific location.

⁷⁶ *Sydney Morning Herald*, South Australia, 20 Feb. 1868, p. 5.

⁷⁷ *Border Watch* (Mount Gambier), Adelaide, 15 Feb. 1868, p. 2.

⁷⁸ Adelaide Botanic Gardens Board, Minutes, Jan. 1867–Dec. 1870. Adelaide Botanic Gardens Archives.

Table 5. Type specimens of vascular plants collected by Benjamin John Gulliver during the Northern Territory Expedition, 1867–1868, including New South Wales and Queensland. Accepted names follow APC (2023) unless otherwise indicated.

Taxon	Citation, specimens and references
<i>Acacia conjunctifolia</i> F.Muell. [Fabaceae]	<i>Fragm.</i> 11: 68 (1879): "Ad flumen Victoriae; B. Gulliver". Tindale & Kodala, <i>Fl. Australia</i> 11B: 222 (2001): "T: Victoria R., [N.T.], <i>B. Gulliver</i> ; holo: MEL." Update. Lectotype (here designated): Victoria River, an acacia about 4 feet high, 6 Nov. 1867, <i>B. Gulliver s.n.</i> (MEL91929); isolectotype: NSW524626 (<i>vide</i> AVH & JSTOR-GP, Mar. 2023; ICN Art. 7.11).
<i>Acacia dissonaura</i> F.Muell. [= <i>Acacia latescens</i> Benth.] [Fabaceae]	<i>S. Sci. Rec.</i> 2: 151 (1882): "In the vicinity of Port Darwin; Schultz, 336. Near the Liverpool-River; B. Gulliver". Cowan, <i>Fl. Australia</i> 11B: 153 (2001): "T: vicinity of Port Darwin, [N.T.], <i>F. Schultz</i> 336; syn: K, MEL, PERTH (fragment ex MEL); near Liverpool R., [N.T.], <i>B. Gulliver</i> ; syn: MEL, NSW, PERTH00975540 (fragment ex MEL)." Update. Lectotype not chosen. Gulliver syntypes: MEL2085947, NSW486907, PERTH975540 (<i>vide</i> AVH & JSTOR-GP, Mar. 2023).
<i>Acacia luehmannii</i> F.Muell. [= <i>Acacia sublanata</i> Benth.] [Fabaceae]	<i>Fragm.</i> 11: 116 (1881): "Ad flumen Liverpool-River; B. Gulliver". Cowan, <i>Fl. Australia</i> 11B: 122 (2001): "T: Liverpool R., N.T., <i>B. Gulliver</i> ; holo: MEL; iso K, NSW" Update. Syntypes and isosyntypes: Liverpool River, <i>s.dat.</i> , <i>B. Gulliver s.n.</i> (K000806110); Liverpool River, 28 June 1867, <i>Ben. Gull. [sic] s.n.</i> (MEL2086567A); Liverpool River, <i>s.dat.</i> , <i>B. Gulliver s.n.</i> (MEL2086568A); Liverpool River, <i>s.dat.</i> , <i>B. Gulliver s.n.</i> (NSW481664) (<i>vide</i> AVH & JSTOR-GP, Mar. 2023). It is likely that Cowan saw unmounted material, or at least unnumbered sheets, contained in a single wrapper when he examined MEL specimens. There are now two type elements at MEL (MEL2086567A, MEL2086568A), neither of which have been annotated by Cowan, but each was annotated by Maslin on 3 Mar. 2000 as "Type of <i>A. luehmannii</i> F.Muell." The modern, typed, barcoded labels erroneously record both sheets as "isotypes" of <i>Acacia luehmannii</i> F.Muell. and link them in stating MEL2086567 as "Sheet 1 of 2" and MEL2086568 as "Sheet 2 of 2". Now that they are separated one of either MEL 2086567A or MEL2086568A could be designated as the lectotype specimen of the name <i>Acacia luehmannii</i> F.Muell.
<i>Bridelia tomentosa</i> var. <i>ovoidea</i> Benth. [= <i>Bridelia tomentosa</i> Blume] [Phyllanthaceae]	<i>Fl. Austral.</i> 6: 120 (1873): "Wood Island Gulliver". Forster, <i>Austrobaileya</i> 5: 413 (1999): "Type: Northern Territory, Wood Island, <i>Gulliver s.n.</i> (holo: K n.v. [photo at BRI]; iso: MEL [515966, 515967])." Update. Lectotype: Woodah Island, E. coast of Arnhem Land, <i>s.dat.</i> , <i>B. Gulliver s.n.</i> (K001081430, received from "Herb. F. Mueller 1873"), <i>vide</i> Forster (1999: 413), as "holo". Isolectotypes: Wood Island, <i>s.dat.</i> , <i>B. Gull. s.n.</i> (MEL515966); Wood Island, 20 Sep. 1867, <i>Ben. Gull. s.n.</i> (MEL515967, including Gulliver's original & dated label) (<i>vide</i> AVH & JSTOR-GP, Mar. 2023; McNeill 2014).
<i>Cassia heptanthera</i> F.Muell. [= <i>Senna heptanthera</i> (F.Muell.) Randell] [Fabaceae]	<i>Fragm.</i> 10: 8 (1876): "Ad flumen Liverpool-River; B. Gulliver, qui plantam sub itinere Cadelli legit". Randell, <i>J. Adelaide Bot. Gard.</i> 12: 260 (1989): "Lectotype: Liverpool R. [N.T.], <i>B. Gulliver</i> , qui plantam sub itinere Cadelli legit, MEL, lectotype here designated; isolectotype: K (photo)." Update. Lectotype is MEL2071429 (<i>vide</i> JSTOR-GP, March 2023).
<i>Clerodendrum tomentosum</i> var. <i>mollissima</i> Benth. [Lamiaceae]	<i>Fl. Austral.</i> 5: 63 (1870): "N. Australia. Roebuck Bay, N.W. Coast, <i>Martin</i> ; near Caledon Bay, Gulf of Carpentaria, R. Gull". Munir, <i>J. Adelaide Bot. Gard.</i> 11: 160 (1989): "Lectotype: <i>Dr. Martin</i> 44, Roebuck Bay, Western Australia, undated (MEL98342, lectotype designated here!); <i>B. Gull. s.n.</i> , Caledon Bay, N.T., 2.x.1867 (MEL98346, syntype)." Update. "R. Gull" and "B. Gull" are Benjamin Gulliver. The MEL syntype, seen on JSTOR-GP (Mar. 2023), has an original Gulliver label dated "2/10/67" with the comment "a small shrub with fruit grows in moist situation".
<i>Crinum muelleri</i> Lehmiller & Lykos [Amaryllidaceae]	<i>Herbertia</i> 66: 110, Figs 2, 4, 13, 25, 27 (2013): "Holotype: Australia. Liverpool River, Arnhem Land, Northern Territory, specimen undated, F.Mueller s.n. (AD)". Update. Holotype: Liverpool River, <i>s.dat.</i> , collector likely <i>B.J. Gulliver</i> (AD97602233) (<i>vide</i> JSTOR-GP, Mar. 2023). Possible isotype: Liverpool River, <i>B.J. Gulliver s.n.</i> (MEL2213205A; here assumed not to have been seen by Lehmiller & Lykos). Reference to Mueller as the collector of the holotype is a misattribution, with the authors not familiar with the early printed blue labels used in MEL, the top line stating "BOTANICAL MUSEUM OF VICTORIA"; the bottom recording the name of the Government Botanist "FERD. MUELLER, PH. & MD." Information such as the name of the taxon, collector's name, locality and date of collection, is always handwritten on such labels. In this case it has the name and author of the species and the locality, i.e. " <i>Crinum uniflorum</i> Ferd. Mueller / Liverpool River". The AD label attached to the sheet also erroneously records Mueller as the collector. Mueller is not known to have collected from the Liverpool River and the specimen in AD is likely a duplicate of a MEL specimen gathered 25 May 1867 by Benjamin Gulliver and sent by him to MEL; both the AD and MEL specimens were identified by Helen Hewson in 1985 as <i>C. uniflorum</i> (<i>vide</i> AVH, 2023).
<i>Dendrobium dicuphum</i> F.Muell. [Orchidaceae]	<i>Fragm.</i> 8: 28 (1873), name validated by reference to description by Mueller (under the name <i>D. bigibbum</i> Lindl.) in <i>Fragm.</i> 6: 119 (1868), in which a collection "Ad flumen Liverpool's River; B. Gulliver" was recorded. Blake, <i>Proc. Roy. Soc. Queensland</i> 74(4): 41 (1964): "Type: Liverpool R. (N.T.) <i>B. Gulliver</i> (MEL)."

Table 5. continued

Taxon	Citation, specimens and references
	<p>George, <i>Nuytsia</i> 1(2): 178 (1971): "Type: Liverpool River, N.T., <i>B. Gulliver</i> – iso.: K." Clements, <i>Austral. Orchid Res.</i> 1: 46 (1989): "Type: Liverpool River, <i>Gulliver</i> s.n. (holo MEL, iso K, W)!" Barrett <i>et al.</i>, <i>Telopea</i> 25: 226 (2022): "Type: Northern Territory: Liverpool R., <i>B. Gulliver</i> s.n. (holo: MEL 624053; iso: K, MEL 624079, W)." APNI (as of Nov. 2023) modified the typification statement of Barrett <i>et al.</i> (2022) to read "Northern Territory: Liverpool R., <i>B. Gulliver</i> s.n. (holo [sic: lecto]: MEL 624053; iso [sic: isolecto]: K, MEL 624079, W)." Update. Lectotype (second-step, here designated): Liverpool River, <i>s.dat.</i>, <i>B. Gulliver</i> s.n. (MEL624053). Isolectotypes: MEL624079, K001085456 (received 1873; <i>vide</i> JSTOR-GP) and W (<i>n.v.</i>, as per Clements 1989).</p>
<p><i>Eugenia cyanocarpa</i> F.Muell. ex Maiden & Betche [= <i>Syzygium oleosum</i> (F.Muell.) B.Hyland] [Myrtaceae]</p>	<p>Blake's reference to the "type" is considered as a lectotypification, restricting the type to MEL. It is likely that when seen by Blake the material was unmounted, in a single folder and most certainly lacked a MEL number. By the time Clements (1989) had published on the matter of typification, the apparent original material was mounted on two sheets, but he did not indicate which one he regarded as the holotype. He was also coauthor of Barrett <i>et al.</i> (2022) and the numbers of both MEL sheets are given there. Clements' choice of one of the MEL sheets as the holotype, could be seen as a second-step lectotypification (ICN Art. 9.17), however without the statement "designated here" (mandatory from 1 Jan. 2001) it is not valid (Art. 7.10). As such, the second-step lectotype is designated above, according to the rules of the ICN. In APNI, the status of both MEL624053 and MEL624079 were altered to lectotype and isolectotype, but this interpretation is not correct.</p> <p><i>Proc. Linn. Soc. N.S.W.</i> 29: 740 (1905). F.Muell., <i>Fragm.</i> 9: 146 (1875), <i>nom. prov.</i> (Art. 36.1): "ad Botany-Bay extendit fide collectionis Gulliveri, nec non ad Hastings-River sec. Henderson et in Novam Angliam sec. Stuart". Hyland, <i>Austral. Syst. Bot., Suppl.</i> 9: 107 (1983): "Syntypes: <i>Gulliver</i>, Botany Bay (MEL60130, 60132); Stuart, New England (MEL60639); Henderson, Hastings River (<i>n.v.</i>)" (<i>vide</i> JSTOR-GP, May 2023).</p>
<p><i>Kentia wendlandiana</i> F.Muell. [= <i>Hydriastele wendlandiana</i> (F.Muell.) H.Wendl. & Drude]. [Arecaceae]</p>	<p><i>Fragm.</i> 7: 102 (1870): "Ad flumen Liverpool's River; B. Gulliver". Baker & Loo, <i>Kew Bull.</i> 59: 68 (2004): "Type: [...] Liverpool R., <i>Gulliver</i> s.n. (holotype MEL; isotypes BRI, K)." Update. Lectotype (here designated): Liverpool River, 5 May 1867, <i>Gulliver</i> s.n., MEL67687, MEL67688, MEL67689 (3-sheet specimen); Isolectotypes: BRI-AQ0024190, K000899966, NSW692937 (<i>vide</i> AVH & JSTOR-GP, March 2023; McNeill 2014; ICN Art. 7.11).</p>
<p><i>Randia sessilis</i> F.Muell. [= <i>Atractocarpus sessilis</i> (F.Muell.) Puttock] [Rubiaceae]</p>	<p>The lectotype is spread over three separate but sequentially numbered sheets and it is clear from curatorial labels attached by MEL staff, e.g. "holotype" and "Sheet 1 of 3", attached to each sheet that they should be considered a single specimen (ICN Art. 8.3, Ex. 7).</p> <p><i>Fragm.</i> 7: 47 (1869), "Ad promontorium Cape York: B. Gulliver". Puttock, <i>Austral. Syst. Bot.</i> 12: 294 (1999): "Type: [...] Cape York, without date, <i>Gulliver</i> s.n. holo: MEL 598114—excluding separate flower!" (<i>vide</i> JSTOR-GP, May 2023). Update. Lectotype: Cape York, <i>s.dat.</i>, <i>Gulliver</i> s.n. (MEL598114 <i>p.p.</i>, being the leaf, twigs & fruit), <i>vide</i> Puttock (1999: 294), as "holo". Remaining syntype: MEL598114 <i>p.p.</i>, being the separate flower).</p>
<p><i>Sowerbaea alliacea</i> F.Muell. [Asparagaceae]</p>	<p>In typification notes, Puttock (1999) stated that the single sheet "consists of two leafy twigs, a dissected female flower and fragments of a fruit. Mueller (1869) [in his original description] stated that the flower was sent to him later than the original collection; this element is therefore a paratype." However, the latter is a syntype specimen used by Mueller when describing the flower, with him noting "Flos unicus me visus seorsim missus", i.e. "the only flower I saw was sent separately". The original protologue (in lacking mention of another collector) and annotations on the sheet indicate that Gulliver was the collector.</p> <p><i>Fragm.</i> 6: 180 (1868). "Ad flumen Liverpool's River terrae Arnhemicae; B. Gulliver". Henderson, <i>Fl. Australia</i> 45: 265 (1987): "T: near Liverpool R., Arnhem Land, N.T., May 1867, <i>B. Gulliver</i>; holo: MEL; iso: AD." Update. Lectotype (second-step, here designated): Liverpool River, <i>Gulliver</i> s.n. (MEL51922). Isolectotypes: AD97234307, K000794812, MEL51920, MEL51921 (<i>vide</i> AVH & JSTOR-GP, Mar. 2023).</p>
<p><i>Tristania longivalvis</i> F.Muell. [= <i>Welchiodendron longivalve</i> (F.Muell.) Peter G.Wilson & J.T.Waterh.] [Myrtaceae]</p>	<p>The statement by Henderson (1987) that MEL holds the holotype was premature as there were three syntypes at that herbarium: MEL51920, MEL51921 and MEL51922. The latter has a "Seen for Flora Australia" label which is signed and dated "R.J. Henderson (BRI) 19 Nov 1985" but there is no indication that he saw the two other specimens held by MEL. Henderson's publication is here seen as a first-step lectotypification, restricting the lectotype to MEL (and not AD or K). All three MEL sheets are similarly labelled and appear to have adequate inflorescence material for identification, but MEL51922 may be the best and as it is the specimen annotated by Henderson, is here designated the lectotype.</p> <p><i>S. Sci. Rec.</i> n.s. 2 [pre-print distributed by Mueller, this volume of the journal was never published; a copy of the protologue is attached to K000793316]: no page numbers (1886), "On Prince of Wales Island; R. Brown; on Thursday-Island, Rev. B. Scortechini; at Cape York, B. Gulliver". Wilson & Waterhouse, <i>Austral. J. Bot.</i> 30: 441 (1982): "Lectotype (here designated). QUEENSLAND: Thursday Island, <i>Scortechini</i> (fruiting specimen, MEL)." Update. Lectotype: Thursday Island, <i>s.dat.</i>, <i>B. Scortechini</i> (MEL63739, "fruiting specimen"). Isolectotypes: Thursday Island, <i>s.dat.</i>, <i>B. Scortechini</i> (MEL63738, MEL63740), Thursday Island, 1885, <i>B. Scortechini</i> (K000793316). Remaining syntypes: Prince of Wales Islands, 1802, <i>R. Brown</i> (MEL63736); Cape York, 12 Dec. 1867, <i>B. Gulliver</i> (MEL2291047, MEL63737) (<i>vide</i> AVH & JSTOR-GP, Mar. 2023).</p>

According to data accessed on AVH (2022), the Gullivers collected plants in Tasmania between 1870 and 1873. A search of AVH (1 May 2023) documents the range of their collecting activities, from numerous flowering plants to much smaller gatherings of gymnosperms, bryophytes, lichens and algae, e.g. they obtained 31 algal collections (29 in MEL, two duplicates in AD) covering 22 species, most of which were red algae. All were jointly gathered by the Gulliver brothers in Dec. 1871 and, except for one specimen from Frederick Henry Bay, were collected at Kangaroo Point, Derwent River. Eleven collections, encompassing eight species of ferns and fern allies, with most from the vicinity of Mt Wellington were also gathered. From the data, several other observations can be made, including that it is unusual for the brothers to use collection numbers and that dates of collection, with some notable exceptions, were not regularly added. The aforementioned algal collections are an exception, as is another very large gathering of plants labelled as being collected in Mar. 1873. This relates to an excursion to Lake St Clair, involving various dignitaries and perhaps just the one Gulliver brother. Thus, in February of that year a newspaper article stated that “The Colonial Secretary and party, consisting of Messrs. Piquenit [William Charles Piquenit (1836–1914), artist],⁷⁹ Gulliver, Abbott [Francis Abbott (1834–1903), superintendent of Hobart Botanic Garden], and Coverdale [John Coverdale (1814–1896), medical practitioner in Hobart; Sorell 2022] arrived at Lake St. Clair this (Monday) day week. The camp equipage, boat, etc., were entrusted to Mr. Henry Jackson [...] prior to the arrival of Mr. Scott [James Reid Scott (1839–1877), Colonial Secretary (Smith 2022)] and his friends”.⁸⁰ Members of the excursion were later joined by Tasmanian Governor Charles Du Cane [Sir Charles Du Cane (1825–1889); Rimmer 2022] for about two days. In a two-part report of their travels,⁸¹ there was nothing to indicate that there was more than one Gulliver present, and it is evident from AVH that Thomas Gulliver alone is almost invariably the person recorded as the collector. Add to this observation the fact that in an account book held at MEL, it was recorded that on 18 Apr. 1873, Thomas Gulliver was paid £4 10s for a collection of dried plants from Tasmania (Short 1990), it seems reasonable to suggest that Thomas, alone or with little assistance from Benjamin, was primarily responsible for the March collections. That said, there is also no doubt that Benjamin did make a reasonable number of often undated collections in the general Lake St Clair region, be it alone or with Thomas. Indeed, there are about 160 known plant collections, associated with the Gullivers, from locations such as Lake St Clair, Mt Olympus, Mt Arrowsmith, Fatigue Hill [Calders Lookout], Lake Petrarch and Cuvier Valley, among others (AVH 2022).

There are two contemporary publications (Hampe 1876; Gottsche 1880) citing specimens of bryophytes collected by the Gullivers from Mt Wellington. Hampe (1876) cited only one, the type of the moss *Polytrichum gulliveri* Hampe collected by Thomas and Benjamin (Table 6). Gottsche (1880) cited a Gulliver specimen for each of nine species, eight of which were simply attributed to “Gulliver”, and one to “Th. et B. Gulliver”. As previously noted, there are at least two bryophyte specimens in MEL with labels indicating they were collected by Miss Gulliver.

Regarding lichens, Krempelhuber (1881) recorded seeing Gulliver specimens of seven taxa. Of these, one is the type of *Cladonia deformis* var. *tasmanica* Kremp., it is attributed to Thomas and Benjamin and the locality given as Tasmania (Table 6). Indeed, all seven specimens are attributed to them and, except for two noted as coming from Mt Wellington, are simply labelled as Tasmanian. More recently Kantvilas (1983), in a history of lichenology in Tasmania, stated that lichen collections gathered by the brothers and sent to Mueller were mostly obtained from Mt Wellington.

Assemblage 4. — Queensland, 1873–1879, exclusively the collections of Thomas Allen Gulliver, mostly associated with places where he was stationed during his career in telegraph and postal positions

The telegraph line between Cardwell and Norman River mouth (Kimberley = Karumba) was completed in 1871. Thomas Gulliver took a position as a line repairer in 1873. In this role and subsequently as telegraph station master at various stations, he collected about 500 specimens, most of which were sent to Mueller in Melbourne, a few were later sent (from MEL) to F.M. Bailey (collections now at BRI). Many of Thomas’ plant specimens are annotated broadly as “between the Norman and Gilbert rivers” and are mostly of herbs, sedges and grasses (AVH 2022). The route of the telegraph line from Cardwell passed through Taylors Creek, Cashmere, Mineral Springs, Junction Creek, Eva Creek, Ada Creek, Etheridge River, Gilbert River, Wooleys Lagoon, Carron Creek, Francis’s Lagoon, Rocky Creek, Normanton, Norman River Heads and Sandy Point (Langford 2008; Johnstone 2022a, 2022b) (Fig. 4). The names of a number of the telegraph stations were used as collection locations by Thomas including Junction Creek, Etheridge River, Carron Creek and Sandy Point. Other localities cited on his field collection labels include Nebo and St. Lawrence (central Queensland), Kimberley (Karumba), Thornborough and Hodgkinson River. Thomas’ specimens are overall meagre in their size but well prepared. An example of Thomas’ handwriting is presented in Fig. 5.

79 William Charles Piquenit [1836–1914]. Art Gallery NSW: WC Piquenit. <https://www.artgallery.nsw.gov.au/collection/artists/piquenit-wc/> [accessed: 19 Oct. 2023].

80 *Mercury* (Hobart), Out for a holiday, 18 Feb. 1873, p. 2.

81 *Tasmanian Tribune* (Hobart), His Excellency’s trip to Lake St. Clair, 29 Mar. 1873, p. 2; *Tasmanian Tribune* (Hobart), His Excellency’s trip to Lake St. Clair. (continued), 31 Mar. 1873, p. 2.

Table 6. New taxa of vascular plants, mosses and lichens described from collections made by the Gullivers in Tasmania. Accepted names follow APC (2023) unless otherwise indicated. NB: Excludes the designation *Bauera rubioides* var. *pleniflora* F.Muell.¹.

Taxon	Citation, specimens and references
Flowering Plants	
<i>Acaena tasmanica</i> Bitter [? = <i>Acaena montana</i> Hook.f.] [Rosaceae]	<i>Biblioth. Bot.</i> 17(74, 1–3): 55, t. 4, fig. a, b. (1911): "Tasmania: 1. sine loco indicato, sub nomine <i>A. montana</i> J.Hook., leg. F. [sic] et B. Gulliver Phytologic Museum of Melbourne, herb. Monac! [...] 2. sine loco speciali sub nom. falso: <i>A. sanguisorba</i> (sic!) Vahl. coll. R.C. Gunn, ex herb. Hook. herb. Berol!." Update. Syntype: Tasmania, <i>s.dat.</i> , J. [?] & B. Gulliver <i>s.n.</i> (M0214573) (fide JSTOR-GP Mar. 2023). APC (2007) lists <i>A. tasmanica</i> Bitter as a doubtful synonym of <i>A. montana</i> Hook.f. It is not mentioned by de Salas & Baker (2023), but accepted as a synonym of <i>A. montana</i> Hook.f. by POWO (Mar. 2023).
<i>Carex appressa</i> f. <i>minor</i> Kük. in H.G.A. Engler (ed.) [= <i>Carex appressa</i> R.Br.] [Cyperaceae]	<i>Pflanzenr.</i> IV, 20(38): 179 (1909): "Tasmania (Gulliver!, Rodway!)". Update. Syntypes: Huon River, Tasmania, <i>s.dat.</i> , T. & B. Gulliver <i>s.n.</i> (MEL625287); Huon River, <i>s.dat.</i> , Gulliver <i>s.n.</i> (K000961109, received "Herb. F. Mueller 1877") (fide JSTOR-GP, Mar. 2023). Kükenthal, in his description of <i>C. appressa</i> , reduced <i>C. chlorantha</i> var. <i>composita</i> Benth. (see below) to synonymy under his new forma <i>C. appressa</i> f. <i>minor</i> . In doing so, he indicated that he had seen specimens gathered by Gulliver and Rodway. No appropriate specimen collected by the latter has been located. Govaerts & Simpson (2007), place it in synonymy under <i>C. appressa</i> var. <i>appressa</i> , but no infraspecific rank recognised in APC (2023).
<i>Carex chlorantha</i> var. <i>composita</i> Benth. [= <i>Carex appressa</i> R.Br.] [Cyperaceae]	<i>Fl. Austral.</i> 7: 440 (1878): "Huon River, Gulliver". Update. Syntypes: Huon River, <i>s.dat.</i> , Gulliver <i>s.n.</i> (K000961109, received "Herb. F. Mueller 1877"); Huon River, Tasmania, <i>s.dat.</i> , T. & B. Gulliver <i>s.n.</i> (MEL625287) (fide JSTOR-GP, Mar. 2023). Govaerts & Simpson (2007) place the taxon in synonymy under <i>C. appressa</i> var. <i>appressa</i> , but no infraspecific rank recognised in APC (2012) or de Salas & Baker (2023).
<i>Gnaphalium japonicum</i> var. <i>sciadophora</i> F.Muell. [= <i>Euchiton japonicus</i> (Thunb.) Holub.] [Asteraceae]	<i>Pap. & Proc. Roy. Soc. Tasmania</i> 1876: 34 (1877): "Near Lake St. Clair, Th. Gulliver." No type specimen seen at AVH or JSTOR-GP, Mar. 2023. Update. <i>Gnaphalium japonicum</i> var. <i>sciadophora</i> was not recognised by Holub (1974), APC (2021) or de Salas & Baker (2023).
<i>Goodenia humilis</i> var. <i>alpigena</i> F.Muell. [= <i>Goodenia humilis</i> R.Br.] [Goodeniaceae]	<i>Pap. & Proc. Roy. Soc. Tasmania</i> 1873: 62 (1874): "Alpine meadows about Lake St. Clair, Th. and B. Gulliver". Carolin, <i>Fl. Australia</i> 35: 175 (1992): "T: near Lake St Clair, Tas., Th. & B. Gulliver; holo: MEL" Update. Lectotype or perhaps holotype: Lake St. Clair, 4,000', <i>s.dat.</i> , Th. & B. Gulliver <i>s.n.</i> (MEL23370A) (fide AVH & JSTOR-GP, Mar. 2023), fide Carolin (1992: 175), as "holo".
<i>Huanaca cordifolia</i> var. <i>minuta</i> F.Muell. [? = <i>Diplaspis hydrocotyle</i> Hook.f.] [Apiaceae]	<i>Pap. & Proc. Roy. Soc. Tasmania</i> 1873: 60 (1874): "Lake St. Clair; Th. and B. Gulliver." Van den Borre & Henwood, <i>Austral. Syst. Bot.</i> 11:7 & 9 (1998), did not see any MEL specimen and tentatively referred it to <i>D. hydrocotyle</i> . Update. Contrary to Van den Borre & Henwood (1998), it is listed as a synonym of <i>Diplaspis hydrocotyle</i> at APC and POWO (May 2023). No type specimen found at AVH and JSTOR-GP (Mar. 2023).
<i>Hydrocotyle asiatica</i> var. <i>monantha</i> F.Muell. [? = <i>Centella cordifolia</i> (Hook.f.) Nannf.] [Apiaceae]	<i>Pap. & Proc. Roy. Soc. Tasmania</i> 1873: 60 (1874): "Lake St. Clair; Th. and B. Gulliver." Update. Currently listed as a name of uncertain application in APC, and is not recognised in Curtis (1963) or de Salas & Baker (2023). It is erroneously referred to as a synonym of <i>Centella asiatica</i> (L.) Urb. at POWO (May 2023). However, de Salas & Baker (2023) recorded that the name <i>Hydrocotyle asiatica</i> L. has been misapplied in Tasmania to <i>Centella cordifolia</i> (Hook.f.) Nannf. A search of AVH (May 2023) for specimens of the latter shows that MEL holds a specimen (MEL2252215A) collected by the Gulliver brothers from Lake St. Clair.
<i>Mitrasacme montana</i> var. <i>minuta</i> F.Muell. [= <i>Schizacme montana</i> (Hook.f. ex Benth.) Dunlop] [Loganiaceae]	<i>Pap. & Proc. Roy. Soc. Tasmania</i> 1873: 63 (1874): "Creeping among alpine mosses on Mount Arrowsmith; Th. and R.[sic] Gulliver." Update. The species is now recognised as <i>Schizacme montana</i> (Hook.f. ex Benth.) Dunlop. Apart from the original publication the var. <i>minuta</i> appears to have been overlooked in taxonomic literature, not being mentioned for example in Rodway (1903), Curtis (1967), Dunlop (1996), APNI or APC. The diagnosis "Smaller in all parts than the ordinary form" is lacking in precision but is here assumed to be acceptable; if not, the name is invalid. AVH lists a specimen, MEL0000802A, determined by Dunlop in 1992 as <i>S. montana</i> , and collected by the Gulliver brothers from the base of Mount Arrowsmith. Whether it is of "the ordinary form" or of restricted growth has not been ascertained.
<i>Trochocarpa disticha</i> var. <i>microphylla</i> F.Muell. [? = <i>T. disticha</i> (Labill.) Spreng.] [Ericaceae]	<i>Pap. & Proc. Roy. Soc. Tasmania</i> 1873: 63 (1874): "Mount Arrowsmith at an elevation of 3500 feet; Th. and B. Gulliver." Update. Cited in APNI. In APC (2012) referred to as a "name of uncertain application" and with the note "excluded from APC". In de Salas & Baker (2023: 47) treated as a synonym of <i>T. disticha</i> (Labill.) Spreng, with the variety not recognised. None of the 38 records of this species at AVH (2023) are attributed to the Gullivers.

Table 6. continued

Taxon	Citation, specimens and references
Bryophyte	
<p><i>Polytrichum gulliveri</i> Hampe [as "gullweri"] [= <i>Pyrrhobryum mnioides</i> subsp. <i>contortum</i> (Müll.Hal.) Fife [Polytrichaceae]</p>	<p><i>Linnaea</i> 40: 315 (1876): "In monte Wellington Tasmaniae, legit J. [sic] & B. Gullifer [sic], pauca specimina". Gilmore, <i>Fl. Australia</i> 51: 362 (2006): "T: Mt Wellington, Tas., J. & B. Gullifer s.n.; holo: BM." Update. Syntypes: Mt Wellington Tasmania, s.dat., J. [?] & B. Gulliver s.n. (BM000668238, BM000555017; both ex herb. Hampe 1881) (fide JSTOR-GP, Mar. 2023; APC Australian Moss Census (sensu AusMoss 2015). Following Australian Moss Census, <i>Polytrichum gulliveri</i> Hampe is a synonym of <i>Pyrrhobryum mnioides</i> subsp. <i>contortum</i>. Following Art. 60.1 Ex. 7, the spelling of the epithet "gullweri" is corrected here to "gulliveri". Hampe also spelt the surname as "Gullifer" when referring to the collector.</p>
Lichen	
<p><i>Cladonia deformis</i> var. <i>tasmanica</i> Kremp. [= <i>C. ustulata</i> (Hook.f. & Taylor) Leight [Cladoniaceae]</p>	<p><i>Verh. K.K. Zool.-Bot. Ges. Wien</i>, B, 30: 332 (1881) ["1880"]: "Tasmania (J. [sic] v. B. Gulliver". Archer, <i>Lichenologist</i> 18(3): 242 (1986): "type:—Australia, Tasmania, J.v.B. Gulliver' (T. & B. Gulliver) (M—holotype; MEL—isotype)." Archer, <i>Fl. Australia</i> 54: 139 (1992): "T: Tas., Gulliver; holo: M; iso: MEL." Update. Lectotype: Tasmania, s.dat., T. & B. Gulliver s.n. (M0034166), fide Archer (1986: 242), as "holotype". Isolectotype: MEL6517 (fide JSTOR-GP, March 2023). Accepted species name following McCarthy (2023). This variety is not recognised.</p>

1. The designation *Bauera rubioides* var. *pleniflora* F.Muell., *Pap. & Proc. Roy. Soc. Tasmania* 1873: 60 (1874), is not validly published as it lacked a description or diagnosis and is therefore not a name in the sense of the ICN. The name is based on a single collection gathered by Thomas Gulliver from Port Esperance.

He also collected freshwater algae (c. 14 specimens), from which seven new taxa of Desmidiaceae were described (Borge 1896). In the introduction to the work, Borge (1896: 3) wrote that "The material for the following essay was kindly made available to me by Dr. O. Nordstedt, who got almost everything through Baron F. v. Mueller from the Phytologic Museum of Melbourne". Thomas' motivation to

collect freshwater algae is not known although Mueller frequently encouraged his collectors to seek plants from moist/wet habitats. There is no evidence that specimens of freshwater algae collected by Thomas were held by Mueller in Melbourne, and it is assumed that all were sent by Mueller directly to Nordstedt, who was then the recognised authority on the group.



Fig. 4. Extract from 'Map shewing telegraph line from Cardwell to Gulf of Carpentaria 1872', the section from Gilbert River and the mouth of Norman River. Govt. Engraving & Lithographic Office: Brisbane. Held at the State Library of Queensland.

New species described from Thomas' collections are presented in Table 7. Three of these commemorate Thomas: the grasses *Ectrosia gulliveri* F.Muell. [= *Eragrostis gulliveri* (F.Muell.) R.L.Barrett & P.M.Peterson] and *Heterachne gulliveri* Benth. [= *Eragrostis lilliputiana* R.L.Barrett & P.M.Peterson]; and the bell-flower *Isotoma gulliveri* F.Muell. Some of his collections were used for diagnostic illustrations in *Hooker's Icones Plantarum* (Hooker 1877–1879), *Australische Süßwasserchlorophyteen* [Australian Freshwater Algae] (Borge 1896) and *Illustrations of Cyperaceae* (Clarke 1909).

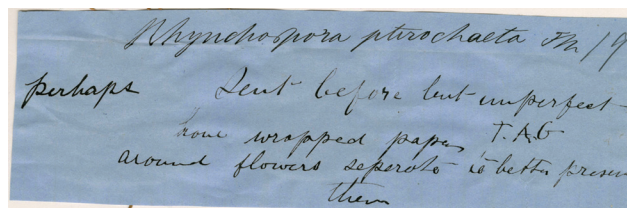


Fig. 5. Thomas Allen Gulliver's handwriting on a field-collection label, MEL2297567. The top line, "*Rhynchospora pterochaeta* FM 19", is in Ferdinand Mueller's hand.

Table 7. New species of vascular plants and algae described from type specimens collected by Thomas Allen Gulliver in Queensland. Accepted names follow the APC (2023) and Algaebase (2023) unless otherwise indicated.

Taxon	Citation, specimens and references
Flowering Plants	
<i>Aneilema calandrinoides</i> F.Muell. [= <i>Tapheocarpa calandrinoides</i> (F.Muell.) Conran] [Commelinaceae]	<i>Fragm.</i> 9: 191 (1875): "Inter fluvios Normani et Gilberti; Th. Gulliver". Conran, <i>Austral. Syst. Bot.</i> 7: 586 (1994): "Inter fluvios Normani et Gilberti, <i>T.A. Gulliver s.n.</i> (holotype: MEL; isotypes: BRI, K)." Update. Lectotype: Carons Creek [= Carron River] between the Norman & Gilbert River, 1874, <i>Th. Gulliver 16</i> (MEL2294521; amalgamated data, see below), <i>vide</i> Conran (1994: 586), as "holotype". Isolectotypes, possible isolectotypes or syntypes: Carron Ck between Norman & Gilbert rivers, <i>s.dat.</i> , <i>T.A. Gulliver s.n.</i> (BRI AQ0207114, from specimen data, photo not seen); Carrons Creek, Carpentaria <i>s.dat.</i> , <i>Th. Gulliver s.n.</i> (K0000854161, received from MEL in 1876) (<i>vide</i> AVH & JSTOR-GP, Mar. 2023). Conran (1994) did not provide sheet numbers for the "holotype" or "isotypes" he recognised. However, it is evident from AVH and JSTOR-GP that MEL holds just a single specimen, MEL2294521. On this sheet the number 16 is written on both a tag attached to a flowering stem and on an original blue label, the same label also in accord with the protologue in recording that the plant material is from "Between the Rivers Norman & Gilbert". Another attached early label is unnumbered but gives the locality as "Carons Creek between the Norman & Gilbert River" plus the information that it was collected in 1874. In not being numbered, and with Gulliver being a resident of the Gulf country for some years and therefore possibly collecting the same species more than once, the status of the remaining specimens is not clear.
<i>Chionachne sclerachne</i> F.M.Bailey [= <i>Cleistochloa sclerachne</i> (F.M.Bailey) C.E.Hubb.] [Poaceae]	<i>Bot. Bull. Dept. Agric.</i> 2: 21 (1891): "Lloyd Bay, Cape York Peninsula. The specimens from which the above diagnosis is given were received from T.A. Gulliver, April. 1886". Jannink & Veldkamp, <i>Blumea</i> 47: 574 (2002): "Type: <i>Gulliver s.n.</i> A° 1886 (holo BRI; fragm K), Australia, Queensland, Cape York Peninsula, Lloyd bay, April 1886." Update. Lectotype (here designated): Lloyd Bay, 1886, <i>T.A. Gulliver s.n.</i> (BRI-AQ0318934). Isolectotype: K000674821 ("fragment from type in Hb. Brisbane") (<i>vide</i> JSTOR-GP, March 2023).
<i>Cissus muelleri</i> Planch. [Syn.: <i>Cissus cardiophylla</i> (F.Muell.) Jackes, <i>nom. illeg.</i>] [Vitaceae]	in A.DC. & C.DC., <i>Monogr. Phan.</i> 5(2): 516 (1887): "Australie tropicale: Queensland, district de Kennedy (Mueller, herb. Melb. sous le nom de <i>Vitis cordata</i>). Hodgkinson river (Gulliv., n 204, in herb. Melb.). Rockingham bay (Dallachy in herb. Melbourne)". Jackes, <i>Austrobaileya</i> 13: 14 (2023): "Queensland. North Kennedy District: Basalt Wall Fletchers C[ree]k, <i>s.dat.</i> , <i>R. Daintree s.n.</i> (lecto [here designated]: MEL565994)." Update. Lectotype "Basalt Wall Fletchers C[ree]k, <i>s.dat.</i> , <i>R. Daintree s.n.</i> [...] (MEL565994)." Possible isolectotype: MEL565993. Possible syntype: Hodgkinson River, 1882, <i>Gulliver 804</i> (MEL567093) (<i>vide</i> Jackes 2023; JSTOR-GP, Apr. 2023). Jackes (2023) indicated that of the three syntypes seen by Planchon only one has been definitely located, this being one which Planchon believed was collected by Mueller but, as evident from the specimen label, was gathered by Daintree. The syntype collected by Dallachy has not been located, but a specimen (MEL567093) collected in 1882 by Gulliver from Hodgkinson [Hodgkinson] River is extant but numbered as 804, not 204 as given by Planchon. The difference in number may, or may not, be the result of an incorrect transcription by Planchon and it is referred to here as a possible syntype.
<i>Digitaria erirolepis</i> Henrard [= <i>Digitaria longiflora</i> (Retz.) Pers.] [Poaceae]	<i>Monogr. Gen. Digitaria</i> 819 (1950): "Queensland: Etheridge River. Leg. Gulliver. Typus speciei ex Herb. Munro in Herb. Hackel Vindobon. sub. no. 23018". Webster, <i>Brunonia</i> 6: 190 (1983): "Type: <i>Gulliver s.n.</i> (W, holo: BRI, K)." Update. Holotype: Etheridge River, <i>s.dat.</i> , <i>Gulliver s.n.</i> (W19160023018). Isotypes: BRI (<i>n.v.</i>), Etheridge river, <i>s.dat.</i> , <i>Gulliver s.n.</i> (K001056088, received "Herb. F. Mueller 1877") (<i>vide</i> JSTOR-GP, Mar. 2023).
<i>Ectrosia confusa</i> C.E.Hubb. [= <i>Eragrostis confusa</i> (C.E.Hubb.) R.L.Barrett & P.M.Peterson] [Poaceae]	<i>Hooker's Icon. Pl.</i> 34: t. 3312, p. 14 (1936): "between Norman and Gilbert Rivers, Gulliver (type)". Barrett <i>et al.</i> , <i>Austral. Syst. Bot.</i> 33: 470 (2020): "between Norman and Gilbert rivers, [1874], <i>T. Gulliver s.n.</i> (lecto: K 000907200 designated here; isolecto: BM 000991659 [images seen for both (JSTOR 2019)])". Update. Lectotype specimen received from Mueller in 1877 (<i>vide</i> JSTOR-GP, Mar. 2023). Transfer to <i>Eragrostis</i> not yet recognised by APC (May 2023), but is at POWO (May 2023).

Table 7. continued

Taxon	Citation, specimens and references
<p><i>Ectrosia gulliveri</i> F.Muell. [= <i>Eragrostis gulliveri</i> (F.Muell.) R.L.Barrett & P.M.Peterson] [Poaceae]</p>	<p><i>Fragm.</i> 8: 201 (1874): "Inter fluvios Norman's et Gilbert's River; T. Gulliver". Hubbard, <i>Hooker's Icon. Pl.</i> 34: t. 3312, p. 16 (1936): "between Norman and Gilbert rivers, <i>Gulliver</i> (type)". Barrett <i>et al.</i>, <i>Austral. Syst. Bot.</i> 33: 471 (2020): "between Norman and Gilbert rivers, [1874], <i>T.Gulliver s.n.</i> [26] (first-step lecto, designated by C. E. Hubbard, <i>Hooker's Icon. Pl.</i> 34: t. 3312, p. 16 (1936; no herbarium indicated): second-step lecto, designated here: K 000907201 [image seen (JSTOR 2019)]; isolecto: E 00386888 [image seen (JSTOR 2019)], MEL 2131377!); between Norman and Gilbert rivers, [1874], <i>T.Gulliver s.n.</i> [34] (residual syn.: MEL 2131373!)" Update. For detailed notes as to typification see Barrett <i>et al.</i> (2020). Lectotype specimen received from Herb. F. Mueller in 1877 (<i>vide</i> JSTOR-GP, Mar. 2023). Transfer to <i>Eragrostis</i> not recognised as yet by APC (May 2023), but is at POWO (May 2023).</p>
<p><i>Ectrosia leporina</i> var. <i>micrantha</i> Benth. [= <i>Eragrostis leporina</i> (R.Br.) R.L.Barrett & P.M.Peterson] [Poaceae]</p>	<p><i>Fl. Austral.</i> 7: 634 (1878): "Victoria River, F. Mueller, between Norman and Gilbert Rivers, <i>Gulliver</i>". Hubbard, <i>Hooker's Icon. Pl.</i> 34: 12, t. 3312 (1936). Barrett <i>et al.</i>, <i>Austral. Syst. Bot.</i> 33: 472 (2020): "between Norman and Gilbert rivers, [1874], <i>T.Gulliver</i> [21] (first-step lecto, designated by C. E. Hubbard, <i>Hooker's Icon. Pl.</i> 34: 12, t. 3312 (1936; no herbarium indicated): second-step lecto, designated here: lecto, designated here: K000907194 [image seen (JSTOR 2019)]; iso: K000907194 [image seen (JSTOR 2019)], NSW 557738!)" Update. The above citation is incorrect in citing the same K number (K000907194) for both the lectotype and the K isolectotype. The correct sheet number for the lectotype is K000907195, it is the only one to have the collection number '21' on the accompanying "Government Botanist, Melbourne" label. The correction is allowed as per ICN Art. 9.2. Transfer to <i>Eragrostis</i> not yet recognised by APC (May 2023), but is at POWO (May 2023). Neither APC, Barrett <i>et al.</i> (2020) or POWO recognise var. <i>micrantha</i>.</p>
<p><i>Eleocharis nuda</i> C.B.Clarke [Cyperaceae]</p>	<p><i>Bull. Miscell. Inform. Kew Addit. Ser.</i> 8: 21 (1908); Clarke, <i>Ill. Cyper.</i> tab. 35, figs 8–11 (1909): "a <i>Gulliver</i> in Australia lecti". Blake, <i>Proc. Roy. Soc. Queensland</i> 50: 101 (1939): "Carron Creek between Gilbert and Norman Rivers <i>Gulliver</i> 10 and 17 (M. Co-type)". Update. Lectotype (here designated): Between Norman and Gilbert rivers, <i>s.dat.</i>, <i>Gulliver s.n.</i> (K000307922, received from "Herb. Mueller 1877"); Possible isolectotype(s) or syntype(s): Carron's Creek between the Rivers Gilbert & Norman, <i>Th. Gulliver 10 & 17</i> (MEL18637A; NSW70378, n.v.) (<i>vide</i> AVH & JSTOR-GP, Mar. 2023; Kew Herb. Cat. and POWO, May 2023). Currently, in APNI there is reference made to <i>Gulliver's</i> gatherings. It is stated "Lectotype: Carron Creek between Gilbert and Norman Rivers <i>Gulliver</i> 10 and 17 (M. Co-type)". This, despite the "specimen" having two collection numbers written on the accompanying label, and the fact that Blake used the term "co-type" (a now unrecognised term) which has been generally used to indicate isotypes and syntypes. Blake was aware of the linkage of both of Clarke's publications (cited above) – and had "advice on nomenclature" from Kew while compiling his monograph of <i>Eleocharis</i>. He was undoubtedly aware that type material on which Clarke based his description of <i>C. nuda</i> is held in K. The sheet K000307922, has a signed, handwritten annotation "<i>Eleocharis nuda</i> sp. nova / Type of sp. / C.B. Clarke, July 1887", accompanying a single plant attached to the sheet plus an attached envelope containing fragmentary inflorescence material, and original sketches. The status of the specimens at MEL and NSW remains uncertain.</p>
<p><i>Eriachne armitii</i> F.Muell. ex Benth. [Poaceae]</p>	<p><i>Fl. Austral.</i> 7: 627 (1878): "N. Australia. Gilbert River, Armit; Norman River, <i>Gulliver</i>". Lazarides, <i>Austral. Syst. Bot.</i> 8: 366 (1995): "SYNTYPES: Queensland, Cook District, Gilbert River; <i>Herb. F. Mueller, in 1876, W.E.D.M. Armit 514</i> (K, lectotype designated here; A, MEL 95273, US). Burke District, Normanton, Norman River; sp. no. 1, probably collected by T.A. <i>Gulliver s.n.</i> (MEL 95272)." Update. Lectotype: Gilbert River, 1876, <i>W.E.D.M. Armit 514</i> (K001056590) <i>vide</i> Lazarides (1995: 366). Isolectotypes: A00023712; K001056589, ex herb. BRI; MEL95273; US01231884. Syntypes: Normanton, Norman River, sp. 1, <i>s.dat.</i>, probably T.A. <i>Gulliver s.n.</i> (MEL95272; CANB 687392.1) (<i>vide</i> AVH & JSTOR-GP, Mar. 2023).</p>
<p><i>Goodenia minutiflora</i> F.Muell. [Goodeniaceae]</p>	<p><i>Fragm.</i> 8: 244 (1874): "Inter fluvios Norman's et Gilbert's River; Th. <i>Gulliver</i>". Carolin, <i>Telopea</i> 3: 535 (1990): "LECTOTYPE: QUEENSLAND: Between the Norman and Gilbert Rivers, [1874], <i>T. Gulliver 68</i> (MEL23997). ISOLECTOTYPES: MEL23998, 22243*."</p>
<p><i>Haloragis scolopetifera</i> F.Muell. [= <i>Haloragis glauca</i> f. <i>scolopetifera</i> (F.Muell.) Orchard] [Haloragaceae]</p>	<p><i>Trans. Proc. Roy. Soc. Victoria</i> 24: 136 (1888): "[i]t is known only from Norman River and Spear Creek (Th. <i>Gulliver</i>), and from Aramac Creek (Dr. Poulton)". Orchard, <i>Bull. Auckland Inst. Mus.</i> 10: 121 (1975): "Lectotypus (Orchard): <i>Dr. Poulton s.n.</i>, Aramac Creek, MEL39077 (fl., fr.); Syntypus: T. A. <i>Gulliver 1076</i>, Spear Creek, MEL39079 (fr.)!" (<i>vide</i> JSTOR-GP, Mar. 2023).</p>
<p><i>Heterachne gulliveri</i> Benth. [= <i>Eragrostis lilliputiana</i> R.L.Barrett & P.M.Peterson] [Poaceae] (Fig. 6)</p>	<p><i>Hooker's Icon. Pl.</i> 13: 39, t. 1250 (1877): "Between Norman and Gilbert Rivers, Carpentaria, North Australia, <i>Gulliver</i>". Barrett <i>et al.</i>, <i>Austral. Syst. Bot.</i> 33: 471 (2020): "between Gilbert and Norman rivers, Carpentaria, North Australia, [1874], <i>T. Gulliver s.n.</i> [25] (first-step lecto, designated by C. E. Hubbard, <i>Hooker's Icon. Pl.</i> 33: 3, t. 3828 (1935; no herbarium indicated): second-step lecto, designated here: K 000907210 [image seen (JSTOR 2019)]; isolecto: MEL 2127056!, MEL 2131369!, US 00323635!)" Note. The name <i>Eragrostis lilliputiana</i> is not yet recognised by APC (2023), but is at POWO (May 2023).</p>

Table 7. continued

Taxon	Citation, specimens and references
<i>Isotoma gulliveri</i> F.Muell. [Campanulaceae] (Fig. 7)	<i>Fragm.</i> 10: 39 (1876): "Inter fluvios Normanii et Gilbertii; Th. Gulliver". Syntypes: Between the Norman & Gilbert Riv., 1874, <i>T. Gulliver s.n.</i> (MEL719707; K000277983, received Dec. 1886) (<i>vide</i> JSTOR-GP, K specimen only).
<i>Marsdenia rhyncholepis</i> F.Muell. [= <i>Leichhardtia cymulosa</i> (Benth.) P.I.Forst.] [Apocynaceae]	<i>Fragm.</i> 11: 78 (1879): "Ad flumen Palmer-River; Th. Gulliver". Forster, <i>Austrobaileya</i> 11: 9 (2021): "Type: [...] Palmer River, in 1878, <i>T. Gulliver s.n.</i> , (holo: MEL 9255; iso: BRI [AQ333102])." Update. Lectotype (here designated): Thornborough, 1878, <i>Th Gulliver s.n.</i> (MEL9255). Isolectotypes: BRI-AQ0333102; K000873039 (received at K, Dec. 1886) (<i>vide</i> JSTOR-GP, Mar. 2023).
<i>Melaleuca lysicephala</i> F.Muell. & F.M.Bailey [= <i>Asteromyrtus lysicephala</i> (F.Muell. & F.M. Bailey) Craven] [Myrtaceae]	<i>Occas. Papers Queensl. Fl.</i> 1: 2 (1886): "Lloyd's Bay.-Thos. A. Gulliver". Craven, <i>Austral. Syst. Bot.</i> 1: 380 (1989): "Typus: Australia, Queensland: Lloyd Bay, <i>comm. Gulliver s.n.</i> (BRI, holo.; MEL, iso.)." Update. Lectotype: BRI-AQ0278438, <i>vide</i> Craven (1989: 380) as "holo". Isolectotype: MEL975 (<i>vide</i> JSTOR-GP, Mar. 2023; McNeill 2014).
<i>Rhynchospora longisetis</i> var. <i>pterochaeta</i> F.Muell. [= <i>Rhynchospora pterochaeta</i> (F.Muell.) B.D.Jacks.] [Cyperaceae]	<i>Fragm.</i> 9: 17, 58 (1875), "Haec ad Cape's River occurrit (Bowman), ad Norman's et Gilbert's River (Th. Gulliver), ad Victoria-River (F.M.)." Update: Syntypes & isosyntypes include: Cape River, <i>Bowman s.n.</i> (K001057244, MEL2297566); Between the Norman and the Gilbert River, Aug. 1874, <i>Th. Gulliver s.n.</i> (K001057245, MEL2297567). (<i>vide</i> JSTOR-GP, May 2023). Possible syntypes (now treated as a separate species, <i>R. exserta</i> C.B.Clarke): Upper Victoria River, <i>F. Mueller s.n.</i> (K001057248 ex Herb. Hook., MEL2297560). While Mueller mentions in the protologue that this taxon could perhaps be recognised as a species, he did not definitely associate the final epithet with the generic name <i>Rhynchospora</i> (ICN Art. 35.2). As such, he only validly published a name for the taxon at the rank of variety. This does not constitute an invalidly published provisional name at species rank (Art. 36.1) as indicated by Chapman (1991: 2517). The first author to validly publish a combination at species rank for this taxon was Jackson in <i>Index Kewensis</i> 2: 771 (1895).
<i>Zornia areolata</i> Mohlenbr. [Fabaceae]	<i>Webbia</i> 16: 53 (1961): "Australia: Northern Territory [Queensland]: Creen Creek, Gulliver s.n. (MEL, holotype)". Reynolds & Holland, <i>Austrobaileya</i> 3: 19 (1989): "Type: [...] Creen Creek, <i>Gulliver s.n.</i> (holo: MEL, n.v.; iso: MEL (MEL 1544960))." Update. Mohlenbrock recorded seeing two Gulliver specimens from MEL, the holotype specimen from Creen Creek (cited above) and among the other specimens seen, he referred to a specimen collected from "between the Norman and Gilbert Rivers, <i>Gulliver 57</i> " (MEL1544960). Because of the labelling, Mohlenbrock clearly believed they were of different gatherings. Reynolds & Holland (1989: 20) were aware that Creen Creek is not in the N.T., but located between the Norman and Gilbert Rivers and suggested that MEL1544960 is "probably an isotype" and that "[I]t agrees with the protologue and illustration of the holotype." This may be correct, but with Gulliver living in the area for some years, he may also have collected the species on two occasions. Should the holotype not be located – it has not been seen at AVH & JSTOR-GP (Nov. 2023) – MEL1544960 would be a candidate for a neotype.
Algae	
<i>Cosmarium securiforme</i> Borge [Desmidiaceae]	<i>Bih. Kongl. Svenska Vetensk.-Akad. Handl. Afd. III</i> 22(9): 20, tab. 3, fig. 33 (1896): "Queensl. Zwischen Norman River und Gilbert River (J. [sic] Gulliver)".
<i>Docidium elegans</i> Borge [= <i>Triploceras gracile</i> var. <i>elegans</i> (Borge) Willi Kreig.] [Desmidiaceae]	<i>Bih. Kongl. Svenska Vetensk.-Akad. Handl. Afd. III</i> 22(9): 29, tab. 4, fig. 66 (1896): "Queensl. Zwischen Norman River und Gilbert River (J. [sic] Gulliver)".
<i>Docidium horridum</i> Borge [Desmidiaceae]	<i>Bih. Kongl. Svenska Vetensk.-Akad. Handl. Afd. III</i> 22(9): 28, tab. 4, fig. 55 (1896): "Queensl. Rockingham Bay (J. Dallachy), zwischen Norman River und Gilbert River (J. [sic] Gulliver)".
<i>Docidium nodosum</i> var. <i>mammillatum</i> Borge [Desmidiaceae]	<i>Bih. Kongl. Svenska Vetensk.-Akad. Handl. Afd. III</i> 22(9): 27, tab. 4, fig. 52 (1896): "Queensl. Zwischen Norman River und Gilbert River (J. [sic] Gulliver)".
<i>Docidium verticillatum</i> var. <i>ornatum</i> Borge [= <i>Triplocerus verticillatum</i> var. <i>ornatum</i> (Borge) F.M.Bailey] [Desmidiaceae]	<i>Bih. Kongl. Svenska Vetensk.-Akad. Handl. Afd. III</i> 22 (9): 28, tab. 4, fig. 56 (1896): "Queensl. Zwischen Norman River und Gilbert River (J. [sic] Gulliver)".
<i>Euastrum spinulosum</i> var. <i>ornatum</i> Borge [Desmidiaceae]	<i>Bih. Kongl. Svenska Vetensk.-Akad. Handl. Afd. III</i> 22 (9): 12, tab. 2, fig. 16 (1896): "Queensl. Carpentaria Golf (I.L. Bancroft), zwischen Norman River und Gilbert River (J. [sic] Gulliver)".
<i>Staurastrum elegans</i> Borge [Desmidiaceae]	<i>Bih. Kongl. Svenska Vetensk.-Akad. Handl. Afd. III</i> 22 (9): 15, tab. 2, fig. 21 (1896): "Queensl. Zwischen Norman River und Gilbert River (J. [sic] Gulliver)".

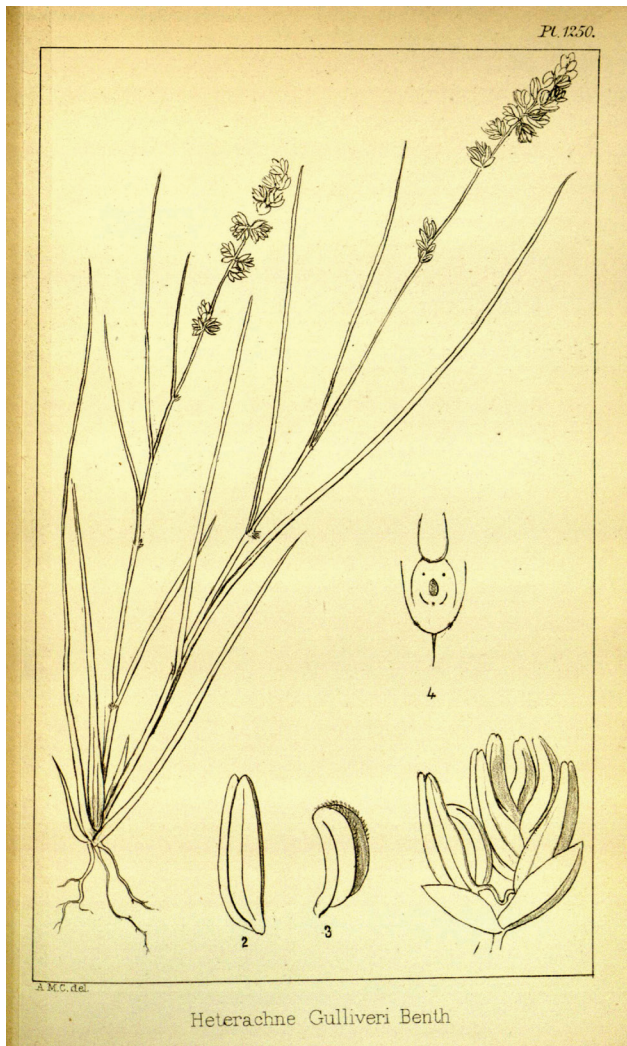


Fig. 6. Illustration of *Heterachne gulliveri* Benth. [= *Eragrostis lilliputiana* R.L.Barrett & P.M.Peterson]. Illustration from Hooker's *Icones plantarum* 13: 39–40, pl. 1250 (1877–1879).

Assemblage 5. — Queensland, 1882–1888, the mostly undifferentiated collections of Thomas Allen Gulliver and Benjamin John Gulliver in the vicinity of Townsville and other locations in north-east Queensland

The brothers had both settled in Townsville by 1882, and took an interest in the regional flora. The main collection locations include Magnetic Island (30 specimens), Port Douglas (10), Townsville (10), base of Mount Bartle Frere (5) and Trinity Bay (3) [Data as per AVH, 27 May 2023]. Most specimens are held in MEL, which suggests that Mueller may have made requests for collections and that the brothers were maintaining their long association with Mueller. That this was so, is evident in a letter sent to Mueller by Thomas Gulliver in 1888, in which he notes that he is enclosing another specimen of “No. 9 from Barte [*sic*] Frere” as well as indicating that Benjamin had decided



Fig. 7. *Isotoma gulliveri* F.Muell. Photo: Dave Albrecht (D.E. Albrecht 9820 & R.K. Harwood).

to further explore Mt Bartle Frere (in the Bellenden Ker Range) in the following month, and in doing so also noted that his brother “is a splendid collector”.⁸² We are not aware that any new taxa were described from specimens during this period.

Summary

The Gulliver siblings were part of Ferdinand Mueller's large network of botanical collectors and their collections provided materials for the descriptions of new species, as well as resolving details of distribution and morphological diversity of already described species. For example, at least 70 of Benjamin's collections from the Northern Territory Expedition were cited by Mueller in *Fragmenta Phytographiae Australiae*, and by Bentham in *Flora Australiensis*. The sibling's collections from Tasmania and Thomas' collections from Queensland similarly contributed to Mueller's work.

About 1460 specimens collected by the Gullivers have been located in herbaria in Australia and Europe. Most are held in MEL and with a moderate number at K. Their collections are type specimens for about 50 new names of plants, bryophytes, algae and a lichen, including specimens collected by Benjamin during the Northern Territory Expedition (also including New

⁸² Thomas Gulliver to Ferdinand von Mueller, 1888-03-12. R.W. Home, T.A. Darragh, A.M. Lucas, S. Maroske, D.M. Sinkora, J.H. Voigt & M. Wells (eds), *The Correspondence of Ferdinand von Mueller*. <https://vmcp.rbg.vic.gov.au/id/88-03-12> [accessed: 19 Oct. 2023].

Table 8. Flowering plants, bryophytes, fishes and bird names that commemorate Thomas Allen Gulliver and Benjamin John Gulliver. All but one commemorates Thomas, both are commemorated in *Polytrichum gulliveri*. Accepted names follow the APC (2023) unless otherwise indicated.

Flowering Plants
<i>Ectrosia gulliveri</i> F.Muell., <i>Fragm.</i> 8: 201 (1874) [= <i>Eragrostis gulliveri</i> (F.Muell.) R.L.Barrett & P.M.Peterson].
<i>Heterachne gulliveri</i> Benth., <i>Hooker's Icon. Pl.</i> 13: 40, t. 1250 (1877) [= <i>Eragrostis lilliputiana</i> R.L.Barrett & P.M.Peterson] (Fig. 6).
<i>Isotoma gulliveri</i> F.Muell., <i>Fragm.</i> 10: 39 (1876) (Fig. 7).
<i>Quercus gulliveri</i> F.Muell., <i>Victorian Naturalist</i> 1: 167 (1885) [= <i>Lithocarpus celebicus</i> (Miq.) Rehder].
Bryophytes
<i>Polytrichum gulliveri</i> Hampe [as "gulliveri"], <i>Linnaea</i> 40: 315 (1876) [= <i>Pyrrhobryum mnioides</i> subsp. <i>contortum</i> (Müll.Hal.) Fife. Named jointly for Benjamin John Gulliver and Thomas Allen Gulliver.
Fishes
<i>Acanthopercra gulliveri</i> Castelnau, 1878, <i>Proc. Linn. Soc. N.S.W.</i> 3: 45 (1878) [= <i>Parambassis gulliveri</i> Castelnau]. Gulliver's perchlet.
<i>Gulliveria</i> Castelnau, 1878, <i>Proc. Linn. Soc. N.S.W.</i> 3: 45 (1878). Cardinal fishes.
<i>Kurtus gulliveri</i> Castelnau, 1878, <i>Proc. Linn. Soc. N.S.W.</i> 2(3): 233 (1878). Nursery fish.
Birds
<i>Zosterops gulliveri</i> Castelnau & Ramsay, 1876, <i>Proc. Linn. Soc. N.S.W.</i> 1: 383 (1876) [= <i>Zosterops luteus luteus</i> Gould, 1843]. Silveryeye (Fig. 8).

South Wales and Queensland), from Tasmania, mostly recorded as joint collections by Thomas and Benjamin, and collections by Thomas from the southern Gulf of Carpentaria (mainly between Gilbert River and Norman River). Zoologically, Thomas' collections from the vicinity of the Norman River mouth also advanced knowledge of the birds and fishes of that region.

In addition to their contribution to taxonomy, the brothers made a significant contribution to tropical horticulture and gardening. Acacia Vale Gardens and Nursery, established by Benjamin in 1882 in Townsville, became one of the most prominent horticultural businesses in that city and only ceased operation on the death of Benjamin in 1938. He introduced plants

such as crotons and large flowering trees to Townsville, and facilitated the development of public gardens and parks with contributions of plants and seeds. They were the first to grow strawberries in Townsville. Thomas, at his property Roseneath to the west of Townsville, experimented with fodder crops and grew mangoes as an orchard crop. In regard to fruit trees, the Gullivers developed a number of mango cultivars, the most popular being Gulliver's Triumph. This cultivar has recently been propagated from the known surviving trees, which have been largely lost through suburban development and the aging of original trees.

In this work, biographical details have been reviewed and updated, particularly in regards to the Gullivers' birth and death dates, and individual activities. The combined contributions of the Gulliver siblings to Australian natural history were undoubtedly appreciated by those who named taxa after them. A list of eponymous taxa is presented in Table 8.



Fig. 8. *Zosterops gulliveri* Castelnau & Ramsay [= *Zosterops luteus luteus* Gould, 1843] was named for Thomas Allen Gulliver. Photo: Doug Herrington.

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