

The Mystery of *Myrsine australis* at Akaroa

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Excuse me for writing in the first person, even though Ines is a co-author. This is primarily a personal story of discovery, much serendipitous, that mostly comes from living for the past eleven years just up the road from the Garden of Tane, Akaroa. However, the story goes back much longer than that to when Dumont d'Urville navigated the corvette *Astrolabe* through what he named French Pass in January 1827.

Tane's Domain

What is now most often called The Garden of Tane was developed in the period of Provincial Government and was well established by 1876 when the Canterbury Province was abolished. Then the Akaroa Borough Council was established and the Akaroa Domain Board, an arm of the Canterbury Province, resigned trust in favour of the Borough Council.

I wrote a little about the early history of the Akaroa Domain for the Royal New Zealand Institute of Horticulture Conference *Greening the city: bringing biodiversity back in to the urban environment* (Harris 2003). In short, what was described as a wilderness, and which early photographs (Fig. 1) show as native tussock and shrubland that grew after forest clearance, was developed into parkland. It had spaced exotic trees with mown grass between, broad paths, and various amenities including tennis courts, a fountain, a wishing well, and a summerhouse from which a broad panorama of Akaroa could be viewed (Fig. 2).

The Domain was a place for planting commemorative trees marked by plaques bearing the names of local government dignitaries of the time. For a time the Akaroa Borough Council employed fulltime caretakers for the Domain but the job of maintaining it as manicured parkland proved too much for them. Care of the Domain then became a part-time responsibility of council employees, and this has largely remained the situation for more than 100 years.

The Domain was a focus for social activity for the town for some years (Fig. 3). However, progressively, perhaps from about the First World War, determined, financially supported effort to maintain it as manicured parkland came to an end. In this regard, perhaps fancifully, I see parallels with the Lost Garden of Heligan in Cornwall, currently one of the most visited gardens in England. The loss of caretakers dedicated to its care, probably together with the improvement of travel between Akaroa and Christchurch, led to reduce



Figure 1 Akaroa looking south c. 1865. Akaroa Museum Collection Photo 1222.

The road running southward towards the top left is Rue Jolie. Beyond this, to the right, the Akaroa Domain was developed beginning before 1876. The Domain area was initially covered by tussock and scrub similar to that in the foreground.



Figure 2 View towards Akaroa town from the Garden of Tane lookout in 2013. Photo Deirdre A Harris.

The summerhouse was close to this lookout but its site is now covered with vegetation. This obscures the panorama that would have been viewed from it in earlier days.



Figure 3 Akaroa Domain c. 1910. Akaroa Museum Collection Photo 25.

Ladies and a gentleman promenading on a well formed path. The Domain also had areas of parkland at the time. Note the thicket of kanuka in the left background. Felling of this for firewood was a controversial issue.



Figure 4 *Myrsine australis*, the “shining matipo”, forms a natural hedge under exotic trees along the track to the main lookout of the Garden of Tane, Akaroa. Photo Deirdre A Harris. Note the carpet of oak leaves under the matipo, or is it mapau or mataira?

interest by Akaroa townsfolk in the Domain as a social playground. Those coming from Christchurch were more interested in the scenic views and recreational opportunities provided by the harbour. They had their own gardens to tend to and the Christchurch Botanic Gardens and other parklands in the city were sufficient to satisfy their horticultural obligations and interests. With the abandonment of maintaining the Domain as parkland, a variety of species, predominantly woody, regenerated in spaces between the planted exotic trees. Once broad tracks became narrower, some were overgrown, and the amenities were abandoned and fell into disrepair. It seems that native plants reclaimed their ground rapidly. The conflict between natives and exotics continues to this day both between the plants and between people who cherish indigenous or introduced horticultural plants.

Just how quickly this conflict developed is shown in an editorial in the Akaroa Mail published on 28 July 1896. This included the statement “What other spirit of evil influence could ever have suggested to the Akaroa Domain Board the recent destruction of native trees in the Domain, which they were practically sworn to cherish, and cultivate...” and continued “...is its state of native loveliness, its manukas and its shining matipos and the rest of its greenery that goes to make the flora of New Zealand one of the most beautiful in the world”.

Here it is relevant to note that the “manukas” were most likely kanuka. These were the centre of controversy when they were felled in the Domain for firewood. Those that remain to this day are large specimens reaching the end of their lives and are progressively falling over in the course of the partly natural succession that characterises the Domain. Most likely the “shining matipos” were *Myrsine australis*, the focus of this article, which I will return to further on.

An important phase in the history of the Domain began in 1964 when Arthur Ericson retired early from farming for health reasons to settle in Akaroa and lived there until he died in 1991 (Alexander 1991). The Domain was especially neglected during World War II and Ericson embarked on clearing it of self-established exotic plants, an objective that he hoped to extend to the planted exotics. Cleared areas were replanted with native species including those that do not occur naturally on Banks Peninsula. Through his efforts the Domain was declared a Scenic Reserve by the Department of Conservation in 1986 and named the Garden of Tane (hereafter referred to as the Garden).

Not everyone approved of what Ericson did. At the centre of this disapproval was Roger (Fred) Harrison who looked after the Garden for the Council during the time Ericson was active. As described by his son Nigel (Harrison 2003), his father spent “A great deal of time clearing the native undergrowth away in the recreational area so that the exotics could be enjoyed and also to allow people to wander off the track and continue to picnic”. Ericson’s opinions on how the Garden should be managed prevailed, and with the help he attracted, he did much to control weeds and keep tracks clear as well as planting native species

as part of his concept of the Garden of Tane. After his death in 1991 the Garden once again suffered neglect. But the big old exotic trees, which match in age and size those that currently dominate the Christchurch Botanic Gardens, still hold their place in the Garden of Tane to today. The significance of the Garden to the history of farming and landscaping in Canterbury was expressed well in an article written by Derrick Rooney (1991) not long after Arthur Ericson died.

In the period of existence of the Banks Peninsula District Council (BPDC) from 1989 to 2006 little seems to have been done with the Garden by the Council or by the Department of Conservation who had granted it the status of a Scenic Reserve. Possibly its status in this regard was tainted by its history of planting of exotics. With the amalgamation of BPDC with Christchurch City Council (CCC) hope was raised that access to the much greater resources and expertise embodied in Christchurch could provide impetus for the maintenance and the development possibilities for the Garden. To this end a management plan was prepared by the CCC and published in June 2010. One recommendation of the Plan was to establish a Reserve Management Committee for the Garden of Tane. This committee was established in September 2012.

The small population of Akaroa makes it difficult to find people to serve on the committees of the many clubs, societies and governance bodies in the town. Fortunately just the required number of people was found to serve on the Garden of Tane Reserve Management Committee, and I am one of them. In the year the Committee has functioned, it has considered maintenance needs of the Garden, envisaged plans to enhance its values, and endeavoured to engage the expertise of the CCC park managers, botanist, arboriculturist, pest controllers and other specialists.

We have recognised that the Garden of Tane is only a short walk away from the Akaroa wharf where thousands of cruise ship passengers have disembarked in the last few years and will continue to for more years yet. This gives them an easy opportunity to experience New Zealand native bush and native birds, including tui that have found their way to the Garden from their release at Hinewai in 2009.

Shining matipo

This preamble brings me to my present interest in *Myrsine australis*. Taken into the Garden of Tane by the activities of the Management Committee I have been often asked by the other members what is the name of this plant or that. The usual assumption by people who regard you as a botanist is that you can instantly put a name to all plants. This ability certainly does not apply to me. However, often my attention has been directed to *Myrsine australis* (Fig. 4, p. 10), which is abundant in the Garden, with the question "What is that called?" More than once it has been followed by the question "Is it matipo?" My answer to this was "No, it is not. That is the common name for *Pittosporum*". (What is

the correct way to pronounce that?) In this answer I was thinking of *Pittosporum tenuifolium*, which in its various forms abounds in garden centres, native landscape plantings, hedges and home gardens, but not in the Garden of Tane.

This answer brought nodded admiration from questioners, particularly if I gave in addition the binomial name. Conversing about the names of plants brings the same social satisfaction as talking about the weather, although perhaps at a higher intellectual plane? But I was left with uncertainty as to what was the correct Māori name for *Myrsine australis*. This led to me consulting Flora of New Zealand, Volume I (Allan 1961). (As an aside, I bought my copy with money given to me by an aunt as a 21st birthday present in 1961.)

To my mild embarrassment, fortunately not seen by those whose questions had led to consultation of the Flora, I found the Māori name for *Myrsine australis* listed on p. 541 as mapau, and also in the list of Māori Names of Plants as mataira, and most tellingly, as matipo. Beever's (1987) Dictionary of Māori plant names gives mapou as the first name as well as several other names, including matipou. The Māori name for *P. tenuifolium* given by Allan is kohuhu, and also as the first choice by Beever. Of the alternative names given by Beever for *P. tenuifolium* none has similarity to *matipo*.

Reference to Metcalf's *Cultivation of New Zealand trees and shrubs* (1972) provided some relief. He gives mapau or matipou for *M. australis* and kohuhu for *P. tenuifolium*. But he goes on to write for *P. tenuifolium* "Throughout New Zealand this plant is quite wrongly known as matipo. Its correct Māori name is kohuhu, and the only plant entitled to be called matipo is *Myrsine australis*". Shame on me for my ignorance!

The Akaroa connection

The serendipitous moment in my looking up the entry for *M. australis* in Allan was to read "Type locality: Akaroa. Type: P, *M. Hombron*, 1841". P is the abbreviation in Allan for the Herbarium of Muséum National d'Histoire Naturelle, Paris, and indicates where the type specimen from the type locality was considered to be deposited. "*M. Hombron*" is for Monsieur Hombron, more specifically Jacques Hombron (1800–1852). Margaret Bulfin née Simpson gave biographical notes about Hombron when she considered collections made in the course of Dumont d'Urville's visit to Akaroa when the ships of his 1837–1840 expedition, the *Astrolabe* and the *Zélée*, stopped there for nine days from 8 April 1840 (Simpson 1984). Hombron was the senior surgeon on the *Astrolabe* and, together with Honoré Jacquinot the junior surgeon on the *Zélée*, had the responsibility for botanical collections made during the expedition.

However, my moment of excitement in reading in Allan (1961) that Akaroa was the type locality for *Myrsine australis* was short-lived. Alas the entries relating to type details were soon seen to be disparate with the authorities

given for the species, with the earliest date being 1832 for the name *Suttonia australis* given by Achille Richard. It was at this point, on 30 June 2013, that I sought the help of Ines Schönberger in her role of Herbarium Manager, Allan Herbarium (CHR), Landcare Research, Lincoln, about the anomaly of the type locality of *M. australis* given in Allan.

Ines' response was far more than I could have anticipated. Further, the details she provided by her reply indicated how much the process of extracting information from herbaria has progressed since the 1990s. Ines sent me images from the Paris Herbarium of the type specimen of *M. australis* (Fig. 5a, b), the description and illustration of the species from Richard (1832) (Fig. 6), and a specimen from the Herbarium of the Royal Botanic Garden, Kew of the species collected from Banks Peninsula by Jacque Hombron (Fig. 7a, b). The specimen has the date 1841, presumably the year it was deposited in the Paris Herbarium, although it would have been collected by Hombron in the vicinity of Akaroa when the *Astrolabe* anchored in Akaroa Harbour in April 1840.

The type specimen

My interest in type specimens was whetted when I was in France for six months in 1989. The main purpose of being in France was to continue research on the suitability of New Zealand plants for ornamental use in that country. I did this in collaboration with Luc Decourtye who was at that time Head of the Laboratoire d'Amélioration des Arbuste Ornementaux, INRA, Angers.

Encouraged by Margaret Bulfin through her interest in the activities of French botanists in Akaroa in the 1840s, I also visited the Herbarium of the Museum of Natural History, Paris, particularly to look for the type specimens of species for which Étienne Fiacre Louis Raoul (1815–1852) is the authority. This proved to be a very useful exercise and is described in Canterbury Botanical Society Special Publication "Etienne Raoul and Canterbury Botany 1840–1996" (Harris & Cadic 1998). I also extended my searches to species for which Achille Richard is the authority, initially for kanuka (*Leptospermum ericoides* A.Rich., which became *Kunzea ericoides* (A.Rich.) Joy Thomps.), a species in which I have a special interest (Harris 1987). I note that Peter de Lange now separates what is generally known as kanuka in New Zealand into ten species. He names the species occurring on Banks Peninsula *Kunzea robusta* (de Lange 2014).

The procedure at the Paris Herbarium was for visitors to be seated in a laboratory from where they could ask attendant herbarium staff to search for specimens of species of interest. Here it is appropriate to acknowledge the excellent help I received from Dr RD Hoogland and Mlle Bouyer in searching out specimens from the vast collection of the Paris Herbarium.

I had completely forgotten that Mlle Bouyer had searched out the specimen of *Suttonia australis* for me (Fig. 5a) and that I had annotated it with the currently accepted name of *Myrsine australis* (Fig. 5b). Further, the collection



Figure 5 The type specimen of *Myrsine australis* (A.Rich.) Allan (syn. *Suttonia australis* A.Rich.) lodged in the Herbarium of the Museum of Natural History, Paris (a) The full sheet. (b) Details of the labels and annotations.

Note the sketches of flowers and fruits of the species used in the description and illustration of the species shown in Figure 6b.

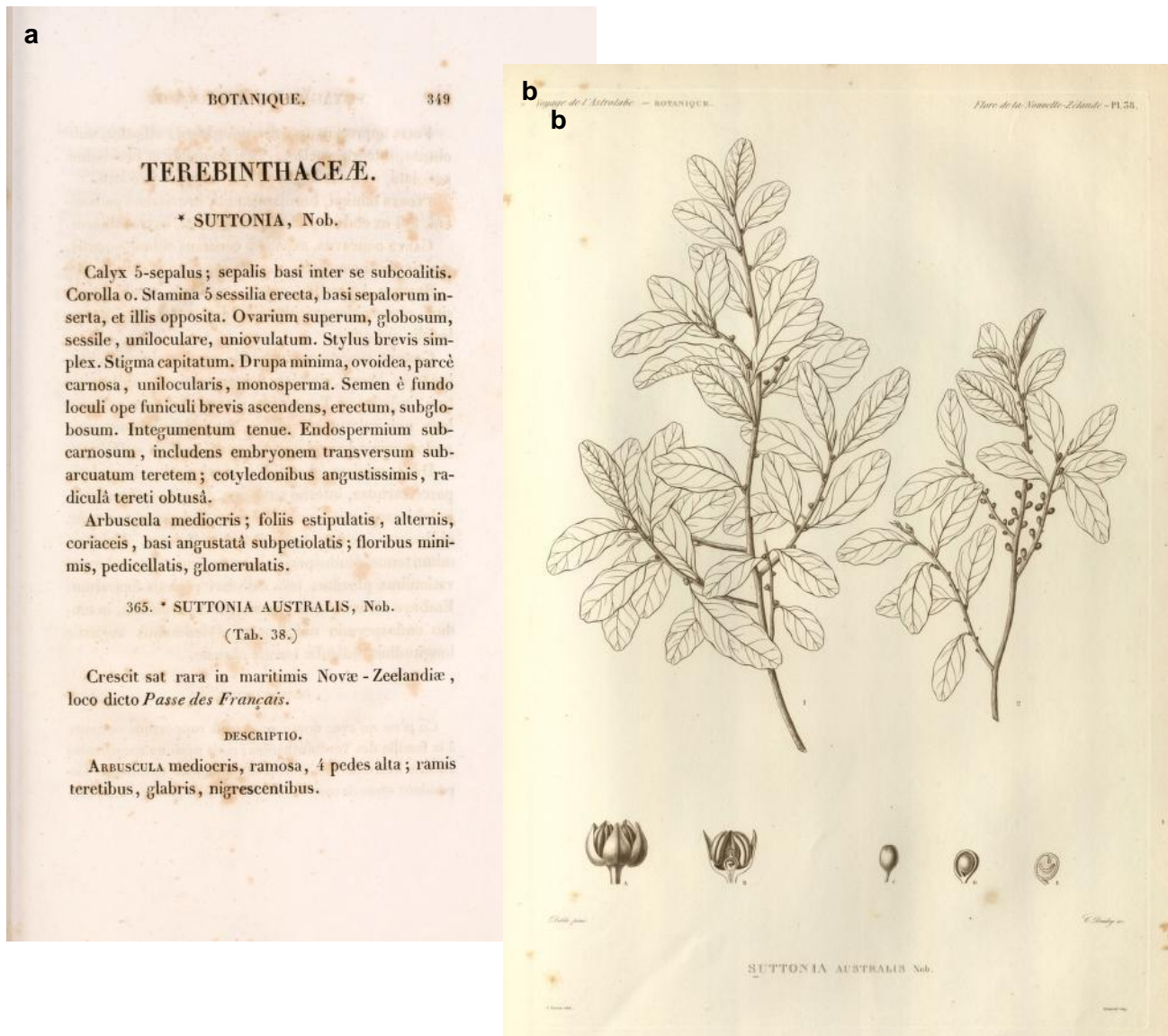


Figure 6 Descriptions and illustration of *Suttonia australis* syn. *Myrsine australis*.

(a) First page of the description. Copied from (Dumont d'Urville 1830-1835) Voyage de Découvertes de l'Astrolabe. Exécuté par ordre du Roi, pendant les années 1826 – 1827 – 1828 – 1829, sous le commandement de M. J. Dumont d'Urville. Botanique par MM. A. Lesson et A. Richard. Paris J. Tastu, Éditeur. 1832.

Page 349 of the description of *Suttonia australis* from Richard, A. 1832: Essai d'une Flore de la Nouvelle Zélande. In: Dumont d'Urville, J. Voyage de découvertes de l'Astrolabe, Division 2, Botanique, pt. 1. Tastu, Paris.

(b) The illustration. Copied from: Voyage de la Corvette l'Astrolabe exécuté pendant les années 1826 – 1827 – 1828 – 1829 sous le commandement de M. Jules Dumont d'Urville, Capitaine de Vaisseau. Atlas. Paris. Publié par J. Tastu, Editeur. 1833.

Plate 38 in Richard, A. 1832: Essai d'une Flore de la Nouvelle Zélande. Dumont d'Urville, J. Voyage de découvertes de l'Astrolabe, Division 2, Botanique, Atlas. Tastu, Paris.

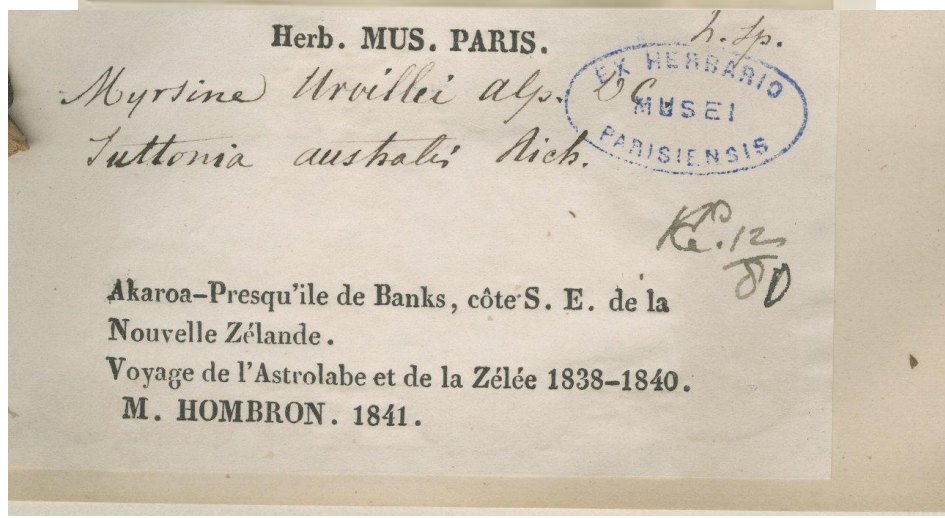


Figure 7 Hombron's specimen of *Myrsine australis* collected at Akaroa in April 1840. (a) The full sheet. (b) Details of the label. Images courtesy of the Royal Botanic Gardens, Kew (K).

site “Nlle Zelande. Pas des Français” clearly indicated the type locality as French Pass, New Zealand. The abbreviation “*Nob.*” for Latin nobis, meaning “to us”, connected to the “*Herbarium Richard*” written in red on the label, indicates Achille Richard as the author of the species. The sheet is annotated “Herb. Richard”, and also bears a stamp with “Herbarium Drake”. The Richard Herbarium later came into the hands of De Franqueville who died in 1891 and was eventually obtained by Drake del Castillo who acquired many of the larger private herbaria in Europe during the latter part of the 1800s. At his death in 1904 Drake’s herbarium, which contained more than 500,000 samples, was left to the Muséum National d’Histoire Naturelle.

“(*Astrolabe*)” indicates the connection to the corvette but there is no date of collection or who was the collector. However, we can pinpoint the date to a few days and who was the collector from Dumont d’Urville’s account of his epic and complex navigation through Current Basin exiting through French Pass to the “peaceful waters of Admiralty Bay” in the days from 22 to 28 January 1827 (Wright 1950). On 26 January d’Urville wrote “Anxious to give each of our colleagues the means of employing his time usefully, I had the naturalists and the artist of the expedition landed without delay.”.....“I had a double aim, first to utilize the zeal and the time of men whose presence on board could not help in any way with the handling of the ship that we now had to deal with: but above all, to lull the sailor’s fears of what dangers we might be running, by demonstrating that investigations were going on just as they did under the happiest circumstances of our voyage.” It can be reasonably assumed that one of those landed was Pierre-Adolphe Lesson, a surgeon on the expedition who also had responsibility for botanical collections. However, there is the possibility that d’Urville had a direct hand in collecting plant specimens, including that of *M. australis*. On 25 January he wrote “From there, I went on a beach of the island not far from the channel, where I spent an hour wandering about and collecting plants”. On exiting into Admiralty Bay on 28 January d’Urville wrote “To preserve the memory of the passage of the *Astrolabe*, I gave the name of Passe des Français...” (Fig. 8).

Publication and dates

The *Astrolabe* returned to Marseilles, France on 25 March, 1829, where she discharged her precious cargo of specimens to be sent to Paris and there went on to her home port of Toulon on the Mediterranean coast. D’Urville landed there with all who were to work with him on the publication of the expedition. In May 1835 d’Urville completed the publication of *Le Voyage de l’Astrolabe* for the 1826–1829 voyage in all its parts.

In giving the titles of the five *Sections* of the publication, Wright (1950) lists *Section Two* as “Botany. Text of Messrs. Lesson (Jun.) and A. Richard; one octavo volume. Album of at least 80 copperplate engravings, most of them in colour, on double royal superfine paper”. I’m not sure if this equates to the entry in the *Annals of Taxonomic Research on New Zealand Tracheophyta 1769–1958* (Allan 1961). This entry is “Dumont D’Urville, M. J. *Voyage de*



Figure 8 The *Astrolabe* navigating the final hazard of French Pass on 28 January 1827. Artist Louis Auguste de Sainson. Hand coloured lithograph by Alfred Leon Lemercier.

Reproduced with the permission of the Alexander Turnbull Library, National Library of New Zealand. Sainson, Louis Auguste de, b. 1800: *L'Astrolabe dans la Passe des Français*. (Nouvelle Zélande). de Sainson pinx. Tastu Editeur. Lith. de Langlumé. A. St. Aulaire lith. Paris, 1833. Ref: B-052-004. Alexander Turnbull Library, Wellington, New Zealand. <http://natlib.govt.nz/records/22420081>



Figure 9 The *Astrolabe* and *Zélée* anchored in Akaroa Harbour in April 1840 together with an American and a French whaling ship.

[Akaroa Bay, 1840]. *Baie d'Akaroa*, from *Voyage au Pôle Sud et dans l'Océanie sur les corvettes l'Astrolabe et la Zélée*,... 1837-1840, by J. Dumont d'Urville, 1842-1854, *Atlas Pittoresque*, Vol. 2, Plate 185. Artist Lois Le Breton. Reproduced with permission of the Macmillan Brown Library Collection.

Découvertes de l'Astrolabe pendant les années 1826–1829. Botanique par M.A. Richard. Paris. Includes a few spp., some 34 Tracheophyta illustrated, occurring in N.Z.”

Just how Richard came to describe, publish and be credited with authorship for *Suttonia australis* in *Essai d'une Flore de la Nouvelle Zélande* in 1832 before the publication in 1832 of the Botany Section of d'Urville's *Voyage* (Fig. 6a, p. 16) and cutting out Lesson is an item of curiosity and perhaps requires clarification. The plate of the illustration of *Suttonia australis* was published in the *Botanique Atlas* in 1833 (Fig 6b, p. 16). The listing in the *Annals* (Allan 1961) is “1832 Richard, A. *Essai d'une Flore de la Nouvelle Zélande*. Paris. Describes some 260 spp. Based on the collections of Dumont D'Urville and M. Lesson during the voyage of Duperrey in 1824 and of d'Urville in 1827”.

Sampson (1985) notes that Achille Richard (1794–1852) was not on d'Urville's second voyage but was a leading botanist of the time and a staff member of the Paris Museum until 1831 when he became professor of botany at the Paris Faculté de Médecin. Sampson also reports that Thomas Cheeseman regarded *Essai d'une Flore de la Nouvelle Zélande* as the first publication dealing with the flora of New Zealand as a whole and that it is to be regretted that little use of it has been made by New Zealand botanists. There is an opportunity here for a New Zealand botanist, fluent in both French and English, to comprehensively explore the archives and collections in Paris to gain further knowledge and understanding of the botany undertaken by d'Urville's second voyage. But perhaps this a too tall an order?

Hombroon's specimen

Hombroon's specimen of *M. australis* (Fig. 7, p. 17) brings to mind a mystery that puzzled New Zealand botanists in the past. I came across this mystery when I wrote a feature article for *The Press* (Harris 1990) to remind Cantabrians that it was 150 years since Dumont d'Urville visited Akaroa from 8 to 17 April 1840. The *Astrolabe* came close to being wrecked when entering the harbour, and its departure together with the *Zélée* was delayed by adverse weather (Fig. 9). The mystery is why they had collected so few botanical specimens during their extended stay at Akaroa, and the question applies to other parts of the voyage. Margaret Bulfin (Simpson 1984), and earlier Eric Godley (1967) on writing on a century of botany in Canterbury, both asked this question. Eric suggested that members of the French party were not energetic collectors as seen by the paucity of their botanical collecting in the vicinity of Akaroa, even though there were many novel species to be found there. In retrospect it seems Eric's judgement of the French with the information he had available to him at the time was incorrect.

The short answer to this mystery seems to be that while a good number of specimens of vascular species were found and collected in the vicinity of Akaroa during the days d'Urville was at Akaroa in April 1840 and subsequently deposited in the Herbarium of the Natural History Museum,

Paris, no record of them was published. There appears to have been little awareness of these specimens until my visit to the Paris Herbarium in 1989. In the Paris Herbarium there are sets of collections made by Jaques Bernard Hombron (1800–1852) and Elie Jean François Le Guillou (1806–1860), senior surgeons on the *Astrolabe* and *Zélée* respectively. Le Guillou's interest was more in insects than plants. I have published photos of Hombron's specimens of *Leptospermum scoparium* and *Fagus* (*Nothofagus*) *fusca* (currently *Fuscospora fusca*) collected at Akaroa and lodged in the Paris Herbarium elsewhere (Harris 1990, 1999).

However, the specimen in Figure 7 is lodged in the Herbarium of the Royal Botanic Garden, Kew, and is stamped "Ex Herbario Musei Parisiensis". It is most likely a duplicate of one still retained in the Paris Herbarium, but this needs to be checked. This may provide an explanation for the error of the type locality for *Myrsine australis* being given as Akaroa in Allan (1961). Allan, and those who assisted him in the publication of Volume I of the Flora, had limited access to the collections in the Paris Herbarium but had ready access to those held by Kew. Thus, perhaps, the expedient assumption was made that Hombron's specimen was the type, and Akaroa the type locality.

There are good reasons why the collection of these specimens was not published. First was the tragic death of d'Urville in a train accident on the line between Paris and Versailles on 8 May 1842. At the time of his death he had begun preparation of an account of the 1837–1840 voyage, "Voyage au Pôle Sud et dans l'Océanie sur les corvettes l'Astrolabe et la Zélée" (Dumont d'Urville 1842-1846), for which he intended to write a large part of the narrative and as well to supervise its full production. With d'Urville's driving motivation and organisation lost it was left to others to complete the full set of volumes. In particular completion of the botanical part (*Botanique*) was left to the supervision of J. B. Hombron and Honore Jacquinet (1815–1887).

Sampson (1985) describes the course by which the two *Botanique* volumes, together with an Atlas of 65 plates, came to publication. The first volume, written by Pierre François Camille Montagne (1784–1886), dealt with non-vascular plants and was published in 1845. The second volume dealing with vascular plants was not published until 1853, the year after Hombron died. The task of finally completing the vascular volume was taken over by Joseph Decaisne (1807–1882), a leading botanist of the time based at the Paris Museum. This volume included only the vascular plants that had been illustrated in the Atlas published in 1852. As only 16 fern species and 84 flowering plants were described, this led to botanists, including Margaret Bulfin (Simpson 1984) and Eric Godley (1967) mentioned before, to question why so few higher plants were collected on such a long voyage (Sampson 1985). Thus a second reason for a full list of vascular species collected not being published is the long period from collection to final publication, disruptions related to Hombron's early death most likely to be a contributing cause.

A third reason relates to the intensive botanical exploration between 1840 and 1843 of the environs of Akaroa, and to a lesser extent of other parts of New Zealand, by Étienne Raoul. Raoul's botanical endeavours in Akaroa, which led to the publication of *Choix de Plantes de la Nouvelle-Zélande* (Raoul 1846), were the subject of a special publication of the Canterbury Botanical Society (Burrows 1998). On his return to France, Raoul worked at the Natural History Museum, Paris under the direction of Adolph Brongniart (1801–1876) and Joseph Decaisne to complete the *Choix*. So he would have been there at the same time as Hombron and colleagues were working to complete the vascular volume of the *Botanique* for *Voyage au Pôle Sud*. So an understandable response of those working to finally bring the vascular "*Botanique*" to publication could have been that Raoul had largely done the job as far as the New Zealand collections were involved. This deduction is supported by the publication in the vascular "*Botanique*" of 15 plants collected from the Auckland Islands on d'Urville's route back from Antarctica. These would have retained some degree of novelty after the plants from mainland New Zealand were published in the *Choix*.

Hombron's specimen (Fig. 7b, p. 18) perhaps indicates an original intention to publish what d'Urville's botanists collected at Akaroa. First there is the specially printed label showing the specimen was collected at Akaroa in the course of the voyage of the *Astrolabe* and the *Zélée*. There are similar labels I have seen for plants collected by d'Urville's expedition for its visits to the Auckland Islands and Otago Peninsula. This can be viewed as an indication of systematic organisation of the specimens in the course to their publication. Then there is the name *Myrsine Urvillei* published by deCandolle (1834) given above Richard's name *Suttonia australis*. Sampson (1985) comments that Decaisne made corrections to the names of some of the vascular plants in the *Atlas* that accompanied the "*Botanique*". It appears to be Decaisne's handwriting on the label (Fig. 7b). What do the annotations on the right hand side of the label mean? Does the upper one that could be "*N Sp.*" indicate consideration of the collection as a new species by Decaisne? More mysteries to solve?

More shining living specimens

Although considerable information and satisfaction can be derived from examining herbarium specimens, this is outshone by what can be gained by the observation of living plants. For me, and I suspect for others with a botanical bent, this is especially the case when species are seen growing in their natural habitats and even more so if they are in their type locations. It is not difficult to envisage the excitement of the French botanical collectors, thinking particularly of d'Urville, Lesson, Hombron and Raoul, when they first encountered species new to them and which they thought to be new to science. It is easy to sense their determination to get their specimens back to their home herbarium, to consult with taxonomists there, and to publish the names of the "new species" and to be credited as authors.

A project envisaged by the Garden of Tane Reserve Management Committee is to have a planting of the trees and shrub species described and named by Étienne Raoul. This is planned to be on an area immediately after entry through the main gate at the top of Rue Jolie (Fig. 1, p. 9). This area is currently covered by an untidy assemblage of naturalised weeds. Although it has been resolved that Akaroa is not the type locality for the shining matipo, *Myrsine australis*, it would be a reasonable extension to include it in the planting together with other trees and shrubs native to Banks Peninsula that were named by French botanists. This would be an appropriate way to acknowledge and commemorate the considerable and unique contribution they made to our knowledge about the plants of New Zealand.

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