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PLANTAE COULTERIANAE: THOMAS COULTER’S CALIFORNIAN EXSICCATA

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ABSTRACT

An account of the extent, diversity, and importance of the Californian collections of Thomas Coulter in the herbarium (TCD) of Trinity College, Dublin, Ireland, is presented here. It is based on examination of collections in TCD, several other collections available online, and referenced literature. Additional information on historical context, content of herbarium labels and annotations is included. Coulter’s collections in TCD are less well known than partial duplicate sets at other herbaria. He was the first botanist to cross the desert of southern California to the Colorado River. Coulter’s collections in TCD include not only 60 vascular plant specimens previously unidentified as type material but also among the first moss and marine algae specimens known to be collected in California. A list of taxa named for Thomas Coulter is included. Images of the map of his route are presented here as well as comments on some locality errors. Mention is made of works cited in annotations that were, in fact, never published, leading to persistent author citation errors. Coulter’s expansive interests in collecting and natural history included languages of the indigenous tribes he encountered in California.

Key words: bryophytes, California, Coulter, exsiccata, flora, herbarium, marine algae, Native Americans, Native American language, TCD.

“This is truly the kingdom of Desolation.” “I fear the whole flora of California Alta will fall far short of a thousand species. Indeed, I do not expect above 600 and of these not above 200 of much interest.” (Coulter 1832)

PREFACE

The title of this paper includes “Plantae Coulterianae” partly in recognition of—and homage to—the similarly titled treatments by Asa Gray and his co-authors about the expeditions and collections of other explorers of the era, including Plantae Fendleriannae Novi-Mexicanae (Gray 1849), Plantae Lindheimerianae (Engelmann and Gray 1845), Plantae Wrightianae Texano–Neo-Mexicanae (Gray 1852), Plantae Novae Thurberianae (Gray 1854) and Plantas Hartwegianas (Benthem 1839–1857) and in part in response to Nelson and Probert’s (1994: 79) comment, “No-one has published a Plantae Coulterianae.”

My primary purpose is to present a list of—and guide to—the hundreds of Coulter’s Californian specimens in the Trinity College Dublin Herbarium (TCD), Dublin, Ireland. His are among the earliest collections of Californian specimens. It is beyond the scope and purpose of this contribution to document the identifiers or provenance of each of Coulter’s Californian specimens. The initial identifications of Coulter’s specimens were made over 170 years ago. It is likely that many are misidentified or under-identified (not differentiated to infraspecific taxa). I hope the listing here and description of discoveries (see Findings below) entices systematists to examine the Coulter exsiccata at TCD and elsewhere to verify their type status if appropriate, correct incorrect determinations, and assign infraspecific taxa not recognized when the specimens were first identified. I also hope curators and monographers look for more of Coulter’s specimens in other collections and image those on hand.

I have attempted to locate as many of Coulter’s Californian exsiccata as possible in TCD. There are likely more specimens there under older names or merely misfiled. I have included references to specimens at other herbaria historically more likely to have been consulted than those at TCD. The account of Coulter’s Californian plants (phanerogams and bryophytes) is included (Appendix I) to demonstrate the taxonomic breadth of his collecting in California and the distribution of his exsiccata. There is also a separate account of Coulter’s marine algae specimens (Appendix II), taxa for which his collections are type material (Appendix III), a list of plant and algae taxa named for him (Appendix IV), a list of taxa claimed as first collected by Coulter but not typified by his specimens (Appendix V), and a list of obscure generic names and their disposition in this paper (Appendix VI). This contribution is not to be taken as taxonomically definitive because most determinations have not been verified. It was not feasible to attempt to verify or update identifications of the hundreds of exsiccata on site at TCD due to limited time and onsite resources. There may be other herbaria containing significant numbers of duplicates of Coulter’s Californian exsiccata and I welcome additions and corrections to this effort. An applicable comment on this contribution is: “A measure of the usefulness of this study will be the number of additions and corrections it elicits” (Renkema and Ardagh 1930).

INTRODUCTION

Thomas Coulter (1793–1843) (Fig. 1) is best known, in California, as an Irish botanist for whom are named Pinus coulteri (Coulter pine), which bears the heaviest cones of any pine species, and the large white-flowered Romneya coulteri...
Fig. 1. Portrait of Thomas Coulter, artist unknown, oil on canvas. Collection of Trinity College Dublin, The University of Dublin. Reproduced by permission of the Board of Trinity College Dublin, The University of Dublin, Ireland.
(Coulter’s matilija poppy). David Douglas, engaged by the Horticultural Society of London to collect plants in North America, met Coulter in Monterey in 1831 and later described him as “...a good fellow, most zealous in all he undertakes and anxious to collect a vast collection...” (letter from David Douglas to William Hooker in London dated 15 April 1833, transcribed by Nelson and Probert 1994: 111). Alphonse de Candolle described Coulter as an amiable eccentric who kept live lizards and snakes in his pockets and whistled tunes to them to keep them calm (de Candolle’s 1862 memoirs: 332 translated in Nelson and Probert 1994: 26). Coulter, an accomplished all-around naturalist, and lexicographer, was also an avid fisherman and a good shot. Coulter’s contribution to our knowledge of the diversity of the California flora is largely overlooked and underappreciated because narratives of his explorations were never written and his collections were not well known for several years after his death. Coulter wrote only one short article about his travels in California for the Journal of the Royal Geographical Society of London (Coulter 1835).

Thomas Coulter was among the earliest floristic collectors to visit California. He traveled extensively along the coast and interior desert and collected intensively wherever he went, vascular and non-vascular plants as well as marine algae. He collected showy specimens and plain specimens, annuals and perennials alike. He seems to have had a good eye for differences, collecting many different species of Lupinus and Eschscholtzia. Coulter’s specimens are not scanty and he often collected enough material for duplicates. His Californian plant collections, amassed in just over two years, were assigned at least 841 exsiccatum numbers. Coulter’s Californian collections are unusual in that specimens in the partial sets distributed from TCD to other herbaria or individuals after Coulter’s death in 1843 are better known and studied than the first set retained at TCD. No list of Coulter’s Californian exsiccatum in TCD has previously been prepared and there are few reports of Coulter specimens at other herbaria. The focus of this contribution is to bring attention to the early Californian collections represented by Coulter’s specimens in TCD. It is also of interest to note the disparity or lack of current annotations among the institutions holding Coulter specimens. The majority of the Coulter’s Californian specimens in TCD have not been annotated since their original determinations over 170 years ago.

Thomas Coulter obtained a degree in medicine from the University of Dublin. He completed his studies in botany in Geneva under Augustin-Pyramus de Candolle, preparing a monograph on the Dipsacaceae. When he met Alexander von Humboldt in Paris in 1823, they probably discussed Coulter’s desire to cross South America between Buenos Aires, Argentina, and Lima, Peru, and then to explore Mexico and California (Nelson and Probert 1994: 30). While seeking the means to travel to South America, Coulter was offered and accepted the position of medical doctor to the Real del Monte Mining Company in the state of Hidalgo, Mexico. It was ideal for him because the company also wanted a naturalist on staff (Nelson and Probert 1994: 33). Coulter went to Mexico in 1825 where his contract allowed time to collect plants, insects, reptiles, and bird skins. There he collected hundreds of herbarium specimens as well as wood samples and associated herbarium vouchers (Nelson and Probert 1994: 92). He ultimately resigned from the mining company in May 1829 and went to Pitic (Hermosillo) in Sonora, Mexico, to establish a mint for the Mexican government (Nelson and Probert 1994: 98) but soon quit and went south to Guaymas. Coulter collected plant specimens in the area, noted by Hemslie (1879–1888) as collected in “Sonora Alta” (the intended scope of this geographic designation is uncertain). A set of these is in the herbarium at Kew (K). Thomas Coulter’s collecting of “California Alta” plant specimens (he used “California Alta” to distinguish the region from Baja California; see clarification below) may have begun, for reasons explained later, with his stay in Sonora, Mexico, in December 1829. Coulter had wanted to travel to California for some time and planned to go to California overland but instead sailed for California Alta from Guaymas on 21 August 1831. Prior to leaving Mexico, Coulter had left instructions that all of his earlier Mexican collections be sent to London.

Coulter’s Mexican Woods

Coulter reportedly collected 784 wood samples from Mexico and California, of which most, if not all, were accompanied by herbarium vouchers (Ball 1846: 3). Other references have higher estimates of the number of wood samples (e.g., Nelson and Probert 1994: 92) but no others suggest that any wood samples were from California. It has been assumed that Coulter’s Mexican wood specimens were included with the long-term loan of Dixon’s specimens of tropical woods from TCD to the University of Limerick, Ireland. However, none of Coulter’s wood specimens has been located with the Dixon specimens. I have seen some of the herbarium vouchers for the wood samples at the National Botanic Garden (DBN) in Dublin (see also Nelson and Probert 1994: 92) but many are also at TCD. They were all Mexican specimens, so Ball’s suggestion that some were from California is a likely error. A comparison of a few herbarium vouchers for the wood specimens indicates that the affixed numbers on these wood specimen vouchers are a separate sequence from Coulter’s Mexican exsiccatum series.

Nelson and Probert (1994) present an extensive account of Coulter’s life and exploits in Mexico and California. Bancroft (1885), Coville (1895), McVaugh (1943), McKelvey (1955) and Nelson (1983, 1988) include (occasionally conflicting) descriptions of Coulter’s itineraries in Mexico and California as well as aspects of his life and collections. Coulter’s itinerary in California is especially difficult to follow because there is very little documentation, scant information on the herbarium labels, and he retraced his routes at times. He collected along the central coast of California north perhaps as far as San Francisco and south as far as San Diego and inland from the coast north of San Diego through the desert to the Colorado River near present-day Yuma, Arizona. He included a map of Upper California (Fig. 2–5) in the only paper he wrote about his time in California (Coulter 1835).

Alta California Upon Coulter’s Arrival

Based on correspondence accounts, Coulter arrived in Monterey, California, a village of about 700 inhabitants, in late September or early October 1831 (Nelson 1983: 68, 102). For context, Mexico had won its independence from Spain in 1821. Alta California, as a Province of Mexico, included all of what is now California, Nevada, Utah, and most of Arizona. It was in a state of tension when Coulter arrived. The governor of Alta California issued a Proclamation of Emancipation in 1826
Fig. 2. Map of Upper California from Coulter (1835): Thomas Coulter, Notes on Upper California. *Proc. Roy. Geogr. Soc. London* 5: 59–70 (1835) map, RB 7310, The Huntington Library, San Marino, California. Reproduced by permission. Enlarged versions of the upper, middle and lower parts of this map are shown in Fig. 3–5.
freeing all Indians in the military districts of San Diego, Santa Barbara and Monterey from missionary rule and made them eligible for Mexican citizenship. The Mexican government decided to secularize the Franciscan missions, partly because of the Franciscan’s continued loyalty to the Catholic Church in Spain and partly to deprive the friars of their control over the native Americans who lived and worked around the missions. “The Franciscans were at times oppressive and ruthless and the Mexican government wanted to remove them from their powerful position in the province” (Nelson and Probert 1994: 100). Secularization was in progress but formalized with passage of An Act for the Secularization of the Missions of California in 1833.

Other sources of discord were the competing factions seeking to replace the former Spanish governor of California. Thomas Coulter and fellow botanist David Douglas signed on as members of Compañía Extranjera (Company of foreigners) under Zamorano, a friend of the former governor, to defend Monterey, the capital of Alta California (Bancroft 1885: 221; Nelson and Probert 1994: 104). The company apparently served only as guards. The extent of Douglas’ and Coulter’s service to the company is unknown. This is the environment under which Coulter traveled and collected in Alta California.

**Coulter and the Native Americans**

Coulter, although viewing the Native Americans by the stereotypical norms of the period, expressed his opinion of the condition of the “aboriginal inhabitants”: “…I believe that a great deal of both force and fraud were used in congregating them together in missions; and the moment that force shall be altogether withdrawn, I have no doubt that the majority of them will return to the woods. Now that the seaboard is pretty much occupied by whites, the Indians will probably retire to their relations still living in free in the interior.” (Coulter 1835: 67). Coulter exhibited a talent and interest in languages, gathering oral vocabularies which he wrote down, of several different dialects spoken by the various Native Americans he encountered in California (Nelson and Probert 1994: 109–110). He shared his lists of words with John Scouler who included them in a paper on the languages of tribes of northwest America (Scouler 1841: 246–251). Except for the Pima word list that Coulter likely recorded near the Colorado River, Scouler included the word lists under the names of the missions where Coulter presumably made his notes: San Diego, San Juan Capistrano, San Gabriel, Santa Barbara, San Luis Obispo, and San...
This is further evidence that Coulter likely traveled along El Camino Real and routes that connected the missions. I have seen no specimen labels that refer to San Juan Capistrano although Coulter undoubtedly passed through the area. In addition to drawing attention to this reference and aspect of Coulter’s exploits, Nelson and Probert (1994: 109) credit A.P. Grant for providing dialect names for the word lists Coulter gathered based on his locations, San Diego (Diegueño), San Juan Capistrano (Juaneño-Ajachme), San Gabriel (Gabrielino-Tongva), Santa Barbara (Barbareño Chumash), San Luis Obispo (Obispeño), and San Antonio (Antoniaño Salinan). Coulter’s work was cited as recently as 1970 (Beeler 1970) as an important contribution to the study of native American languages. His record of comparable vocabularies of several different languages of the Native Americans reflects the broad interests and talents of Coulter, affirms the likely route of his travels, and partially describes the social context of his journeys.

DEDICATION: I would like to dedicate this section of the paper to Jessica M. Orozco, (MS, Botany, 2016, Claremont Graduate University and Rancho Santa Ana Botanic Garden) whose enthusiasm for botany and all things related to her Native American heritage were tragically cut short. One will seldom meet such a kind and giving parent, talented botanist, eager learner, enthusiastic teacher and Native American advocate. There is likely untold Native American context to many of our studies of the California flora. GDW

Correlating Coulter’s collection localities and travel itinerary in California is difficult. In part because all of his notes were apparently lost between London and Dublin during his trip home and subsequently scant if any locality is ascribed to his specimens. Coulter (1835) included a map (Fig. 2 –5) to illustrate some land features and his routes in California. A copy of
Fig. 5. Enlarged lower portion of Fig. 2: Map of Upper California from Coulter (1835): Thomas Coulter, Notes on Upper California. *Proc. Roy. Geogr. Soc. London* 5: 59–70 (1835) map, RB 7310, The Huntington Library, San Marino, California. Reproduced by permission.
Coulter’s map was reproduced in Dawson (1951) and Nelson and Probert (1994). San Luis Obispo, La Purisima, Santa Ynez, Santa Barbara, San Buenaventura, San Fernando, San Gabriel, San Pedro, Pala, San Felipe, Bahia, Carinil, Agua Soda, San Pedro (desert) and San Pablo as well as San Luis [sic] Rey and San Diego are shown on Coulter’s map (Fig. 2–5). More discussion of Coulter’s map is below at Notes. There are no dates provided to indicate the dates or direction of his travels along the segments of his routes. The best accounting of his California itinerary with dates and locations are those by Nelson (1983) based, in part, on Coulter’s correspondence, and Nelson and Probert (1994). McKelvey (1955: 428–442) provides similar details of Coulter’s travels in California. These references provide the basis of this section although they do not mention where plant specimens were collected.

Coulter joined a party traveling south to San Gabriel along El Camino Real soon after he arrived in Monterey. They apparently left Monterey on 18 October 1831 traveling, likely on horseback with pack mules for supplies and equipment, along the valley of the Rio San Buenaventura (Salinas River) east of the Santa Lucia Mountains to San Luis Obispo. From there the trail went south to La Purisima and eastward to Santa Ynez then south through to the coast and eastward to Santa Barbara where they arrived on 20 October 1831. The party stayed for a few days, then continued south through San Buenaventura (Ventura) and San Fernando, arriving in San Gabriel on 3 November 1831. Coulter did not venture further south on this trip and retraced his route to Monterey, arriving on 23 November 1831. That is when he met the Scottish plant collector David Douglas who had already been to Santa Barbara and back collecting plants. Coulter and Douglas apparently collected together around Monterey during the winter of 1831/1832 (see FINDINGS below).

Coulter and Douglas parted company when Coulter left Monterey in late March 1832, traveling south along El Camino Real likely collecting plants along the way. These included the specimen cone that would be designated the type specimen of Pinus coulteri collected from the Santa Lucia Mountains near the mission of San Antonio. He stopped in Santa Barbara on 6 April 1832 and then went on to San Gabriel Mission, arriving by 23 April 1832. His party continued south along the east side of the Santa Ana Mountains past a lake shown on his map (Lake Elsinore) arriving at Pala 30 April 1832. From there they continued southeast possibly along San Felipe Creek and Carrizo Creek toward the Colorado River. Coulter and his party arrived at the ford of the Colorado River about 8 miles south of the junction with the Gila River on 8 May 1832. On 17 May 1832 they set out retracing their route to return to Monterey. They took longer on the return, presumably collecting plants. By 27 May 1832 they were in Pala. They arrived back at San Gabriel on 15 June 1832, apparently making a side trip to the Pueblo de Nuestra Señora Reina de los Ángeles de Porciúncula (Los Ángeles) and San Pedro. On 5–7 July 1832 they were in Santa Barbara and finally reached Monterey 19 July 1832 (Nelson 1983).

Coulter left Monterey for the third and last time in late 1832, heading south through San Luis Obispo, Santa Barbara, San Buenaventura, San Fernando to San Gabriel. From San Gabriel he kept to the coast to San Luis Rey and to San Diego where he hoped to secure passage to Mexico. I have seen no record of when he arrived at or departed from San Diego.

Coulter left Mexico and returned to London in mid-November 1834 (Nelson and Probert 1994: 117) where he remained for a time with at least some of his collections. News of his exploits and return spread quickly and fellow botanists were eager to view his collections. Sorting and labeling of the specimens began in January 1835 (Nelson and Probert 1994: 118). During this period Coulter loaned several pine cones he had collected to David Don, secretary and librarian to Aylmer Bourke Lambert who was continuing Lambert’s monographic work on pines. Don (1836) described five new species of conifers based on these cones. Coulter had returned to Ireland by August 1835 (Nelson and Probert 1994: 122).

**Coulter’s Californian Specimens**

Coulter made extensive collections of flowering plants (Fig. 6), ferns, conifers, bryophytes, and marine algae. He may have collected lichens as well. There is no record of when Coulter’s Californian plant specimens were sent to London or when they arrived. Unfortunately, Coulter’s journals never arrived and were presumed lost. In a report on the Dublin University Museum, director Robert Ball (1846: 5) stated that Coulter procured during his stay in Mexico and California “all together (probably) 3,000 species.” Robinson (1843: 548), reporting on the passing of Dr. Coulter to the 16 March 1844 meeting of the Royal Irish Academy, stated that Coulter had collected upwards of 50,000 specimens of 10,000 to 11,000 species. That would include collections from Mexico as well as California. Ball’s and Robinson’s numbers could not have been based on actual counts of specimens and may have included estimates of the number of duplicates of collections. Nelson and Probert (1994: 177) consider these figures greatly exaggerated because they were able to account for only 1737 exsiccat numbers of phanerogams and cryptogams from Mexico and 841 exsiccat numbers of phanerogams and cryptogams from California. Nelson and Probert (1994: 177) estimate that Coulter collected not more than 4000 exsiccat numbers in two series, Mexico and California, and that even if he had collected five specimens of each number the total number of specimens would only be 20,000. As was the custom at the time, duplicates of Coulter’s Californian specimens would likely have been sent to individuals for their private collections. Subsequently these private collections were transferred to institutions. Coulter’s Californian exsiccatata Brown University, Providence, Rhode Island (BRU) came from S. Olney, those at the Gray Herbarium, Harvard University, Cambridge, Massachusetts (GH) came from A. Gray, many at the Royal Botanic Gardens, Kew, England (K) came from W. J. Hooker, and those at the New York Botanical Garden Bronx, New York (NY) from J. Torrey. All of these appear to be partial sets, so estimates of possibly five duplicates of each exsiccat number are probably high. I have not seen a number higher than 841 associated with Coulter’s Californian plant specimens. However, there are marine algae specimens bearing nine previously unreported exsiccat numbers scattered between numbers 842 and 872.

There is no record of where or when duplicates of Coulter’s Californian exsiccatata were sent nor an indication of the extent and content of those sets of duplicates. There are Coulter Californian specimens at BM, BRU, E, FH, GH, K, L, NY, UC and US. There are reportedly specimens at CGE and G but I have not seen any representative images or database entries. As more
Fig. 6. Vascular plant specimen, Coulter 237, Gaultheria shallon (TCD).
herbaria and specimens are digitized or otherwise databased and made accessible online, many more specimens of Coulter’s California exsiccate will likely come to light. Lightner (2014: 30–37) lists several dozen Coulter specimens from Kew as representatives of plant taxa known to occur in San Diego County. However, I have found only two specimens, both labeled *Isomeris arborea* with St. [sic] Diego, California, on the label, *Coulter 65* at K noted by Lightner (2014: 33) and *Coulter s.n.* at TCD, that were collected in San Diego.

**Vascular Plants and Bryophytes**

Coulter’s plant specimens were apparently first identified, then sorted into families and genera. Names applied to the specimens may have come from de Candolle’s *Prodromus* (de Candolle 1823–1873) and Steudel’s *Nomenclator Botanicus* (Steudel 1840–1841) (Webb 1991: 301). This ordering is evident from the general closeness of the exsiccate numbers within the families in Appendix I (e.g., Ranunculaceae, Apiaceae) and even within genera (e.g., *Trifolium* in Fabaceae). It is likely that W. H. Harvey wrote the scientific names and sequential exsiccate numbers on the labels of the vascular plant and bryophyte specimens. Other individuals may have identified and labeled the specimens as well. Duplicates were probably numbered at the same time. Some exsiccate numbers on the labels are followed by a notation *, bis, x, xx or xxx. These are treated here as representing distinct collections from the original exsiccate-numbered specimens because I am uncertain of the meaning of the notations. It is not clear how or when duplicates were labeled and numbered. Specimens bearing exsiccate numbers out of sequence with those of related taxa were likely identified and numbered later. Most of Coulter’s Californian collections bear printed labels (Fig. 7) while others have handwritten labels (Fig. 8), or identifications and exsiccate numbers written directly on the herbarium sheet.

Coulter collected over a dozen bryophytes that are among the earliest known specimens from California (Fig. 9). They were assigned exsiccate numbers sequentially following those of the vascular plants and consequently follow them in Appendix I. I am fortunate that a moss expert, Dr. Daniel Kelly, is at TCD. Dr. Kelly was kind enough and interested enough to look over the Coulter specimens and identify them. This is greatly appreciated as is his forwarding some difficult material to Dr. Len Ellis at the British Museum of Natural History for a second opinion on a few collections and to Dr. D. G. Long at Edinburgh for confirmation of the identity of the liverwort. As with many of the vascular plant collections of Coulter’s, the specimen of *Orthotrichum coulteri* Mitt. in the Farlow Herbarium (FH) at Harvard University is the lectotype, not the one at TCD.

**Marine Algae**

Coulter collected marine algae while he was in Monterey, California. These were likely of interest to Dr. Harvey, who was Coulter’s curatorial successor at TCD. Harvey described four new taxa based on Coulter’s Californian collections. Harvey (1852, 1853, 1858) cited Coulter collections for 28 marine algae taxa. Five that Harvey cited are not included in Appendix II because no specimens were located. Specimens for eighteen taxa for which a Coulter collection was cited by Harvey (1852, 1853, 1858) were not found in TCD but were located in other herbaria. Duplicates of most of the marine algae collections are in other herbaria. Because generally no exsiccate numbers were assigned, each specimen is treated here as a separate collection (Fig. 10). The marine algae specimens have disparate and occasionally dubious identifications among institutions holding them. Coulter’s marine algae at TCD are listed in Appendix II with comments kindly provided by Kathy Miller, Curator of Algae, University of California (UC) at Berkeley. Additional Coulter specimens were located on the websites of various herbaria as well as at the *Macroalgal Herbarium Portal*. Nomenclature for the marine algae follows that in the online resource, *AlgaeBase*.

**Collection Localities**

For most of Coulter’s specimens no more detailed a locality than California is indicated on the labels. All of the printed labels affixed to Coulter’s Californian collections have “California” on the label (Fig. 7), as opposed to “Mexico” which is on the printed labels for his separately numbered exsiccate from Mexico. At the time Coulter was in California it was still part of Mexico and as noted above there were no specific state boundaries (current states of Arizona and Nevada had yet to be founded). Some labels have additional locality information as listed below. There are handwritten labels on some specimens that bear abbreviations for California as well as other localities. Coulter seems to have traveled along the El Camino Real that connected the California missions. Beyond “California”, any additional locality information was most frequently a description of the portion of his route where the specimen was collected. Less frequently there is a single location cited. I have tried to cite the localities exactly as they appear on the labels. Although all of the labels I have seen refer to “San Barbara”, this abbreviation was either used by Coulter on his bundle labels or interpreted as such by Harvey when applying labels to Coulter’s specimens because Coulter’s only published paper on his travels consistently uses “Santa Barbara” (Coulter 1835; Dawson 1951). The only localities noted on any of the labels beyond “California” are:

- Between Monterey and El Sur
- Between Monterey and San Francisco
- Between Monterey and San Gabriel
- Between Monterey and San Miguel
- Between San Miguel and San Barbara (not written out as Santa Barbara)
- El Sur (a Mexican land grant southwest of Monterey on the coast near Big Sur)
- Monterey (also abbreviated Mty., Mont’y, and Monty.)
- Monterey to El Sur
- Monterey to San Francisco
- Monterey to San Gabriel
- Monterey to San Miguel
- Santa Barbara (always written on labels as San Barbara)
- San Diego (written as St. Diego)
- San Francisco (also abbreviated S. Francisco, S. Fco.)
- San Gabriel
- San Miguel
- San Miguel to El Sur
- San Miguel and San Barbara (not written out as Santa Barbara)
- San Miguel to San Barbara (not written out as Santa Barbara)
- San Miguel to San Francisco
The Herbarium at Trinity College, Dublin (TCD)

Upon his return to Dublin, Coulter was given rooms at Trinity College in 1835, but a change of Provost in 1837 brought an end to this arrangement (Webb 1991: 298). While having to vacate most of the rooms he occupied he retained one room and this is almost certain to have held his herbarium and other collections (J. Parnell, pers. comm. to GDW 2019). By June 1840 he and the new Provost of Trinity College Dublin were reconciled and Coulter obtained new rooms in Staircase 40 (Fig. 11), and he was made the first keeper of the TCD herbarium (Nelson and Probert 1994: 128). During his tenure as curator Coulter purchased several other collections for the herbarium while arranging the herbarium according to de Candolle’s Prodomus system (Wright 1896: 4). Robinson (1843: 547) asserted that at the time of his death on 28 November 1843, Coulter had completed arrangement of the European part of the herbarium and about of 8000 American specimens [likely an exaggeration], “…and the remaining packages are well furnished with memoranda so that for them also the arrangement is practicable.” This might explain how, although Coulter’s journals had been lost, it was still possible to affix localities, although scant, to many of Coulter’s specimens.

William Henry Harvey was appointed Keeper of the Trinity College Dublin Herbarium on 30 March 1844. During his tenure Harvey identified, or caused to be identified, and labeled Coulter’s Californian exsiccata (letter from A. Gray to J. Torrey, 1 October 1844, referenced in J. Gray 1893 vol. 1: 327–328). This was a remarkable accomplishment because there were no published floras of the western United States at that time and TCD likely contained very few if any herbarium specimens from the region for comparison. From among Coulter’s collections Harvey and W. J. Hooker described four new genera and five new species (Harvey 1845a,b, 1846). Harvey and Asa Gray prepared descriptions of many new taxa based on Coulter’s Californian collections but never published them. I have been unable to locate any copy of a manuscript at Harvard University or Trinity College, Dublin, containing these descriptions. As discussed below, Gray apparently used those descriptions in subsequent publications of new taxa referring to the Harvey and Gray work as “Harv. & Gray MS” or “Harv. & A. Gray, Pl. Coultr. ined.” The latter citation was used for several taxa Gray described in Plantae Fendlerianae (Gray 1849).

Harvey distributed some of Coulter’s duplicates to Asa Gray (now incorporated in GH), William Hooker (now incorporated in K), John Ball (some now in TCD) and Stephen Olney (now incorporated in BRU). Referenced correspondence indicates that Harvey had sent some of Coulter’s specimens of Leguminosae (Fabaceae) to George Bentham for review (Fig. 12), and when Bentham returned them Harvey sent back duplicates in August 1848 (Carter 1982: 334). These are probably the specimens of Fabaceae (Leguminosae) of Coulter’s that Bentham cites for taxa in that family in Plantas Hartwegianas (1839–1857) published in 1848–1849. Asa Gray visited Harvey in Dublin in December 1850 (J. Gray 1893: 376). It is probable that during this time he looked at some of Coulter’s specimens. There are several specimens at TCD bearing the annotation label “Fl. N. Amer., Torr. & Gray.” When Harvey died in May 1866, Alexander Dickson was appointed chair of botany but resigned after just two years (Webb 1991: 300).

Edward Perceval Wright who had assisted Harvey was appointed Professor of Botany in 1869 and petitioned to use the herbarium rooms. He effectively became Curator of the Herbarium in 1870. The cabinets (called presses) had not been opened in the three years since Harvey’s death. Wright supervised a mandatory move of the herbarium in 1882 from Staircase 40 where it had been for 50 years to new quarters on the campus above the Great Entrance Hall (Wright 1896: 9). Many specimens not in dust-free cabinets during this time suffered insect
Damage (Wright 1896: 10). It is possible that because of damage, some of Coulter’s Californian specimens were discarded. During the relocation of the herbarium and accompanying jumbled mixing of folders, Wright discovered that Harvey, with no assistant available and to save time, had put newly named (identified) and unnamed specimens in the lower shelves of the cabinets below the genera to which he considered they belonged. This practice may explain why there are taxa from some families that bear Coulter’s exsiccata numbers that are out of consecutive order from the majority of the numbered exsiccata for that family. Wright adopted Durand’s (1888) Index Generum Phanerogamorum (Index) as the basis for arrangement and numbering of the families and included genera in the herbarium. Coulter’s Californian specimens were filed according to the sequence in Durand’s Index (Durand 1888). The assigned exsiccata numbers generally follow a sequence within a plant family but there is some deviation among families. This system is still in use in TCD. Wright retained his post as curator of the herbarium until his death in 1910.

Henry H. Dixon who had been Wright’s assistant for some years took over the curatorship in 1910 upon Wright’s death. His contribution to the status of the herbarium, and consequently Coulter’s collections, was to secure funding in 1912 to construct an annex to the recently built School of Botany to house the herbarium (Webb 1991: 301). Dixon transferred the herbarium to its new quarters and marked each folder with its number as dictated by Durand’s Index. The majority of the collection remains in these quarters today and the arrangement of most of the specimen folders remains based on Durand’s Index.

David Webb was appointed to succeed Dixon in 1949. Webb conducted a systematic sampling of the folders in the herbarium and published the results (Webb 1991) summarizing the geographic diversity and concentration of the specimens (e.g., North America, 14,000 specimens). Webb also provided a list of collectors represented in the collection and the geographical ranges of their collecting efforts. Thomas Coulter is listed as one of the larger collections (Mexico, California, France, Italy, Ireland, England, Madeira) represented in the herbarium. Webb was followed by John Parnell in 1983 as TCD Curator. Parnell (1982) lists Coulter as one of the collectors of lichens in TCD but does not mention whether the collections were from Europe, Mexico, or California. Dr. Parnell’s assistance and encouragement during this long study has been remarkable and greatly appreciated.

The herbarium at Trinity College, Dublin (TCD) is currently largely housed in the aforementioned annex to the Botany Building (Fig. 13). The synoptic Ireland collection and the general collection of dicotyledons, the monocotyledons (except Poaceae) and the bryophytes are in the main room of the herbarium. The Poaceae, gymnosperms, ferns, algae and some of the lichens are together down the hall in another area. The specimens are kept in tiers of latching wooden cabinets, called presses by staff (Fig. 14). The banks of cabinets are two tiers high except in one end of the main room of the herbarium where they are three tiers high but ladders are readily available.

The specimen folders within families and genera of dicotyledons arranged and numbered according to Durand’s Index (Durand 1888) are sequentially followed by those of the monocotyledons and gymnosperms. The ferns, bryophytes, algae and lichens are not included in Durand’s Index and consequently lack coincident numbers. Family designations and genera recognized since Durand’s Index was published are handwritten in a reference copy of the Index kept in the TCD herbarium.

Each genus folder bears a reference number assigned from Durand’s Index. Within genera in the general collection there are separate numbered and labeled folders for each of 15 geographical areas of the world (Fig. 15). Californian plant specimens are found in the “North America” blue folders which are marked “11 North America” (Fig. 16). Specimens from Mexico are in folders labeled “12 Central America”. The area folders are arranged in numerical order within each genus. All of the specimens I have seen at TCD are in good condition despite their age, their storage in wooden cabinets and their relocation history noted above.

**METHODS**

In the TCD herbarium, I looked in most of the North American folders of genera likely to occur in California. Following the arrangement of families and genera according to Durand’s Index (Durand 1888) was not difficult. Many specimens are filed under genera not currently recognized or as having species from California. I started with the more obvious genera and proceeded to look under genera known from the central coast and Colorado Desert areas of California. Beyond genera listed in current treatments of the Californian flora, detecting which gen-
era to look in for Coulter’s Californian collections was a challenge. I also checked folders of genera noted in Durand’s Index (Durand 1888) to occur in California. Over 250 of the genera I considered likely to contain Coulter specimens from California either did not contain Coulter specimens or there were no North American folders in TCD. Many of these are old names not now recognized. In some instances, specimens of a particular genus may be found under a more recently recognized name as well as an older name. Occasionally nomenclature has changed such that specimens are under an old name that is current again (e.g., Hosackia). As of this writing I have located 726 of Coulter’s 841 numbered Californian vascular and nonvascular plant exsic-cata. All but 47 of these are represented in TCD. One hundred-fifteen exsiccata numbers are unaccounted for. In an effort to locate these I considered that many might be misfiled at TCD. Several taxa described below bearing “California” labels were probably collected in Sonora, Mexico, near Guaymas like others noted in the section: Locality errors California. Knowing this I considered that additional specimens bearing “California” labels might be filed in “North America” folders of genera not known to occur in California. In March 2019, I selected likely genera from a listing of plants collected by Edward Palmer near Guaymas, Sonora, Mexico (Watson 1889). I checked for Coulter specimens in several of the folders of genera listed that occurred in the Guaymas area as well as states in the United States other than California. I found no Coulter specimens in these folders examined at TCD. There may yet be some Coulter specimens in some of the other genus folders of taxa listed in Watson (1889) that I did not check. I took images of the TCD specimens.

I have relied on data on the specimen labels, annotations, and information written directly on the herbarium sheets. Online databases were used to locate Coulter’s Californian exsiccata at institutions other than TCD. The electronic databases of BM, E, GH, K, NY and US were accessed to retrieve data on Coulter specimens in those herbaria. Bundling databases were also consulted (e.g., Consortium of California Herbaria, Consortium of Intermountain Herbaria, Macroalgal Herbarium Portal and Integrated Digitized Biocollections). The online database of the Consortium of Intermountain Herbaria provided access to the Coulter collections at Brown University (BRU). The BRU specimens were all part of the herbarium of Stephen Olney bequeathed to Brown University in 1878. These electronic databases are listed at the end of the References Cited. I relied on images of specimens wherever possible to note original label text, determinations and annotations. Sometimes database entries differed from information on the specimens. Differences included exsiccata numbers, collector, and specimen determination. Frequently database entries provide determinations used for filing of specimens under a current name even though the specimens may not have been specifically annotated as such. For database entries lacking an associated image it was not possible to be sure of exactly what was on the original label and
in some cases the sequence and content of annotations were unclear. In the list of exsiccata (Appendix I) this is indicated by “[no image]”. In some cases, the name associated with the specimen may have been assigned by the institution or an annotator and may or may not have appeared on the original label. Occasionally incorrect attributions were given to Coulter collections if they were mounted on the same sheet with a different specimen that was entered into the database. Unexplained changes made in databases with no associated explanation on the specimen can misinform researchers. Coulter’s Californian specimen of *Krameria* 71* [sic] did not appear in the *K* database or have an accession number. It is mounted on the same sheet as a Barclay collection from Mexico with an accession number that is listed in the *K* database.

**FINDINGS**

**Coulter’s Californian Collections**

Thomas Coulter’s Californian collections represent a floristic coverage of a portion of California made about 30 years prior to that of the Botanical Survey of California under J. D. Whitney (Brewer et al. 1876–1880). Coulter’s vascular plant collections include specimens from about 92 families, 330 genera and representing about 600 minimum-rank taxa (species, subspecies, varieties). The last figure is more tentative because of likely misidentification of specimens. Coulter’s non-vascular plant collections include 10 families, 11 genera, and 13 species of mosses and liverworts. His collections of marine algae comprise 16 families, 23 genera and 29 species. Among Coulter’s Californian collections at *TCD* are specimens that represent type material of 60 vascular plants, one bryophyte, and several marine algae. Most of these were previously unknown among the *TCD* collections. Coulter collected specimens of 28 taxa now considered to be introduced to California. This does not include those listed below under: *Locality Errors California*. I found 892 specimens of Coulter’s Californian collections at *TCD*. Online data for Coulter’s Californian collections accounted for 250 specimens at *K*, 194 at *GH*, 133 at *BRU*, 65 at *UC*, 36 at *NY*, 25 at *BM* and fewer than 10 at each of the herbaria *E*, *F*, *FH*, *L*, *MEL*, *PC*, *PH*, and *US* for a total of just over 1600 specimens.

**Coulter’s Exsiccata Numbers**

Coulter’s Californian collections of phanerogams and cryptogams were assigned exsiccata numbers up to 841. I was able to locate 726 numbered exsiccata, 47 of which are only known
Fig. 12. *Hosackia rigida*, sp. nov. Type material likely annotated by George Bentham, *Coulter s.n.* (TCD).
from herbaria other than TCD. I found nine exsiccatas numbers higher than 841 on some marine algae specimens, none of which were found at TCD. There are several possible explanations of the missing exsiccatas numbers. Probably more of Coulter’s Californian specimens are at TCD and as yet unlocated. It is also possible that some of Coulter’s specimens were damaged by insects and discarded after the move of the herbarium described by Wright (1896: 10). I located about 300 specimens lacking exsiccatas numbers, here assigned “s.n.” (sine numero) designations. Forty-five of these are the only vouchers for taxa in the exsiccatas list. About 130 of the 300 Coulter s.n. specimens are at TCD. I do not know the extent to which exsiccatas numbers are on Coulter’s other marine algae specimens. No numbered marine algae specimens were found at TCD. A cursory search was made of the TCD lichen collections but no Coulter Californian specimens were located. If any were assigned exsiccatas numbers, they would have been beyond the 841 in series.

Specimen Labels

Coulter’s specimens usually bear either printed labels (Fig. 7) or handwritten labels (Fig. 8). I was curious to see if there was a pattern to the disposition of these two label types at TCD and the other institutions holding significant numbers of Coulter specimens. I saw all of the labels on the TCD specimens as noted in the exsiccatas list. Seventy-one percent of the TCD labels are the printed labels. For the other collections I relied on online images and databases. Database entries lacking an associated image of the specimen may not provide consistent unambiguous data on the nature or content of the original label. Some database entries indicated that the label was one of the printed labels but when such a notation was missing it was not possible to know if that was an accidental omission or whether the label was a handwritten label. Consequently, I counted only labels I had seen either

Fig. 13. Botany Building, Trinity College Dublin, Ireland.

Fig. 14. TCD herbarium with banks of latching wooden cabinets (presses).
Fig. 15. **TCD** specimen folders with reference number 3544 for the genus *Aster* following Durand (1888) and numbered references to geographical regions of the world.

Fig. 16. **TCD** specimen folders for Area 11, North America.
in person or by an online image. Ninety percent of the Coulter California exsiccatas at BRU are imaged and of those 99% have printed labels. Comparable figures for those at K are 98% imaged and 19% have printed labels. For GH 29% are imaged and 78% have printed labels. Except for the fact that nearly all of the Coulter California exsiccatas sent to Olney bore printed labels no pattern of interest was apparent.

The taxonomic distribution of handwritten labels is interesting. At TCD all or nearly all of the labels for specimens in Caryophyllaceae, Fabaceae, Onagraceae, Papaveraceae, and Ranunculaceae are handwritten labels, while nearly all of the Asteraceae specimens at K are handwritten labels. Also, at K there are fifteen taxa each represented by two Coulter specimens, one with a printed label occasionally with more information and the other a brief handwritten label. This supports information provided by Carter (1982: 334) that Harvey sent the Coulter Californian collections of Fabaceae (Leguminosae) to Bentham for review and that Harvey sent a set of duplicates to Bentham when Bentham had returned the reviewed set. I have not found references to the other handwritten labeled specimens from other families at TCD, having been sent to specialists for review.

Annotations

Various labels, considered here annotations, are affixed to Coulter’s specimens. Some are merely property labels or labels identifying the specimen as a donation from a private herbarium to an institution, e.g., “Herbarium Careyanum” or “Herbarium Olneyanum”. Other labels indicate that the specimen was examined for a project, e.g., “Torr. & Gray, Fl. N. Amer.” or “Syn. Fl. N. Amer.” Often plant names are written on the Herbarium Olneyanum labels at BRU. It is unclear when these labels were affixed to the specimens or who added names to them. Almost 80 of Coulter’s Californian specimens at TCD bear “Torr. & Gray, Fl. N. Amer.” labels, referring to Torrey and Gray (1838–1843). None of the TCD specimens bear Gray’s labels, “Syn. Fl. N. Amer.”, but there are 21 Coulter specimens at GH that bear these labels. This would seem to indicate that Gray was in possession of some of Coulter’s duplicates at that time.

As stated earlier, Coulter’s collections at TCD remained relatively unknown while duplicates at GH and K were better known and frequently served as type material. Coulter’s Californian specimens in TCD are still infrequently examined. In an effort to provide a clear picture of the limited numbers of Coulter’s specimens that have been afforded recent examination I assessed the collections known to me from TCD, K, GH, and BRU. For the assessment I only included annotations bearing an associated date which allows more reliable comparisons. Prior to my annotations in 2016 and 2017 regarding type status of Coulter’s specimens in TCD, only 4% of his collections in TCD had been annotated since 1900 and those were annotated between 1982 and 2015. Including my recent annotations this figure is 9.5%. By comparison, since 1900, 2% of those at BRU have been annotated, 36% of those at K, and 56% of those at GH. Annotations dated in the past 20 years are 2% for TCD (excluding my annotations of type status in 2016 and 2017), 2% for BRU, 4% for K and 9% for GH.

Locality Errors

Monterey

There are several of Coulter’s Californian specimens with “Monterey” written on the label as the collection locality. However, assuming they are correctly identified, these taxa are not known to occur in or near Monterey County and furthermore are taxa generally confined to the interior deserts of southern California. These include (by current names):

- Acmispon rigidus (Benth.) Brouillet
- Astragalus crotalariae (Benth.) Torr.
- Astragalus lentiginosus var. borreganus M.E. Jones
- Dalea mollis Bentham.
- Dithyreus californica Harv.
- Oligomeris linifolia (Hornem.) J.F. Macbr.
- Sphaeralcea coulteri (S. Watson) A. Gray

California

Several of Coulter’s specimens that bear printed “California” labels represent taxa not known to occur in California. Most or all of these specimens were likely collected about August 1831 near Guaymas, Sonora, Mexico. Coulter collected in that area before sailing for Monterey, California, possibly after he had sent his Mexican collections to London. Coulter probably took the specimens with him to California from where they would have eventually been sent back to London with the bulk of his Californian collections. Coulter’s earlier Mexican collections and the Californian collections arrived in Europe at different times. The bundles of Coulter’s specimens were accompanied by memoranda which reportedly contained some level of information. The oversight was likely Coulter’s. “California” labels would have been affixed to them along with the other collections received at the time as the basic location of collection. It is possible that specimens of some taxa in Appendix I known to occur in California as well as Mexico, were actually collected near Guaymas, Sonora, Mexico (e.g., Lysocypha coulteri). Gray (1884: 321, 322, 348, and 361) specifically questioned the locality designation of California on Coulter’s specimens of Perityle plumigera A. Gray, Perityle leptoglossa A. Gray, Helenium thurberi A. Gray, Pectis thurberi A. Gray, and Pectis coulteri A. Gray. Likewise, Keil (1975: 190) brought this issue to light for Pectis taxa. Coulter’s specimens of the following taxa (listed by current name) bearing “California” labels are known to occur near Guaymas, Sonora, Mexico, and were probably collected in that area:

- Amsinckia inepta J.F. Macbr.
- Brickellia coulteri A. Gray
- Chromolaena sagittata (A. Gray) R.M. King & H. Rob.
- Cyperus articulatus Bentham.
- Helenium laciniatum A. Gray
- Helenium puberulum DC.
- Helenium thurberi A. Gray
- Holographis virgata (Benth. & Hook.) T.F. Daniel
- Ibervillea sonorae (S. Watson) Greene
- Mimosa polyantha Bentham.
- Pectis coulteri Harv. & A. Gray ex A. Gray
- Pectis filipes Harv. & A. Gray ex A. Gray
- Perityle californica Bentham.
Perityle leptoglossa Harv. & A. Gray ex A. Gray
Perityle microglossa Benth.
Ruella occidentalis (A. Gray) Tharp & F.A. Barkley

References to Publications That Were Never Issued

Harv. & A. Gray or Harv. & A. Gray, Pl. Coult.
Throughout this paper are references to scientific names with the citation “Harv. & A. Gray” or some abbreviated version of this. This is found associated with names on Coulter’s excis- cata labels as well as with published accounts currently recognized here (e.g., Baileya pleniradiata and B. pauciradiata both cited in Turner 2006: 446). William H. Harvey (Trinity College, Dublin) and A. Gray (Harvard) were apparently collaborating on naming and describing new taxa based on Coulter’s specimens from California. I have found no indication that these descriptions were ever assembled as a separate manuscript or that such a manuscript was ever published. Torrey recognized that this work had not been published. He published the description of the genus Baileya as “Baileya n. gen. Harv. and Gr., ined.” (Torrey 1848: 145). Gray also recognized that these names and descriptions were not yet published when he subsequently published them for some species in his Plantae Fendleri-anae (Gray 1849) citing as reference “Harv. & Gray, in Pl. Coult. ined.” directly or by reference with each of the descriptions. It is clear that Harvey made no direct contribution to Plantae Fendleri-anae and that Gray was acknowledging their previously prepared descriptions. All “Harv. & A. Gray” references related to descriptions in Gray (1849) should read “Harv. & A. Gray ex A. Gray” or just “A. Gray”. I have chosen to use the longer version to show the historical context of the nomenclatural combinations. This applies to several taxa in the exciscata list (Appendix I) (e.g., Acamptopappus sphaerocephalus, Baileya pauciradiata, B. pleniradiata, Chaenacis artemisifolia, Cirsium occidentale var. coulteri, Malacothrix coulteri, Pectis coulteri, P. filipes, P. papposa and Perityle leptoglossa.

Torr. & Gray, Fl. N. Amer., Suppl.
Several of Coulter’s Californian exciscata specimens in TCD and GH bear labels indicating that the specimen represents a new taxon attributed to Harv. & Gray and published in “Torr. & Gray, Fl. N. Amer. Suppl.” (Fig. 7). All of these taxa are in Asteraceae. No such publication has been found. The Torrey and Gray Flora of North America came out in two volumes. Volume I published in parts between 1838 and 1840 does include a “Supplement, additions and emendations” (pp. 657–698, published in June 1840) but no Asteraceae are in that volume. Volume II published in parts between 1841 and 1843 does not include a supplement but pages 502–504 published in February 1843 are identified as “Additions to Compositae”. Not surprisingly none of Coulter’s Californian exciscata taxa are cited in that section, likely because his specimens had not yet been distributed. Gray recognized that the names attributed to “Torr. & Gray, Fl. N. Amer. Suppl.” had never been published. This is clear from the notation in Plantae Fendleri-anae under Polypappus sericeus Nutt. [now Pluchea sericea Nutt.] where Gray cites as synony- mous his own combination of Tessaria as “(T. borealis Torr. & Gray, Fl. Suppl. Compos. ined.)” (Gray 1849: 75). Another instance is under Riddellia tagetina “Torr. & Gray, Fl. 2: 362, & Suppl. Compos. ined.” (Gray 1849: 93). Several taxa with these labels were validly published in other works such as Plantae Fendleri-anae (Gray 1849) while others were never validly published.

Coulter’s Map of Upper California (Coulter 1835)

Thomas Coulter was the first botanist to cross the California desert and collect plants (Brewer et al. 1876–1880, vol. 2: 555; McKelvey 1955: 434). According to the latter reference he “…set foot—we must believe—in [present day] Arizona”. The original map is the most informative and reliable but the most difficult to consult. Electronic versions are often not sharp enough to see the fine details. I have referred to four versions of Coulter’s map and believe they warrant mention here.

Coulter’s (1835) Map

Figure 2 is an image of the complete map. It is an 8 × 10-inch map in the original article. Figures 3–5 are detail sections of the map. Coulter’s routes are indicated by narrow lines. There are notations of a small “x” at the sites of the missions where he presumably stopped as well as some villages (e.g., San Felipe). The “x” marks at unlabeled sites seem to coincide with the locations of Mission Nuestra Señora de la Soledad, Mission San Antonio de Padua, Mission San Miguel Arcángel, Mission San Juan Capistrano and Santa Ysabel Asistencia. There are small “x” marks on the west side of the Colorado River at Ford and at San Pedro as well as San Pablo [misspelled as Parblo on the map] east of the junction of the Gila River with the Colorado River. Taken in context, the notations on his map seem to indicate that it is possible Coulter crossed the Colorado/Gila rivers into present-day Arizona. The lines depicting Coulter’s travel routes do not extend north from the Ford on the Colorado River to San Pedro and San Pablo although there are “x” marks coincident with these locations. Coulter’s 1835 map also shows multiple routes between San Buenaventura and San Fernando, side trip routes to the Pueblo of Los Angeles and nearby San Pedro, and either a side trip or a trial route between San Luis Obispo and the upper Guadalupe River (= Santa Maria River). This map does not show any route to San Francisco even though some of his specimens are labeled San Francisco. As noted by Nelson and Probert (1994: 159), Coulter commented that he had not been to the north of San Francisco. However, that does not mean that he did not get as far as San Francisco.

Dawson’s (1951) Reprintining of Coulter’s 1835 Map

Dawson includes a narrow but complete facsimile of Coulter’s 1835 map. It is sewn into his small book between pages 30 and 31. In neither of the two copies I have seen of this work are most of the lines depicting Coulter’s travel routes visible. However, most of the “x” notations from the original are visible.

Bancroft (1885, Vol. 3: 407) Version of Coulter’s Map

This map was redrawn from Coulter’s map with labeling and route lines differing from the original. It does not include the southern portion of Coulter’s map south of San Diego and San Felipe or any reference to the Colorado River. The “x” notations are changed to “o” for the mission sites but all others are missing.


On this copy of Coulter’s 1835 map, the lines depicting Coul- ter’s travel routes are clear. The “x” marks for the missions and
Fig. 17. Type material of *Malacothrix couleri* Harv. & A. Gray ex A. Gray, *Coulter 252* (TCD).
villages are mostly not apparent. The accompanying redrawn version is helpful and does indicate most of the notations on the original map.

Notes

Thomas Coulter’s specimens have been designated type material (Figure 17) for about 60 plant taxa. Type specimens are usually the first specimens of a taxon ever collected. As noted earlier, Coulter’s Californian collections remained relatively unknown for about 10 years after his death because the duplicates had not yet been distributed. Consequently, later collectors gathered specimens of some of the same taxa that would become type specimens of taxa first collected by Coulter. Sixteen such taxa are noted as being first collected by Coulter, Coulter and Douglas, or Coulter and Nuttall in Gray’s *Synoptical Flora of North America* (Appendix V). As evidence that Douglas’s specimens were more readily known than Coulter’s, even though both men collected at about the same time in California, Torrey and Gray (1838–1843) make reference to over 300 Douglas collections but no mention of any Coulter specimens. It was probably several years later that Gray saw a Coulter specimen. Bentham (1839–1857) also mentioned specimens collected by Coulter in California and Mexico in his enumeration of species collected by Theodor Hartweg in Mexico. Sixty-one vascular plants (22 from California), one moss and four marine algae are named for Thomas Coulter (Appendix IV). Most of these were first noted by Coville (1895).

It is known that Coulter met David Douglas while in Monterey. They may have collected together near Monterey, California. There are some sheets at TCD with a Coulter collection and a Douglas collection of the same species mounted side by side. As an example, there is a sheet at TCD with two collections of *Dendromecon rigida* on it. *Dendromecon rigida* Benth. is written at the bottom of the sheet. Both specimens have handwritten labels. One reads “Monterey, California T. Coulter 1832” and the other reads “California D. Douglas”. There is a similarly composed sheet of *Viola pedunculata* at TCD. At K there are sheets of *Notholithocarpus densiflorus* (Quercus densiflora) and *Cryptantha (Myosotis) muricata* with Douglas and Coulter specimens mounted side by side although neither has more than California for a locality.

Specimens lacking exsiccata numbers are identified here as “s.n.”. Harvey may have failed to affix numbers to them or they got separated from the numbered specimens of that taxon. Multiple “s.n.” specimens attributed to a particular taxon may represent duplicates of a single collection or unicates of two or more collections. In a few instances specimens bearing the same exsiccata number are reported to be different taxa, e.g., *Coulter 744* in TCD is *Toxicoscordion* (Zygodenus) while *Coulter 744* in GH is *Iris*. There are instances where the handwritten exsiccata number has been misread and entered into a database or where the database indicated that the specimen had some type status but the specimen bore no annotation to that effect. I suspect this might be the reason for the GH exsiccata specimen of *Iris*, of which no image was provided: the *Iris* specimen is entered in the GH database as *Coulter 744* instead of *Coulter 724* as written on the TCD *Iris* specimen label. These sorts of discrepancies are rare when images of labels are available. Although the printed labels read “Dr. Coulter” the attributions on the handwritten labels variously reference “Dr. Coulter”, “Coulter” or “T.C.” Several database entries mistakenly attribute collections to J. M. Coulter. This is John Merle Coulter (1851–1928) but the dates and localities of collections make discrimination of the Coulters relatively easy. Data about Coulter specimens may be confused by other collections mounted on the same sheets. Coulter specimens mounted on sheets with other collections are occasionally filed under the name of other specimens. Likewise, images may be associated with one of the non-Coulter specimens on the sheet.

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APPENDIX I

COULTER’S CALIFORNIA VASCULAR AND NONVASCULAR PLANT EXSICCATA

This list of Coulter’s Californian exsiccata includes the vascular plant taxa followed by the mosses. The vascular plant families are listed in alphabetical sequence starting with ferns followed by gymnosperms, magnoliids, eudicots, and monocots with genera in alphabetical sequence within each family.

Going on the optimistic assumption that the original determinations were correct, the specimens are listed under their currently recognized names. Some of the specimens have been annotated since that time. In most cases the current name was determined by simple taxonomic equivalence, understanding full well that many specimens may have been originally misidentified. Online databases (e.g., Tropicos and IPNI [International Plant Names Index]) as well as Abrams (1923–1960) and the current volumes of the Flora of North America were among the references useful in tracking older names. Complications arising from the use of an older taxonomic scheme occasionally necessitated looking for specimens under genera that were one or two iterations removed from their currently recognized taxonomic status. Placement of specimens under these current names is not intended to be an annoteation or acceptance of the original determinations but rather a convenience of organization. Specimens from herbaria other than TCD for which no image was available are listed in accordance with the name provided in the institution’s database. Specimens seen in TCD that lack a name are generally listed as “sp.” under the genus in which the specimen was filed. Similarly, if a currently recognized infraspecific taxon could not be determined or was an innovation since the mid-1800s, the specific epithet is followed by just “subsp.” or “var.”

An asterisk (*) preceding a taxon’s name indicates that the specimen was likely collected in Sonora, Mexico, by Coulter before he arrived in California but distributed with his “California” label (see Locality errors California). Some specimens that bore names of taxa that were conspicuously out of range have occasionally been relegated to the unverified notations (e.g., sp.) above.

Species entries start with a current name and authorities, all in bold. Author abbreviations follow those in Brummitt and Powell (1992). Names of introduced taxa are prefixed by a dagger (*). Species entries are followed by “Coulter” and an exsiccatum number or “s.n.” (sine numero) underlined. Any applicable abbreviation for Dr. Thomas Coulter on the specimen is written here as “Coulter”. I assigned the “s.n.” notation—it does not appear on the exsiccatum labels. If there is no exsiccatum number on the label, it is left blank. Multiple collections of the same taxon are arranged in ascending numerical order of the exsiccatum followed by any “s.n.” specimens. Each specimen of this latter group is listed separately because there is no way to determine whether they represent duplicates of the same collection.

Next are the acronyms, in bold, of herbaria housing a specimen bearing that exsiccatum number, or s.n. These start with TCD, followed by any other herbaria in alphabetical order of their acronyms. Herbarium identified by acronyms may be found in Index Herbariorum online (see Database References).

Information on the labels was recorded mostly verbatim to what was written on the original labels. I did not use quotation marks because it would render the text unreasonably cluttered and difficult to read. Abbreviations, initials and spelling were written as they appear on the original labels, except for “California”. Occasionally I wrote out the word in brackets. However, the information was arranged in a consistent format for the entries as follows: name or names of the specimen with any author citation as provided, if a currently recognized infraspecific taxon could not be determined or was an innovation since the mid-1800s, the specific epithet is followed by just “subsp.” or “var.”

After information from the label, information from annotation labels follows: “Annotation 1:”. This information is nearly verbatim. These labels are physically or stylistically associated with the labeling of the specimen. In some cases, there are also simple printed labels, e.g., “Fl. N. Amer., Torr. &
Gray” affixed to the sheet, presumably indicating that Gray saw the specimen at some point. Following annotations there are occasionally references to “Written on sheet:”. This precedes plant names or notes handwritten at the bottom of the sheet lacking an annotator attribution and typically apart from any other labeling. These are possibly names under which the specimens were to be filed. Lastly is a reiteration of the herbarium’s acronym under the heading “Note”. Following annotation there are occasionally references to “numbersonlyforthosefewspecimensthathavebeendigitized. Allnotations by Farjon in 1995. Annotation 1: ISOSYNTHYPE Hypolepis californica Hooker by G. Wallace in 2016. Written on sheet: Aspidotis californica. TCD!
K 001057971.

FERN
Blechnaceae
Woodwardia fimbriata Sm.
Coulter 825
TCD: Woodwardia radicans, California (PL). TCD!
BRU: Woodwardia radicans, California [no image]. PBRU 00067177.

Dryopteridaceae
Dryopteris arguta (Kaulf.) Maxon
Coulter 826
TCD: [no name], California (PL). TCD!
TCD: [no name], California (SL). TCD!
BRU: Dryopteris flexis-nas, California [no image]. PBRU 00072928.

Polystichum munitum (Kaulf.) C. Presl
Coulter s.n.
TCD: [no name], California (PL). TCD!
BRU: Polystichum munitum [no image]. PBRU 00073125.

Equisetaceae
Equisetum hyemale L. subsp. affine (Engelm.) Calder & R.L. Taylor
Coulter 829
TCD: [no name], California (SL). TCD!

Equisetum telmateia Ehrh. subsp. braunii (J. Milde) Hauke
Coulter 830
TCD: [no name], California (PL). TCD!
BRU: [no name], California [no image]. PBRU 00064186.

Marsileaceae
Marsilea vestita Hook. & Grev.
Coulter 828
TCD: M. vestita H. & G., California (PL). TCD!

Poly podiaceae
Polypodium californicum Kaulf.
Coulter 818
TCD: [no name], California (PL). TCD!
Coulter 819
TCD: [no name], California (PL). TCD!

Pteridaceae
Adiantum capillus-veneris L.
Coulter 821
TCD: [no name], California (SL). TCD!

Calocedrus decurrens (Torr.) Florin
Coulter 710
TCD: [no name], California (PL). TCD!

Coulter s.n.
TCD: [no name], California (PL). TCD!

Pinus coulteri D. Don
Coulter s.n.

Pinus muricata D. Don
Coulter 712.
by J.A. Perez De Larosa in 2001. Annotation 3: TYPSUS. TCD! Note: see Appendix III for discussion of this specimen.

ANGIOSPERMS

MAGNOLIIDS

LAURACEAE

Umbellularia californica (Hook. & Arn.) Nutt.
Coulter 708.
GH: Umbellularia californica, California. [no image]. GH 381286.
Coulter 709.
GH: Tetranthera sp., California [no image]. GH 381277.

SAURURACEAE

Anemopsis californica (Nutt.) Hook. & Arn.
Coulter 702.
TCD: Anemopsis, California (PL). TCD!

EUDICOTS

ACANTHACEAE

*Holographis virgata (Harv. ex Benth. & Hook. f.) T.F. Daniel
Coulter 603.
BM: Bergenia virgata, Mexico. [no image]. BM 000796114. Note: BM database lists Mexico.

*Ruellia occidentalis (A. Gray) Tharp & F.A. Barkley
Coulter 556.
TCD: Ruellia? [another name illegible], California (PL). Annotation 1: ISOSYNTYPE Ruellia tuberosa var. occidentalis A. Gray by G. Wallace in 2016. TCD!

ADOXACEAE

Sambucus nigra L. subsp. caerulea (Raf.) Bolli
Coulter 211.
TCD: [no name], California (PL). TCD!

AMARANTHACEAE

Alternanthera caracasana Kunth
Coulter 681.
TCD: [no name], California (PL). TCD!

Amaranthus sp.
Coulter 682.
TCD: Amaranthus, California (PL). TCD!

ANACARDIACEAE

Malosma laurina (Nutt.) Abrams
Coulter 238.
TCD: Rhus laurina, California (SL). TCD! [on same label as 549 below] Coulter 549.
TCD: Rhus laurina, California (SL). TCD! [on same label as 238 above]

Rhus aromatica Aiton
Coulter 127.
TCD: Rhus, California (PL). TCD!
Coulter 128.
TCD: Rhus, California (PL). TCD!
Coulter 130.
TCD: Rhus, California (PL). TCD!

Rhus ovata S. Watson
Coulter 550.
GH: Rhus ovata, California. [no image]. Annotation 1: Rhus ovata by Young in 1971. GH 00347143.

Toxicodendron diversilobum (Torr. & A. Gray) Greene
Coulter 126.
TCD: Rhus, California (PL). TCD!
GH: R. diversiloba, California (PL). TCD!
GH: R. diversiloba, California (PL). TCD!
Coulter 129.
TCD: Rhus lobata Hook., California (PL). TCD!
Coulter 129.
TCD: Rhus diversiloba, California [no image]. GH 00347304.
Coulter s.n.

APIACEAE

Apiastrum angustifolium Nutt.
Coulter 210.
Coulter 213.
TCD: Apiastrum angustifolium, California (PL). TCD!

Bowlesia incana Ruiz & Pav.
Coulter 665.
TCD: Bowlesia lobata Doug., California (PL). TCD!

Eryngium pendletonense K.L. Marsden & M.G. Simpson
Coulter 226.
TCD: Eryngium, California (PL). TCD!
**Lomatium* caruiifolium (Hook. & Arn.) J.M. Coulte. & Rose var.
Coulte. 218.  
**TC**D: Ferula caruiifolium Hook. & Arn., S. Miguel, California (PL).  
**TC**D!

**Lomatium parvifolium (Hook. & Arn.) Jeps.
Coulte. 222.  
**TC**D: Ferula parvirolia Hook. & Arn., California (PL).  
**TC**D!  
**GH**: Lomatium parvifolium, California [no image].  
**K**: Ferula parvirolia Coulte. & Rose var. Lomatium parvifolium (Hook. & Arn.) Jeps.

**Lomatium utriculatum (Torr. & A. Gray) J.M. Coulte. & Rose
Coulte. 224.  
**TC**D: Ferula foeniculacea?, California (PL).  
**K**: database lists J.M. Coulter as collector in error.

**Oenanthe sarmentosa** DC.
Coulte. 209.  
**TC**D: Helosciadium? californicum?, California (PL).  
**TC**D!

**Osorhiza sp.**
Coulte. 214.  
**TC**D: Glycyrrhiza, California (PL).  
**TC**D!

**Perideridia oregana** (S. Watson) Mathias
Coulte. 212.  
**TC**D: Edosmia, California (PL).  
**TC**D!  
**K**: Edosmia gaerdneri Nutt., Atenia, California (SL).  
**K**: database lists J.M. Coulter as collector in error.

**Sanicula arctopoides** (Hook. & Arn.)
Coulte. 204.  
**TC**D: Sanicula arctopoides H. & A., California (PL).  
**TC**D!  
**NY**: Sanicula arctopoides, California [no image]. UC: Sanicula arctopoides, California [no image].  
**UC**: Sanicula arctopoides, California [no image]. UC 973556.

**Sanicula arguta** J.M. Coulte. & Rose
Coulte. 216.  
**TC**: Sanicula arguta [no name], Monterey to S. Barbara, California (PL).  
**TC**: Sanicula arguta [no name], Monterey to S. Barbara, California (PL).  
**TC**: Sanicula arguta [no name], Monterey to S. Barbara, California (PL).  
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**TC**: Sanicula arguta [no name], Monterey to S. Barbara, California (PL).  
**TC**: Sanicula arguta [no name], Monterey to S. Barbara, California (PL).  
**TC**: Sanicula arguta [no name], Monterey to S. Barbara, California (PL).  
**TC**: Sanicula argu...
Ambrosia dumosa (A. Gray) W.W. Payne
Coulter 255.

Ambrosia sp.
Coulter 260.
TCD: Ambrosia longistyli Nutt., California (PL). Annotation 1: “I posses no specimen of A. longistyli Nutt. but this agrees pretty well with the descr. (except for the styles?) A. Gr.”, Torr. & Fl. N. Amer. TCD!

Artemisia californica Less.
Coulter 257.
Coulter 264.
TCD: Artemisia foliosa Doug., Monterey to S. California, California (PL). TCD!

Artemisia pyneoeaphala (Less.) DC.
Coulter 256.
TCD: Artemisia pachystachya, Monterey to El Sur, California (PL). TCD!

Artemisia sp.
Coulter 254.
TCD: Artemisia vulgaris, Monterey to S. California, California (PL). TCD!

Baccharis glutinosa Pers.
Coulter 265.
TCD: [no name], Monterey to San Gabriel, California (PL). TCD!

Baccharis sp.
Coulter 282.
TCD: Baccharis glomuliflora, Monterey to S. California, California (PL). TCD!

Baileya multiradiata Harv. & A. Gray ex Torr.
Coulter 312.
TCD: Baileya multiradiata, California (PL). [Mixed sheet, right side specimens] Annotation 1: Baileya multiradiata H. & Gr. Torr. & Gray, Fl. N. Amer. TCD! Note: this may be the sheet from which type material of B. pleni-radiata was taken by A. Gray, ref. GH 00002441.
Coulter 326.

Baileya pauciradiata Harv. & A. Gray ex A. Gray
Coulter 312.

K: Baileya pauciradiata Harv. & Gray, California (PL). K 000943134. [Filed as Hemenoxys richardsonii].
Coulter s.n.

Baileya pleni-radiata Harv. & A. Gray ex A. Gray
Coulter 312.

Bebbia juncea (Benth.) Greene var. aspera Greene
Coulter 297.
TCD: Carpephora chondrioloides H. & Gr. MS, near C. juncea, California (PL). Annotation 1: C. juncea @ chondrioloides Harv. & Gray, Torr. & Gray, Fl. N. Amer., suppl 2. TCD!

Bidens laevis (L.) Britton, Sterns & Poggenb.
Coulter 324.
TCD: [no name], Monterey to S. Gabriel, California (PL). Written on sheet: B. laevis (L.) Britton et al. TCD!

Bidens sp.
Coulter 295.
Coulter 296.
TCD: Bidens, California (PL). TCD!

Blennosperma nanum (Hook.) S.F. Blake var. nanum
Coulter 346.
TCD: Blennosperma california, Monterey to El Sur, California (PL). TCD!
Coulter s.n.
UC: Blennosperma nanum var. nanum, California [no image]. UC 973802.

*Brickellia coulteri A. Gray
Coulter 293.
TCD: Acoria microcephala, California (SL). Annotation 1: “Though the leaves are petioled I think this must be Acoria microcephala DC. (which I have not seen) and a congener of A. hebecula DC. Deless. 1c. But in neither is the “pappus apice panicellatus” I leave it untouched not having the means to study the Labiatiflorae. A. Gr., Torr. & Gray Fl. N. Amer.” Annotation 2: ISOETYPE of Brickellia coulteri by G. Wallace in 2017. TCD!
Centromadia paryi (Greene) Greene subsp. australis (D.D. Keck) B.G. Baldwin
Coulter 290.

GH: Hemizonia paryi subsp. australis, California [no image].

Centromadia pungens (Hook. & Arn.) Greene subsp. pungens
Coulter 290.

TCD: Hartmannia pungens, Monterey to S. Gabriel, California (PL).

TCD! [two sheets]

Coulter s.n.


Chaenactis artemisiifolia (Harv. & A. Gray ex A. Gray) A. Gray
Coulter 313.


Chaenactis glabriuscula DC.
Coulter 364.


K: Chaenactis, C. filifolia, California (SL). K 001065656.

Coulter 465.


Chaenactis glabriuscula DC. var. lanosa (DC.) H.M. Hall
Coulter 365.

TCD: Chaenactis lanosa, Chaenactis glabriuscula, California (PL). Annotation 1: C. lanosa, more globose than Doug. spec., Torr. & Gray, Fl. N. Amer. TCD!


Chaenactis steviioides Hook. & Arn.
Coulter 337.

TCD: Chaenactis steviioides Hook. & Arn., California (PL). TCD!

*Chromolaena sagittata (A. Gray) R.M. King & H. Robinson
Coulter 294.


Cirsium occidentale (Nutt.) Jeps. var. coulteri (Harv. & A. Gray ex A. Gray) Jeps.
Coulter 367.


RSA: Cirsium coulteri, California [photo]. Annotation 1: TYPE. RSA 201381.

Cirsium undulatum (Nutt.) Spreng.
Coulter 269.

TCD: Cirsium undulata [sic], S. Michel to S. Barbara, California (PL).

Written on sheet: not discolor but will do for undulatum AG [= A. Gray].

TCD!

Coulter s.n.

TCD: Cirsium undulatum, California (PL). Written on sheet: [illegible] undulatum A. Gr. TCD!

Corethrogyne filaginifolia (Hook. & Arn.) Nutt.
Coulter 267.

TCD: Corethrogyne tomentella, California (PL). TCD!


Coulter 268.

TCD: Corethrogyne leucophylla Lindl., Monterey, S. Gabriel, El Sur, California (PL). TCD!


K: Corethrogyne filaginifolia, California (SL). K 000884804.

Coulter 270.

TCD: Corethrogyne californica, Monterey to El Sur, California (PL). TCD!

Coulter 271.

TCD: Corethrogyne, California (PL). Annotation 1: C. filaginifolia, foliis gracilioribus, Torr. & Gray, Fl. N. Amer. TCD!

Coulter 273.


Deinandra corymbosa (DC.) B.G. Baldwin
Coulter 300.

TCD: Hemizonia angustifolia, Monterey to S. Gabriel, California (PL). Annotation 1: Hemizina angustifolia Torr. & Gray, Fl. N. Amer. TCD!

Deinandra fasciculata (DC.) Greene
Coulter 361.


Eclipta prostrata (L.) L.
Coulter 341.

TCD: Eclipta erecta, California (PL). TCD!
**Encelia californica** Nutt.

Coulter 308.


Coulter 309.

*TCD*: Encelia californica, California (PL). *TCD*!  

**Encelia farinosa** Torr.

Coulter 327.

*TCD*: Encelia nivea, California (PL). *TCD*!  

**Eriocamaria ericoïdes** (Less.) Jeps.

Coulter 269.

*TCD*: Eriocamaria microphylla, Mont’y. [ = Monterey] to S. Gabriel, California (PL). *TCD*!

**Eriogon canadensis** L.

Coulter 284.

*TCD*: Eriogon canadense, Monterey to S. Gabriel, California (PL). *TCD*!

**Eriogon glaucus** Ker Gawl.

Coulter 325.

*TCD*: Eriogon glaucum [sic], California (PL). *TCD*!  

**Eriogon philadelphicus** L. var. philadelphicus

Coulter 287.

*TCD*: Eriogon purpureum [sic], California (PL). *TCD*!

**Eriopodium confertiflorum** (DC.) A. Gray var.

Coulter 362.

*TCD*: Bahia confertiflora, California (PL). *TCD*!  

**Eriophorum multiflora** (DC) A. Gray

Coulter 343.

*TCD*: Actinolepis multiflora, Monterey to S. Miguel, California (PL). *TCD*!

**Eriophorum steechadifolium** Lag.

Coulter 340.

*TCD*: Eriophorum artemisiaefolia, Monterey to S. Gabriel, California (PL). *TCD*.

Coulter s.n.

*TCD*: [no name], Monterey to El Sur, California (PL). *TCD*.

**Euthamia occidentalis** Nutt.

Coulter 266.


**Geraea canescens** Torr. & A. Gray

Coulter 304.


**Gnaphalium sp.**

Coulter 354.

*TCD*: Gnaphalium, Monterey to El Sur, California (PL). *TCD*!

*Helenium laciniatum* A. Gray

Coulter 356.


Coulter 358.


*Helenium puberulum* DC.

Coulter 357.

*K*: Helenium puberulum DC., California (SL). Written on sheet: A specimen sub. nom. *H. brachyglottos* (Herb. Kew 8/70) comes very near this and is probably identical, J.B. *K* 000974776.

**Helenium sp.**

Coulter 355.

*Coulter* s.n.


*Helenium thurberi* A. Gray

Coulter 359.

Coulter 566
Heterothecasessiliflora
(Nutt.) Shinners subsp. DC. subsp. Hemizoniacongesta
Coulter 344
Hemizonia sp.
Coulter 448
Heterotheca grandiflora Nett.
Coulter 275
Heterotheca sessilifloral (Nutt.) Shinners subsp. echioides (Benth.) Semple
Coulter 349
Iva axillaris Pursh
Coulter 258
Iva axillaris Pursh. var. californica Lindl. subsp. G.L. Nesom
Coulter 285
Leptosyne douglasii (Fisch. & C.A. Mey.) A. Gray
Coulter 319
Leptosyne glandulosa (A. Gray) G.L. Nesom
Coulter 315
Leptosyne platyglossa (Fisch. & C.A. Mey.) A. Gray
Coulter 315
Lasthenia glabrata (DC.) Greene
Coulter 345
Lasthenia microglossa (DC.) Greene
Coulter 328
Lasthenia gracilis (DC.) Greene
Coulter 345
TCD: Barriela [sic] gracilis, Monterey to El Sur, California (PL). TCD!
Lasthenia microglossa (DC.) Greene
Coulter 328
TCD: Barriela microglossa, S. Miguel, California (PL). TCD!
Coulter s.n.
NY: Barriela microglossa, California [no image]. NY 00162829.
Layia glandulosa (Hook.) Hook. & Arn.
Coulter 314
TCD: Layia glandulosa, California (PL). [Filed in Madroglossa folder]. TCD!
Layia heterotricha (DC.) Hook. & Arn.
Coulter 320
TCD: Layia heterotricha, California (PL). TCD!
Layia platyglossa (Fisch. & C.A. Mey.) A. Gray
Coulter 315
TCD: Callichroa platyglossa, California (PL). Annotation 1: C. platyglossa Torr. & Gray, Fl. N. Amer. TCD!
Coulter 318
TCD: Layia elegans, California (PL). Note on label: near glandulosa but pappus different. Annotation 1: Layia elegans Nett. (wool of the pappus finely crisped inside) Torr. & Gray, Fl. N. Amer. Annotation 2: “2.3. like no. 1 with all the inner crisped wool wanting. As it is, it has less hairs on the pappus than any species I know. I have not L. glandulosa (send me some achenes of that). If not that, it might be safer to call it a state of L. elegans. A. Gr. Torr. & Gray, Fl. N. Amer.” TCD!
Coulter 319
TCD: Callichroa platyglossa, California (PL). TCD!
Coulter 322
TCD: Callichroa platyglossa, S. Miguel, California (PL). Annotation 1: Callichroa platyglossa Torr. & Gray, Fl. N. Amer. TCD!
Leptosyne douglasii DC.
Coulter 339
TCD: Leptosyne douglasii, Monterey to S. Francisco, California (PL). TCD!
Coulter s.n.
Malacothrix californica Coulter 352  

Logfia filaginoides (Hook. & Arn.) Morefield Coulter 352.  

Malacothrix saxatilis Coulter 246.  

Malacothrix saxatilis (Nutt.) Torr. & A. Gray var. tenuifolia (Nutt.) A. Gray Coulter 246.  

Malacothrix sp. Coulter 251.  

Malacothrix saxatilis (Nutt.) Torr. & A. Gray var. tenuifolia (Nutt.) A. Gray Coulter 246.  

Monolaopia major DC. Coulter 323.  

Osmadenia tenella Nutt. Coulter 360.  

Palafaxia arida B.L. Turner & M.I. Morris var. arida Coulter 347.  

Palafaxia arida B.L. Turner & M.I. Morris var. gigantea (M.E. Jones) B.L. Turner & M.I. Morris Coulter 347.  

Pectis coulteri Harv. & A. Gray ex A. Gray Coulter 330.  

Pectis filipes Harv. & A. Gray ex A. Gray Coulter 329.  

Pectis papposa Harv. & A. Gray ex A. Gray Coulter 331.  

Wallace ALISO
*Perityle californica* Benth.
Coulter 277


**K**: Perityle acmella Harv. & Gray, Pl. Fendl., California (PL). Annotation 1: Type of *Perityle leptoglossa* Harv. & A. Gray ex A. Gray by Rydberg, K 001079924. **K**


*Perityle microglossa* Benth. var. microglossa
Coulter 280


**GH**: *Perityle acmella* Gray, Pl. Fendl., California (PL). Annotation 1: Type of *Perityle acmella* Harv. & Gray, Fl. N. Amer. Annotation 2: Type. GH 00014292. Note: in GH database as POSSIBLE TYPE.

**K**: *Perityle acmella* Harv. & A. Gray, California (PL). Annotation 1: Type of *Perityle acmella* Harv. & Gray = *P. microglossa* Benth. var. microglossa. **K** 001079924. **K**

**K**: [no name], California (PL). Annotation 1: Type of *Perityle acmella* Harv. & Gray = *P. microglossa* Benth. var. microglossa. **K** 001079925.

Plucheacerea (Nutt.) Coville
Coulter 280

**TCD**: *Baccharis*, California (PL). Annotation 1: *Tessaria borealis*. **TCD!**

**GH**: *Tessaria borealis* Harv. & Gray, California [no image]. Annotation 1: *Plucheacerea* Coville. **GH** 00415662. **GH**


Senecio californicus DC.
Coulter 335

**TCD**: *Senecio californicus*, Monterey to S. Miguel, California (PL). **TCD!**


Senecio flaccidus Less. var. douglasii (DC.) B.L. Turner & T.M. Barkley
Coulter 333

**TCD**: *Senecio douglasii*, Monterey to S. Gabriel, California (PL). Annotation 1: *S. douglasii* var? Torr. & Gray, Fl. N. Amer. **TCD!**

**GH**: Senecio flaccidus var. douglasii, Monterey to S. Gabriel, California [no image]. **GH** 427771. **GH**

**Coulter 334**: Senecio douglasii var?, California (PL). Annotation 1: *S. douglasii* var., Torr. & Gray, Fl. N. Amer. **TCD!**

Seneo sp.
Coulter 332

**TCD**: Senecio coulteri Harv. & Gray, California (PL). Annotation 1: *S. coulteri* Harv. & Gr. Torr. & Gray, Fl. N. Amer. **TCD!**

**Coulter 336**: Senecio multilobatus, Monterey to S. Gabriel, California (PL). Annotation 1: *S. multilobatus* β Torr. & Gray, Fl. N. Amer. **TCD!**

Solidago spathulata DC.
Coulter 288

**TCD**: [no name], California (PL). Annotation 1: *S. spiciformis* Torr. & Gray, Fl. N. Amer. Written on sheet: *spiciformis*. **TCD!**

Solidago velutina DC. subsp. californica (Nutt.) Semple
Coulter 263


Stephanomera virgata Benth. subsp.
Coulter 250

**TCD**: Stephanomera virgata, California (PL). **TCD!**

Symphyotrichum chilense (Nees) G.L. Nesom
Coulter 274

**TCD**: Aster chilensis?, Monterey to S. Gabriel, California (PL). Written on sheet: in Torr. & Gr. fl. A. Gr. **TCD!**

Uropappus lindleyi (DC.) Nutt.
Coulter 253

**TCD**: Calais linearifolia, S. Miguel to S. Barbara, California (PL). **TCD!**


Venegasia carpesioides DC.
Coulter 317

**TCD**: Venegasia carpesioides, S. Miguel to S. Barbara, California (PL). **TCD!**

Wyethia angustifolia (DC.) Nutt.
Coulter 310

**TCD**: Wyethia angustifolia, California (PL). **TCD!**


**Coulter 311**: Helianthella, California (PL). Annotation 1: *Wyethia robusta* Nutt. Torr. & Gray, Fl. N. Amer. **TCD!**

Coulter 276

**TCD**: Alopappus coulteri H. & G. California (PL). Annotation 1: Alopappus (Blepharodon) coulteri Harv. & Gray, Torr. & Gray, Fl. N. Amer. **TCD!** Note: This species ined.

BETULACEAE

Alnus rhombifolia Nutt.
Coulter 649

**TCD**: [no name], California (PL). **TCD!**
Alnus rubra Bong.
Coulter 649.

Corylus cornuta Marshall subsp. californica (A. DC.) E. Murray
Coulter 649.

Amsinckia douglasiana A. DC.
Coulter 504.
GH: Amsinckia douglasiana, California [no image]. 424699.

* Amsinckia inepta J.F. Macbr.
Coulter 501.

Amsinckia sp.
Coulter 495.
TCD: Amsinckia, Monterey to El Sur, California (PL). TCD!
Coulter 4987.
TCD: Amsinckia [illegible], California (PL). TCD!
Coulter 498 in part.

Amsinckia douglasiana A. DC.
Coulter 501.
TCD: Amsinckia, California (PL). TCD!
Coulter 501.

TCD: Amsinckia, California (PL). TCD!
Coulter s.n.
TCD: [no name], California (PL). TCD!

Amsinckia spectabilis Fisch. & C.A. Mey. var.
Coulter 504.
TCD: Amsinckia spectabilis, California (PL). TCD!

Amsinckia spectabilis Fisch. & C.A. Mey. var. microcarpa (Greene) Jeps. & Hoover
Coulter 497.
TCD: Amsinckia, California (PL). Annotation 1: Type material Amsinckia microcarpa Greene by G. Wallace in 2017. TCD!
K: Amsinckia microcarpa [E.L.G.], California (SL). Annotation 1: Amsinckia spectabilis Fisch. & Mey. (var. microcarpa (Greene) Jeps.). Annotation 2: evidently the type (LECTOTYPE) specimen of Amsinckia microcarpa although he cited no number. This is the only specimen of Coulter’s that matched his description (very short calyx, etc.), by Lassen in 1986. K 001067016.
Coulter s.n.

Amsinckia tessellata A. Gray var.
Coulter 502.
E: Amsinckia tessellata, California [no image]. E 00225291.

Amsinckia vernicosa Hook. & Arn.
Coulter 496.
TCD: Amsinckia vernicosa, California (PL). TCD!
Coulter 498 in part.
TCD: Amsinckia angustifolia, California (PL). TCD!
Coulter 498.

Cryptantha angustifolia (Torr.) Greene
Coulter 500.
TCD: [no name], California (PL). TCD!

Cryptantha flaccida (Lehm.) Greene
Coulter 499.
TCD: Myosotis flaccida, California (PL; Ex is crossed out). TCD!
Coulter 513.
TCD: Myosotis flaccida, California (PL; Ex is crossed out). TCD!
Coulter 514.
TCD: Myosotis flaccida, California (PL; Ex is crossed out). TCD!
Coulter 515.
TCD: Myosotis flaccida, California (PL; Ex is crossed out). TCD!

Cryptantha muricata (Hook. & Arn.) A. Nelson & J.F. Macbr. var.
Coulter 511.
TCD: Myosotis muricata, El Sur, California (PL). Written on sheet: Erythea, TCD!
E: Cryptantha muricata, California [no image]. E 893490.
Coulter 523.
TCD: [no name], California (PL). TCD!

Cryptantha sp.
Coulter s.n.
TCD: [no name], California (PL). TCD!

Cynoglossum grande Lehm.
Coulter 520.
TCD: Cynoglossum grande, Monterey, California (PL). TCD!
Coulter s.n.

**Coulter 494**


**Coulter 627**

*Emmenanthe penduliflora* Benth. var. Coulter 494.

**Coulter s.n.**

*TCD: Emmenanthe penduliflora, California (PL). TCD!*

**Coulter 522**

*Nama* aretioides (Hook. & Arn.) Brand var. Coulter 493.  

**Coulter 479**

*TCD: Nemophila insignis, California (PL). TCD!*

**Coulter s.n.**

*UC: Nemophila menziesii, California [no image]. UC 9733557. UC: Nemophila menziesii var. integrifolia, California [no image]. UC 973661.*

**Coulter 477**

*Nemophila parviflora* Benth. var. Coulter 480.  

**Coulter s.n.**

*TCD: Nemophila parviflora, California (PL). TCD! [two sheets]*

**Coulter 492**

*Eriodictyon crassifolium* Benth. var. Coulter 601.  

**Coulter s.n.**

*TCD: Eriodictyon crassifolium, California (PL). TCD!*

**Coulter 475**

*Nama hispidum* Coulter 487.  

**Coulter 485**

*Eucrypta chrysanthemifolia* (Benth.) Greene var. Coulter 480.  

**Coulter s.n.**

*UC: Eucrypta chrysanthemifolia, California (PL). UC 00547997.*

**Coulter 489**

*Phacelia ciliata* Benth. Coulter 489.  

**Coulter 482**

*Phacelia distans* Benth. Coulter 483.  

**Coulter 493**


**Coulter 484**

*Phacelia ramosissima* Lehm. Coulter 484.  

**Coulter s.n.**

*TCD: Phacelia ramosissima, California (PL). TCD!*
Phacelia visida (Lindl.) Torr. var.
Coulter 490.

Pholistoma auritum (Lindl.) Lilja var.
Coulter 471.

Pholistoma membranaceum (Benth.) Constance
Coulter 469.

Plagiobothrys chorisianus (Cham.) I.M. Johnst. var.
Coulter 518.

Plagiobothrys fulvus (Hook. & Arn.) I.M. Johnst.
Coulter 502.

Athysanus pusillus (Hook.) Greene
Coulter 30.

Arabiscanadensis (Nutt.) Greene
Coulter 43.

Boechea sp.
Coulter 51.

Cardamine californica (Nutt.) Greene
Coulter 53.

Cardamine oligosperma Nutt.
Coulter 50.

Caulanthus coulteri (S. Watson) Payson
Coulter 50.

Plagiobothrys sp.
Coulter 507.

Phacelia viscida (Lindl.) Torr. var. Coulter 490.

Pholistoma auritum (Lindl.) Lilja var. Coulter 471.

Pholistoma membranaceum (Benth.) Constance Coulter 469.

Plagiobothrys chorisianus (Cham.) I.M. Johnst. var. Coulter 518.


Athysanus pusillus (Hook.) Greene Coulter 30.

Arabiscanadensis (Nutt.) Greene Coulter 43.

Boechea sp. Coulter 51.

Cardamine californica (Nutt.) Greene Coulter 53.

Cardamine oligosperma Nutt. Coulter 50.

Caulanthus coulteri (S. Watson) Payson Coulter 50.

Phacelia viscida (Lindl.) Torr. var. Coulter 490.


Coulter 491.


Plagiobothrys chorisianus (Cham.) I.M. Johnst. var. Coulter 518.

Plagiobothrys fulvus (Hook. & Arn.) I.M. Johnst.
Coulter 502.

Plagiobothrys sp. Coulter 507.

Athysanus pusillus (Hook.) Greene Coulter 30.

Arabiscanadensis (Nutt.) Greene Coulter 43.

Boechea sp. Coulter 51.

Cardamine californica (Nutt.) Greene Coulter 53.

Cardamine oligosperma Nutt. Coulter 50.

Caulanthus coulteri (S. Watson) Payson Coulter 50.
Caulanthus heterophyllus (Nutt.) Payson
Coulter 42.
- TCD: Streptanthus heterophyllus, California (PL). TCD!

Caulanthus lasiophyllus (Hook. & Arn.) Payson
Coulter 54.
- TCD: [no name], Between Monterey & S. Miguel, California (SL). TCD!
- Coulter 55.
- Coulter 56.

Caulanthus sp.
Coulter s.n.
- UC: Caulanthus, California [no image]. UC 973823.

Descurainia pinnata (Walter) Britton
Coulter 59.
- TCD: Sisymb. canescens Nt., California (PL). TCD!
- TCD: [no name], Between Monterey & S. Miguel, California (SL). TCD! Note: on sheet with Coulter 59 above.

Dithyrea californica Harv.
Coulter 37.

Erysimum capitatum (Hook.) Greene var. capitatum
Coulter 61.
- TCD: Cheiranthus capitatus B, Monterey, California (PL). TCD!
- Coulter s.n.

Erysimum menziesii (Hook.) Wettst.
Coulter s.n.

Erysimum sp.
Coulter 60.
- TCD: [no name], Between Monterey & S. Miguel, California (PL). TCD!
- TCD: [no name], Monterey to S. Francisco, California (PL). TCD! Note: on sheet with Coulter 60 above.

Hornungia procumbens (L.) Hayek
Coulter 36.
- BRU: Hymenolobus divaricatus, California [no image]. PBRU 00073977.
- Coulter s.n.
- BM: Hymenolobus divaricatus, California (PL). BM 1024419.
- BRU: Hymenolobus divaricatus, California [no image]. PBRU 00073976.
- UC: Hornungia procumbens, California [no image]. UC 973605.

Lepidium nitidum Nutt.
Coulter 38.
- Coulter s.n.
- BM: Lepidium nitidum, California (PL). BM 1024413.
- K: Lepidium nitidum, California [no label; script on sheet]. K 000642811.

Lepidium oxyarum Torr. & A. Gray
Coulter 29.
- TCD: Lepidium oxyarum Tor. & Gr., California (PL). TCD!
- Coulter s.n.
- NY: Lepidium oxyarum, California [no image]. NY 00076581.

Lepidium sp.
Coulter 39.
- TCD: Lepidium ruderale L., Monterey, California (PL). TCD!
- Coulter s.n.
- TCD: Lepidium sativum, California (SL). TCD!

Lycocarpa coulteri Hook. & Harv.
Coulter 40.
- Coulter s.n.

Nasturtium officinale W.T. Aiton
Coulter 44.
- TCD: Nasturtium officinale [crossed out], California (PL). TCD!
Coulter 33x
Thysanocarpus laciniatus Nutt. var.
Coulter 41.

TCD: Streptanthus glandulosus, between Monterey & San Francisco, California (PL). TCD!

Coulter s.n.
E: Euclisia glandulosa, California [no image], E 195926.
UC: Streptanthus glandulosus subsp. glandulosus, California [no image]. UC 973824.

Thysanocarpus curvipes Hook.
Coulter 31.

TCD: T. pulchellus, California (PL). TCD!
TCD: Thysanocarpus pulchellus, between San Miguel & San Barbara, California (PL). TCD!
Coulter 33.

TCD: Thysanocarpus elegans, California (PL). TCD!
Coulter s.n.
Coulter s.n.
Coulter s.n.
TCD: Thysanocarpus elegans, California (PL). TCD!
UC: Thysanocarpus curvipes, California [no image]. UC 973829.

Thysanocarpus laciniatus Nutt. var.
Coulter 32.

Coulter s.n.
Coulter 35.

TCD: [no name], California (PL). TCD!
Coulter s.n.
TCD: Thysanocarpus crenatus, California (PL). TCD!
UC: Thysanocarpus laciniatus, California [no image]. UC 973606.

Thysanocarpus sp.
Coulter 32.

TCD: Thysanocarpus angustus, California (PL). TCD! [two sheets]

Tropidocarpum gracile Hook.
Coulter 46.

TCD: [no name], Between Monterey & San Francisco, California (PL). TCD!
Coulter 47.

TCD: [no name], California (PL). TCD!
K: Tropidocarpum gracile, California (SL). K 000642941 Note: K database lists as Coulter s.n. and B.L. Coulter as collector in error.
Coulter 48.

TCD: [no name], Monterey to San Miguel, California (PL). TCD! Note: on sheet with Coulter 47 above.
Coulter 49.

TCD: Tropidocarpum scabriusculum, California (PL). TCD!
Coulter 50.

TCD: Tropidocarpum gracile, California (PL). TCD!

Coulter 62.
K: Tropidocarpum macrocarpon Hook. & Harv., California (SL). K 000642942. Note: K database lists B.L. Coulter as collector in error; this is the HOLOTYPE but is not so noted in database.
Coulter s.n.
GH: Tropidocarpum gracile, California [no image]. GH 00422572.
UC: [no name], California [no image]. Annotation 1: Tropidocarpum gracile Hook. var. scabriusculum (Hook.) Greene. Annotation 2: Tropidocarpum gracile Hook, UC 973822.

CAPRIFOLIACEAE

Lonicera hispidula (Lindl.) Torr. & A. Gray
Coulter 201.


Lonicera involucrata (Richardson) Spreng. var. ledobourii (Eschsch.) Jeps.
Coulter 594.

TCD: Lonicera involucrata Banks, California (PL). TCD!

Symphoricarpus mollis Nutt.
Coulter 202.

TCD: Symphoricarpus mollis, California (PL). TCD!
GH: Symphoricarpus mollis, California [no image]. Annotation 1: Symphoricarpus mollis by Jones in 1939. GH 00386321.

Symphoricarpus sp.
Coulter 203.

TCD: Symphoricarpus occidentalis, California (PL). TCD!

CARYOPHYLLACEAE

Arenaria sp.
Coulter 73.

TCD: Arenaria tricoidea Nutt., California (SL). TCD!
Coulter s.n.
TCD: Arenaria trinervia (SL). TCD!

Minuartia californica (A. Gray) Mattf.
Coulter s.n.
UC: Minuartia californica, California [no image], UC 973815.

Minuartia douglasii (Torr. & A. Gray) Mattf.
Coulter s.n.
TCD: Alside douglasii Fenzl, California (SL). TCD!

Minuartia tenella (J. Gay) Mattf.
Coulter 83.

TCD: Arenaria tenella Nutt., California (SL). TCD!
Coulter 84.
TCD: Arenaria tenella, California (SL). TCD! Note: on sheet with Coulter 83 above.

PBRU
Coulter s.n.
BM: Arenaria tenella, Grenieria tenella, California (PL). BM 1024705.

Sagina decumbens (Elliott) Torr. & A. Gray subsp. occidentalis (S. Watson) G.E. Crow
Coulter 82.
TCD: Sagina decumbens, Spergula saginoides, California (SL). TCD!

Sagina sp.
Coulter s.n.
UC: Sagina, California [no image]. UC 973814.

Silene antirrhina L.
Coulter 85.
TCD: Silene antirrhina L., California (SL). TCD!

Silene douglasii Hook. var. douglasii
Coulter 72.
TCD: Silene douglasii, San Miguel to San Barbara, California (SL). TCD!

†Spergularia rubra (L.) J. Presl & C. Presl
Coulter 77.
TCD: Arenaria rubra, California (SL). TCD!
Coulter 78.
TCD: Arenaria rubra, California (SL). TCD!
Coulter 79.
TCD: [no name], Monterey, California (SL). TCD! Note: on sheet with Coulter 77 above.
Coulter 80.
TCD: Arenaria rubra, Monterey, California (SL). TCD!
TCD: [no name], San Miguel to San Barbara (SL). TCD! Note: on sheet with Coulter 80 above.
Coulter 81.
TCD: [no name], San Miguel to San Barbara (SL). TCD! Note: on sheet with the two Coulter 80 above.
Coulter s.n.

†Stellaria media (L.) Vill.
Coulter 76.
TCD: Stellaria media, Monterey, California (SL). TCD!

Stellaria nitens Nutt.
Coulter 74.
Coulter s.n.
TCD: Stellaria nitens, Monterey to El Sur, California (SL). TCD!
TCD: [no name], Monterey, California (SL). TCD!

Chenopodiaceae

Arthrocenemum sp.
Coulter 691.
TCD: Arthrocenemum fraticosum var. californicum, California (PL). TCD!

Atriplex californica Moq.
Coulter 685.
TCD: Atriplex californica, California (PL). TCD!

Atriplex coulteri (Moq.) D. Dietr.
Coulter 687.

Atriplex sp.
Coulter 669.
TCD: Atriplex, California (PL). TCD!

*Beta vulgaris L. subsp. maritima (L.) Arcang.
Coulter 684.
TCD: Beta, California (PL). TCD!

Chenopodium californicum (S. Watson) S. Watson
Coulter 683.
BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00039619.
K: [no name] [no location] (SL). Annotation 1: Ch. californicum S. Wats.
Annotation 2: Blitum bonus-henrius Reichenb. var. erosus. K 000898460.

Chenopodium sp.
Coulter 688.
TCD: Chenopodium, California (PL). TCD!
Coulter 689.
TCD: Chenopodium, California (PL). TCD!
Coulter 690.
TCD: Chenopodium, California (PL). TCD!

*Dysphania anthelmintica (L.) Mosyakin & Clements
Coulter 683.

Suaeda sp.
Coulter 686.
TCD: [no name], California (PL). TCD!

Cistaceae

Helianthemum scoparium Nutt.
Coulter s.n.
TCD: Helianthemum scoparium, San Miguel to S. Barbara, California (SL). TCD!

Hel. scoparium, Monterey, California (SL). TCD!

Cleomaceae

Peritoma arborea (Nutt.) H.H. Ilis var.
Coulter 65.
K: Isomeris arborea Nutt., St. Diego (SL). [Filed as Cristataella arborea].
K 000643879.
Coulter s.n.

Convolvulaceae

Calystegia sp.
Coulter 554.
TCD: [no name], California (PL). TCD!

Cornaceae

Cornus sericea L. subsp. sericea
Coulter 553.
CUCURBITACEAE

*Ibervillea sonorae* (S. Watson) Greene
Coulter 200.
**TCD:** Sicydium lindeiheri, California (PL). **TCD**

*Maraah oregana* (S. Watson) Howell
Coulter 199.
**TCD:** Sicyos [Sicyos] oregana, California (PL). **TCD**

DATISCACEAE

*Datisc glomerata* (C. Presl) Baill.
Coulter 706.
**TCD:** [no name], California (PL). Written on sheet: *Tricerastes* Presl. **TCD**

ERICACEAE

*Arbutus menziesii* Pursh
Coulter 714.
**TCD:** *Arbutus menziesii*, California (SL). **TCD**

*Arctostaphylos crustacea* Eastwood subsp. *crinata* (J.E. Adams) V.T. Parker, M.C. Vasey & J.E. Keeley
Coulter s.n.
**UC:** *Arctostaphylos tomentosa* subsp. *crinata*, California [no image]. **UC**

*Arctostaphylos hookeri* G. Don subsp.
Coulter 243.
**GH:** *Arctostaphylos hookeri*, California [no image]. **GH**

*Arctostaphylos pumila* Nutt.
Coulter 240.
**TCD:** *Arbutus pungens?* California (PL). **TCD**

*Arctostaphylos sp.*
Coulter 243.
**TCD:** *Arbutus pungens*, California (PL). **TCD**

*Arctostaphylos tomentosa* (Pursh) Lindl. subsp.
Coulter 241.
**TCD:** *Arbutus tomentosa* β, El Sur, California (PL). **TCD**
**GH:** *Arctostaphylos tomentosa*, California [no image]. **GH**
**Coulter 241**.

**TCD:** *Arbutus tomentosus* β, California (PL). **TCD**
**Coulter 242.**

**TCD:** *Arbutus tomentosus* α, California (PL). **TCD**
**GH:** *Arctostaphylos tomentosa*, California [no image]. **GH**

**Coulter s.n.**
**BRU:** *Arbutus tomentosa*, California (PL, top line cut off). Annotation 1: Herbarium Olneyanum. **BRU**
**NY:** *Arbutus tomentosa* α, California (PL). Annotation 1: *A. tomentosa* Torr. & Gray, Fl. N. Amer. **NY**
**NY:** *Arbutus tomentosa* β, California (PL). **NY**
**NY:** *Arbutus tomentosa* β, California (PL). **NY**
**Note:** on sheet with Coulter s.n. above and filed as *Arctostaphylos vestita*.

*Gaultheria shallon* Pursh
Coulter 237.
**TCD:** *Gaultheria shallon*, California (PL). **TCD**
**BRU:** *Gaultheria shallon*, California (PL). **BRU**

**Coulter s.n.**
**TCD:** *Gaultheria shallon*, California (PL). **TCD**
**UC:** *Gaultheria shallon*, California [no image]. **UC**

**Vaccinium oatum Pursh**
Coulter 245.
**TCD:** *Vaccinium oatum*, California (PL). **TCD** [two sheets]
**GH:** *Vaccinium oatum*, California [no image]. **GH**

**Coulter s.n.**
**BRU:** *Vaccinium oatum*, California (PL). Annotation label: Herbarium Olneyanum. **BRU**
**NY:** *Vaccinium oatum*, California. [no image]. **UC**

EUPHORBIACEAE

*Croton californicus* Müll.
Coulter 666.
**TCD:** *Croton*, California (PL). Written on sheet: *Hendecandra* [sic]. **TCD**

*Euphorbia cf. melanadenia* Torr.
Coulter 673.
**TCD:** *Euphorbia*, California (PL). **TCD** Note: V. Steinmann referred image to *E. melanadenia* in 2016.

*Euphorbia spathulata* Lam.
Coulter 672.
**K:** *Euph. platyphylla* L., California (SL). Annotation 1: *Euphorbia spathulata* by Berry and Peirson in 2012. **K**
**Coulter 678.**
**TCD:** *Euphorbia*, California (PL). **TCD** Note: image identified by V. Steinmann in 2016.

**Coulter 679.**
**TCD:** [no name], California (PL). **TCD** Note: image identified by V. Steinmann in 2016.

FABACEAE

*Acmispon americanus* (Nutt.) Rydb. var. *americanus*
Coulter 427.
**TCD:** *Hosackia purshiana*, Monterey to San Miguel, California (SL). **TCD**


**Coulter 427.**
**TCD:** *Hosackia purshiana*, California (SL). **TCD**

**Coulter s.n.**
**K:** *Hosackia purshiana*, California (PL). **K**

**Acmispon cytisoides** (Benth.) Brouillet
Coulter 425.
**TCD:** *Hosackia cytisoides* Benth., California (SL). **TCD**
**Coulter s.n.**
**BM:** *Hosackia cytisoides* Benth., California (PL). **BM**

**Acmispon glaber** (Vogel) Brouillet var.
Coulter 424.
**K:** [no name], California (SL). Written on sheet: *Hosackia scoparia* T. & G. **K**

**Coulter s.n.**
**TCD:** *Hosackia scoparia* Nutt., California (SL). **TCD**

**Acmispon maritimus** (Nutt.) D.D. Sokoloff var.
Coulter 421.
**TCD:** [no name], California (SL). Annotation 1: I think all these n. 421 must be *Hosackia maritima* Nutt. though there are more leaflets than he describes. **TCD**
Astragalus asymetricus E. Sheld.
Coulter 342.

TCD: [no name], S. Miguel to San Barbara, California (SL). Annotation 1: Phacca densifolia var. [illegible]. TCD!

Astragalus crotalariae (Benth.) Torr.
Coulter 346.


Astragalus curtipes A. Gray
Coulter 453.


Astragalus didymocarpus Hook. & Arn. var.
Coulter 458.

TCD: Astragalus didymocarpus Hook. & Arn., California (SL). TCD!

Astragalus lentiginosus Douglas var. borreganus M.E. Jones
Coulter 431.

TCD: Astragalus coulteri sp. n., Monterey, California (SL). Annotation 1: Type material Astragalus coulteri Benth. by G. Wallace in 2017. TCD!
K: [no name], California (SL). Annotation 1: This is apparently part of type of A. coulteri Benth. by Barneby in 1962. K 00047311. Note: filed as Astragalus candidissimus, the other specimen on sheet.

Astragalus nuttallii (Torr. & A. Gray) J.T. Howell var.
Coulter 345.

TCD: [no name], Monterey to San Gabriel, California (SL). Annotation 1: Phacca densifolia Sm. var. on sheet: densifolia. TCD!

Astragalus sp.
Coulter 439.

TCD: Homolobos multiflorus Torr. et Gr. var. foliolis floribus numerosi, California (SL). TCD!

Dalea mollis Benth.
Coulter 430.


K: [no name], California (SL). Written on sheet: Dalea mollis Benth. K 000082207. [On sheet with Coulter 430 above]

Dalea mollis Benth.
Coulter 430.

TCD: Dalea mollis sp. n., California (SL). Annotation 1: Type material Dalea mollis Benth. by G. Wallace in 2017. TCD!

Hosackia crassifolia Bentham var. crassifolia
Coulter 428.


Hosackia gracilis Bentham.
Coulter 423.

TCD: Hosackia gracilis Bentham., Monterey, California (SL). Written on sheet: gracilis TCD!
Hosackia oblongifolia Benth. var. oblongifolia
Coulter s.n.

Hosackia stipularis Benth. var. stipularis
Coulter 441.
Coulter s.n.
TCD: Hosackia stipulacea, Monterey to El Sur, California (SL). TCD!

Lathyrus sp.
Coulter s.n.
TCD: Lathyrus venosus Muhl. var (SL). TCD!
TCD: Lathyrus venosus Muhl., California (SL). TCD!
TCD: Lathyrus venosus var. angustifolia, California (SL). TCD!

Lupinus affinis J. Agardh
Coulter 382.
Coulter 386.
TCD: Lupinus affinis Ag., Monterey to El Sur, California (SL). TCD!
UC: Lupinus affinis, California [no image]. UC 1713153.

Lupinus albifrons Benth. var.
Coulter 375, 390, 391.

K: Lupinus albifrons, California (PL). K 000829453.
Coulter 379, 390, 392, 395, 396.
TCD: Lupinus albifrons, Monterey, S. Miguel, S. Barbara, California (PL). K 000829453.
Coulter 390.
TCD: [no name], Monterey to S. Barbara (SL). Written on sheet: L. albifrons Benth. TCD!
Coulter 391.
TCD: [no name], Monterey to San Miguel (SL). Written on sheet: L. albifrons. TCD!
Coulter 392.
Coulter 395.
Coulter 396.
GH: Lupinus albifrons, California [no image]. Annotation 1: Lupinus albifrons var. eminens by Piper. GH 366709.
K: [no name], California (SL). Note on label: (Gordon). Written on sheet: albifrons. K 000829454.
Coulter s.n.
TCD: [no name], San Miguel to San Barbara (SL). Written on sheet: L. albifrons. TCD!
[Coulter s.n.]
TCD: [no name], San Miguel to San Barbara (SL). Written on sheet: L. albifrons. TCD! Note: on sheet with Coulter 391 [no name] above.

Lupinus albifrons Benth. var. douglasii (J. Agardh) C.P. Sm.
Coulter 384.
TCD: Lupinus douglasii Ag. scarcely different from L. albifrons, California (SL). TCD!
UC: Lupinus albifrons var. douglasii, California [no image]. UC 1713155.
Coulter 384, 394.
K: Lupinus douglasii Ag., Monterey, California (PL). K 000829310.
Coulter 394.
BRU: Lupinus douglasii, California (PL). Annotation 1: Herbarium Olneyanum Lupinus douglasii Agardh. BRU 00034813.
Coulter s.n.
TCD: Lupinus douglasii, California (PL). Written on sheet: L. douglasii. TCD!
TCD: [no name], California (SL). Written on sheet: Lupinus douglasii. TCD!
NY: Lupinus douglasii, California (PL). NY 02586457.

Lupinus arboreus Sims
Coulter 380.
GH: Lupinus arboreus, California [no image]. Annotation 1: Lupinus rivalaris. GH 00366755.

Lupinus benthamii Heller
Coulter 370.
TCD: Lupinus leptophyllus Benth., Monterey to San Miguel, California (SL). TCD!
TCD: Lupinus leptophyllus, California (SL). TCD!
GH: Lupinus leptophyllus, Monterey to San Miguel, California [no image]. Annotation 1: Lupinus benthamii by Dziekanowski. GH 00065559.

Lupinus bicolor Lindl.
Coulter 377.
TCD: Lupinus micranthus, Monterey to San Francisco, California (SL). TCD!
TCD: [no name], Monterey to San Miguel, California (SL). TCD!
TCD: [no name], San Miguel to San Barbara, California (SL). Annotation 1: Lupinus micranthus Douglas var. TCD!
Coulter s.n.
TCD: Lupinus bicolor Lindl., California (SL). TCD!
MEL: Lupinus polycarpos Greene, California [no image]. MEL 0308004a.
NY: Lupinus micranthus Lindl., California [no image]. NY 02599428.
NY: Lupinus micranthus Lindl., California [no image]. NY 02599540.
NY: Lupinus micranthus Lindl., California [no image]. NY 02599541.

Lupinus concinnus J. Agardh
Coulter 372.
TCD: Lupinus concinnus Ag., Monterey to S. Francisco, California (SL). TCD!
BRU: Lupinus concinnus Ag., California (PL). Annotation 1: Herbarium Olneyanum Lupinus concinnus Ag. BRU 00034794.


Coulter s.n.

TCD: [no name], California [no label]. Written on sheet: Lupinus concinnus Ag., TCD!


NY: Lupinus concinnus Ag., California (PL). NY 00015825.

UC: Lupinus concinnus, California [no image]. UC 973804.

Lupinus excubitus M.E. Jones var. hallii (Abrams) C.P. Sm. Coulter 394.

GH: Lupinus excubitus var. hallii, California [no image]. Annotation 1: Lupinus excubitus var. hallii by Smith in 1928. GH 00369017.

Coulter s.n.

TCD: [no name], California [no label]. Written on sheet: Lupinus concinnus Ag., TCD!

K: Lupinus excubitus var. hallii, California [no image]. Note on label: Ex Herb. Chapman.

Coulter s.n.

TCD: [no name], California [no label]. Written on sheet: Lupinus excubitus var. hallii by Smith in 1928. GH 00369018.

Lupinus hirsutissimus Benth. Coulter 373.

TCD: L. hirsutissimus B., Monterey to El Sur, California (SL). Written on sheet: L. hirsutissimus, TCD!

TCD: [no name], Monterey to San Miguel, California (SL). Written on sheet: L. hirsutissimus, TCD!


Coulter s.n.

TCD: Lupinus hirsutissimus Benth., California (SL). TCD!


Lupinus latifolius J. Agardh var. Coulter 382.

TCD: [no name], San Miguel to San Barbara, California (SL). Written on sheet: Lupinus affinis var. latifolius. TCD!

Coulter 383.

TCD: Lupinus cytisoides Ag., California (SL)!. TCD!

TCD: [no name], San Miguel to San Barbara [on sheet with L. cytisoides]. TCD!


UC: Lupinus latifolius, California. UC 00170322.

Coulter 387.

TCD: Lupinus affinis var. latifolia, California (SL). TCD!

Coulter 388.

TCD: Lupinus nanus Doug!. var. latifolia an sp. disticta?, S. Miguel to S. Barbara, California (SL). TCD!

[Coulter] 389.

TCD: [no name], California (SL). TCD! Note: on sheet with Coulter 387 and [Coulter s.n.] above.

Coulter s.n.


TCD: [no name], Monterey to El Sur (SL). TCD! Note: on sheet with Coulter 387 above.

UC: Lupinus latifolius, California [no image]. UC 973803.

Lupinus microcarpus Sims var. densiflorus (Benth.) Jeps. Coulter 371.

TCD: Lupinus densiflorus, My [= Monterey] to S. Francisco, California (SL). TCD!

Coulter 381.

TCD: Lupinus menziesii Ag., California (SL). Written on sheet: L. menziesii, TCD!


Coulter s.n.

TCD: [no name], Monterey to S. Miguel. TCD! Note: on sheet with Coulter 371.

Lupinus microcarpus Sims var. microcarpus Coulter 371.


Lupinus nanus Benth. Coulter 374.

TCD: [no name], San Miguel to San Barbara (SL). TCD!

Coulter 375.

TCD: L. nanus, Monterey to S. Francisco, California (SL). TCD! Note: on sheet with Coulter 374 above.

Coulter 376.

TCD: Lupinus nanus, San Miguel to San Barbara, California (SL). TCD!

Coulter 374, 375, 376.

K: Lupinus nanus Doug!, Monterey to S. Francisco, S. Miguel to S. Barba-

Coulter 374, 375.

K: [no name], California (SL). Written on sheet: L. nanus Doug!, Monterey to S. Francisco, S. Miguel to S. Barbara, California (PL). K 000829597.

Coulter s.n.

TCD: Lupinus nanus Doug!, California (SL). TCD! Note: on sheet with Coulter 374 and 375 above.

TCD: [no name], Monterey to San Miguel (SL). TCD! Note: on sheet with Coulter 376 above.


UC: Lupinus nanus, California [no image]. UC 973806.

Lupinus rivularis Lindl. Coulter 380.

TCD: Lupinus rivularis, California (SL). TCD!

TCD: [no name], Monterey to San Gabriel, California (SL). TCD! Note: on sheet with Coulter 380 above.

TCD: [no name], Monterey to San Miguel, California (SL). TCD! Note: on sheet with Coulter 385 L. rivularis.


UC: Lupinus rivularis, California [no image]. UC 00170316.

Coulter 385.


Coulter s.n.

TCD: [no name], Monterey to El Sur (SL). TCD! Note: on sheet with two Coulter 380 above.

Lupinus sparsiflorus Benth. Coulter s.n.

TCD: Lupinus sparsiflorus sp. n., California (SL). Note on label: was mixed with L. truncatus. Written on sheet: L. sparsiflorus Benth. TCD! [needs annotation as Isotype]

*Lupinus* sp.
Coulter 377.
K: *L. bicolor*? [just a fragment folder with pencil script below]. K 000829433.
Coulter 398.
K: [no name], California [no image]. K 000829365. Note: filed as *Lupinus bicolor*.
Coulter 394x.

**TCD:** *Lupinus ornatus* Dougl. *L. argenteus* Ag., California (SL). **TCD!**
Coulter s.n.

**UC:** *Lupinus*, California [no image]. UC 973805.

*Lupinus succulentus* K. Koch
Coulter 387.

*Lupinus truncatus* Nutt.
Coulter 369.

**TCD:** [no name], Monterey to S. Miguel (SL). Written on sheet: *L. truncatus*. **TCD!**
Coulter 378.

**TCD:** *Lupinus truncatus*, San Miguel to San Barbara, California (SL). Written on sheet: *Lupinus truncatus*. **TCD!**
K: [no name], San Miguel to San Barbara, California (SL). Written on sheet: *Lupinus truncatus*. **TCD!** Note: on sheet with 369 and 378 above.
Coulter 376x & 397.

**TCD:** *Lupinus truncatus*, California (SL). **TCD!**
Coulter 369, 378, 397.
Coulter s.n.

**BM:** [no name], California (PL). Annotation 1: *Lupinus truncata* Nutt.
BM 001042527.

*Lupinus varicolor* Steud.
Coulter 393.

**TCD:** *Lupinus versicolor* var., Monterey to El Sur, California (SL). **TCD!**
**UC:** *Lupinus varicolor*, California [no image]. UC 00170312.
[Coulter] 393x.

**TCD:** [no name], Monterey, [California] (SL). Written on sheet: *L. versicolor*. **TCD!**

**TCD:** *Lupinus versicolor* Lindl. (SL). **TCD!** [On sheet with Coulter 393x (no name) above]

*Medicago polymorpha* L.
Coulter 403.

**TCD:** [no name], San Miguel to San Barbara, California (SL). Annotation 1: *Medicago denticulata* Willd. **TCD!**

*Melilotus* sp.
Coulter 404 & 405.

**TCD:** *Melilotus parviflora* Desv., California (SL). **TCD!**

*Mimoso polymorpha* Benth.
Coulter s.n.


*Prosopis pubescens* Benth.
Coulter s.n.

**TCD:** *Prosopis pubescens* sp. n., Monterey to S. Miguel, California (SL). Annotation 1: Type material *Prosopis pubescens* Benth. by G. Wallace in 2017. **TCD!**

*Prosopis* sp.
Coulter s.n.

**TCD:** *Prosopis dalcis* Kunth, California (SL). **TCD!**

*Psorothamnus spinosus* (A. Gray) Barneby
Coulter s.n.

**TCD:** *Psoralea*, California (PL). **TCD!**

*Trifolium alboburpuraeum* Torr. & A. Gray
Coulter 417.

**TCD:** [no name], California (SL). Annotation 1: *Trifolium alboburpuraeum* T. & G. Written on sheet: *alboburpuraeum*. **TCD!**
Coulter s.n.

**TCD:** *Trifolium alboburpuraeum*, California (SL). **TCD!** Annotation 1: scarcely the same as *T. macraei*. **TCD!**

**BRU:** *Trifolium alboburpuraeum*, California (PL). Annotation 1: Herbarium Olenyanum *Trifolium alboburpuraeum* T. & G. **BRU** 00035603.

*Trifolium ciliolatum* Benth.
Coulter 412.
K: *Trifolium ciliolatum*, S. Miguel to S. Barbara, California (PL). Written on sheet: Type. **K** 001051116.
K: [no name], California (SL). Annotation 1: *Trifolium ciliolatum* Benth. in 1911. **K** 001051170.
Coulter s.n.

**TCD:** *Trifolium ciliolatum* sp. n. San Miguel to San Barbara, California (SL). Annotation 1: Type material *Trifolium ciliolatum* Benth. by G. Wallace in 2017. Written on sheet: *T. ciliolatum*. **TCD!**

*Trifolium depauperatum* Desv. var. *amplectens* (Torr. & A. Gray) McDermott
Coulter 416.

**TCD:** *Trifolium amplectens* Hook. & Arn. var., S. Miguel to S. Barbara, California (SL). Written on sheet: *trifolium amplectens*. **TCD!**
Coulter 416x.
Coulter 418.

**TCD:** *Trifolium amplectens*, California (SL). Written on sheet: *T. amplectens*. **TCD!**

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Plantae Coulterianae

[Coulter s.n.]

Trifolium willdenovii

TCD: [no name], Monterey to San Miguel, California (SL). Written on sheet: Trifolium amplexentcs. TCD! Note: on sheet with Coulter 416 above.

Trifolium fucatum Lindl.

Coulter 406.

TCD: Trifolium fucatum, San Miguel to S. Barbara (SL). Written on sheet: Trifolium fucatum. TCD!

Coulter s.n.


Trifolium gracilentum Torr. & A. Gray

Coulter 415.


Coulter s.n.

TCD: Trifolium gracilentum var. major, California (SL). Note on label (was mixed with 414). Written on sheet: gracilentum. TCD!

Trifolium microcephalum Pursh

Coulter 411 & 419.

TCD: Trifolium microcephalum Pursh, California (SL). Written on sheet: microcephalum. TCD!

Trifolium obtusiflorum Hook.

Coulter 410.


Trifolium variegatum Nutt. var.

Coulter 413.

TCD: Trifolium variegatum, S. Miguel to S. Barbara, California (SL). Annotation 1: Trifolium variegatum this was mixed with T. microcephalum. Written on sheet: Tr. variegatum. TCD!


Trifolium wildenowii Spreng.

Coulter 407.


Coulter 407 & 409.

TCD: Trifolium tridentatum, California (SL) [single label for both numbers]. TCD!

Coulter 408.

TCD: Trifolium tridentatum Lindl., Monterey to San Miguel, California (SL). TCD!

Trifolium wormskioldii Lehm.

Coulter 412.


Coulter s.n.

TCD: Trifolium fun briata Lindl. forma latifolia, California (SL). Written on sheet: Tr. fun briata. TCD!

Coulter s.n.

TCD: Trifolium fun briata Lindl., California (SL). Written on sheet: T. fun briata. TCD!

Vicia gigantea Hook.

Coulter 443.

K: [no name], California (SL). K 001051443.

Coulter s.n.


Vicia ludoviciana Torr. & A. Gray subsp. ludoviciana

Coulter 447.


†Vicia sativa L. subsp.

Coulter 445.

TCD: Vicia sativa L., S. Miguel to S. Barbara, California (SL). TCD!

Vicia sp.

Coulter s.n.

TCD: Vicia sparsifolia Nutt., California (SL). Note on label: not sufficient to ascertain with certainty. TCD!

FAGACEAE


Coulter 663.

TCD: Quercus densiflora Hook., California (PL). TCD! [two sheets]


Quercus agrifolia Née

Coulter 662.

TCD: Quercus agrifolia, California (PL). TCD! Note: may be mixed sheet.

Coulter s.n.

TCD: [no name], California (PL). TCD!

Quercus berberidifolia Liebm.

Coulter 661.

TCD: Quercus berberidifolia, California (PL). Annotation 1: Type material Quercus berberidifolia Liebmann by G. Wallace in 2017. TCD!

GH: Quercus agrifolia, California [no image]. GH 00344520.

**Quercus dumosa** Nutt.

*Coulter s.n.*

**GH:** Quercus dumosa, California [no image]. **GH 00344519.**

**Quercus engelmannii** Greene

*Coulter 659.

**TCD:** Quercus agrifolia?, California (PL). **TCD!**

**Quercus lobata** Née

*Coulter 660.

**TCD:** Quercus douglasii, California (PL). **TCD!**

**GH:** Quercus lobata, California [no image]. **GH 00343132.**

**Quercus sp.**

*Coulter s.n.*

**TCD:** [no name], California (PL). **TCD!**


**FRANKENIACEAE**

**Frankenia salina** (Molina) I.M. Johnst.

*Coulter 150.

**TCD:** Frankenia grandifolia Cham., California (PL). **TCD!**

**BRU:** Frankenia grandifolia, California (PL). Annotation 1: Herbarium Olneyanum Frankenia grandifolia C. & Schlcht. **PBRU 00041904.** Note: in BRU database as Coulter 157 in error.

**GH:** Frankenia salina, California [no image]. Annotation 1: Frankenia salina by Welsh in 1990. **GH 00376189.**


**GARRYACEAE**

**Garrya elliptica** Lindl.

*Coulter 647.

**TCD:** Garrya elliptica, California (PL). **TCD!** Note: two sheets, each with male and female plant specimens.

**GH:** Garrya elliptica, California [no image]. **GH 00401725.**

**US:** Garrya elliptica, California [no image]. **US 40349.**

*Coulter s.n.*

**BRU:** Garrya elliptica, California (PL). Annotation 1: Herbarium Olneyanum. **PBRU 00041894.**

**L:** Garrya elliptica, California [no image]. Annotation 1: Garrya elliptica by Wangerin in 1909. **L 1557438.**

**UC:** Garrya elliptica, California [no image]. **UC 973612.**


**GENTIANACEAE**

**Fraseria parryi** Torr.

*Coulter 558.

**TCD:** Fraseria [sic] n. sp., California (PL). Annotation 1: Fraseria selenodes Harv. & Gr., Torr. & Gray. Fl. N. Amer. **TCD!**


*Coulter s.n.*

**TCD:** Fraseria, California (PL). Annotation 1: Fraseria selenodes Harv. & Gr., Torr. & Gray, Fl. N. Amer. **TCD!**

**Zeltnera venusta** (A. Gray) G. Mans.

*Coulter 560.

**TCD:** Erythreae [sic] trichantha?, California (PL). Written on sheet: same as 562, 561 E. venusta. **TCD!**

*Coulter 561.


**GH:** Erythreae venusta, California (PL). Annotation 1: Centaurium calycosum (Buckl.) Fernald (TYPE of Erythrea venusta, A. Gray) by Martin in 1939. Annotation 2: Centaurium venustum (Gray) Robinson Coulter 561 is the TYPE of the basionym by Dunn in 1970. Written on sheet: Centaurium venustum (Gray) Robinson. **GH 00072252.** Note: in **GH** database as SYNTYPE.


*Coulter 562.

**TCD:** [no name], California (PL). Annotation 1: Erythreae venusta Harv. & Gr., Torr. & Gray, Fl. N. Amer. **TCD!**

**GH:** Erythreae venusta, California (PL). Annotation 1: Syn. F. N. Amer. Written on sheet: Flowers larger on pl. Trin. Coll. [Note: on sheet with Coulter 561 but no separate **GH** number; in database as **GH 00415266** and annotated as: Zeltnera venusta by Kittredge in 2013 but annotations not evident on specimen.

**K:** [no name], California (SL). Annotation 1: Centaurium venustum Rob. By W.L.J. [ = Jepson]. **K 000438601.** Note: attributed to Mexico in **K** database in error.


**GERANIACEAE**

**Erodium cicutarium** (L.) Aiton

*Coulter s.n.*

**TCD:** Erodium cicutarium, San Miguel to S. Barbara, California (SL). **TCD!**


**GROSSULARIACEAE**

**Ribes aureum** Pursh var.

*Coulter s.n.*

**TCD:** Ribes tenuiflorum Lindl., California (PL). **TCD!** [two sheets]

**TCD:** Ribes tenuiflorum Lindl., S. Miguel, California (PL). **TCD!**

**BRU:** Ribes tenuiflorum Lindl., California (PL). Annotation 1: Herbarium Olneyanum Ribes tenuiflorum Lindl. **PBRU 00030912.**

**GH:** Ribes tenuiflorum, California (PL). **GH 363959.**

**GH:** [no name], California (PL). **GH 363960.**

*Coulter s.n.*

**UC:** Ribes aureum, California [no image]. **UC 973799.**

**Ribes californicum** Hook. & Arn. var.

*Coulter 228x.

**K:** R. occidentale California (Douglas), intermediate with R. occidentale (SL). **K 00076274.**

*Coulter 233.

**BRU:** Ribes occidentale Hook. & Arn., California (PL). Annotation 1: Herbarium Olneyanum Ribes occidentale Hook. & Arn. **PBRU 00030876.**

**GH:** Ribes californicum, California [no image]. **GH 00380021.**

**K:** R. (ribes) occidentale, “California (Douglas) Dr. Coulter” (SL). **K 000762745.**

*Coulter s.n.*

**TCD:** Ribes occidentale, California (PL). **TCD!**

**Ribes divaricatum** Douglas var.

*Coulter s.n.*

**TCD:** Ribes divaricatum, Monterey, California (SL). **TCD!**

**TCD:** Ribes divaricatum, California (PL). **TCD!**

**TCD:** Ribes villosum Nutt., San Miguel to San Barbara, California. Note on label: spines often but one, sometimes 3, the lateral small (SL). **TCD!**

**TCD:** Ribes villosum Nutt., California (PL). **TCD!**

**TCD:** Ribes villosum, California (PL). Written on sheet: Ribes divaricatum. **TCD!**
**Plantae Coulterianae**

**Coulter 229**

**Ribes divaricatum** Douglas var. pubiflorum Koehne

*GH:* Ribes divaricatum var. pubiflorum, California [no image]. Annotation 1: Herbarium Olneyanum Ribes divaricatum. *PBRU* 00030667.

**Ribes divaricatum** Sm. var.


**Ribes malvaceum** Sm. var.

*GH:* Ribes malvaceum, California [PL]. *TCD!*

**Ribes menziesii** Pursh var. menziesii


**Ribes sanguineum** Pursh var. glutinosum (Benth.) Loudon

*GH:* Ribes glutinosum, California (PL). Written on sheet: Ribes menziesii. *TCD!*

**Ribes speciosum** Pursh

*GH:* Ribes speciosum, California (PL). *TCD!*

**Ribes sp.**

*GH:* Ribes brevipes MS n. sp., Monterey to San Miguel, California (SL). *TCD!*

**Juglandaceae**

**Juglans californica** S. Watson

*GH:* Rhus, California (PL). *TCD!*

**Krameria**

**Krameria erecta** Wild., in Schult. & Schult. f.

*GH:* Krameria erecta, California (SL). Note: Gray (1852, p. 42) mentions having seen this specimen along with an original specimen of Bentham's *Krameria parvifolia.* The Coulter 71*. The specimen was difficult to locate because it did not appear in the *K* database and shares the same accession number as the co-mounted Barclay specimen from Magdalena Bay, Mexico. Based on the text in Gray (1852, p. 42) and Bentham (1844, p. 6) the Barclay specimen is likely an isotype of *Krameria parvifolia* Bentham.

**Lamiaceae**

**Lepechinia calycina** (Benth.) Munz


**Monardella** brevipes A. Gray subsp.

*GH:* Monardella brevipes, California (PL). *TCD!*

**Monardella undulata** Bentham. subsp. crispa (Elmer) Elvin & Sanders


**Salvia apiana** Jeps.

*GH:* Salvia apiana, California [no image]. *GH* 00403231.

**Salvia carduacea** Bentham.


**Salvia columbariae** Bentham.

*GH:* Salvia columbariae, California [no image]. *GH* 00403293.

**Juglandaceae**

**Juglans californica** S. Watson

*GH:* Rhus, California (PL). *TCD!*
Salvia leucophylla Greene  
Coulter 540.  
TCD: Audibertia nivea Benth., California (PL). TCD!  
GH: Salvia leucophylla, California [no image]. Annotation 1: Salvia leucophylla by Epling. GH 403371.  

Salvia mellifera Greene  
Coulter 535.  
TCD: Audibertia stachyoides, California (PL). TCD!  
GH: Salvia mellifera, California [no image]. GH 00403454.

Salvia spathacea Greene  
Coulter 526.  
TCD: Audibertia grandiflora, California (PL). TCD!  
GH: Salvia spathacea, California [no image]. GH 00403510.

Scutellaria tuberosa Benth.  
Coulter 524.  
TCD: Scutellaria tuberosa, California (PL). TCD!  
Coulter s.n.  

Stachys bullata Benth.  
Coulter 531.  
TCD: Stachys bullata, California (PL). TCD!  

Stachys chamissonis Benth.  
Coulter 533.  
TCD: Stachys chamissonis Benth., California (PL). TCD!  
TCD: Trichostema lanceolatum Benth.  
Coulter 528.  
TCD: Trichostema lanceolatum, California (PL). TCD!  
GH: Trichostema lanceolatum, California [no image]. Annotation 1: Trichostema lanceolatum by Lewis in 1941. GH 00402432.

LOASACEAE  
Mentzelia albicaulis (Hook.) Torr. & A. Gray  
Coulter 174.  
TCD: Bartonia albicaulis?, California (PL). TCD!  
BM: Mentzelia, California [no image]. BM 000929395.

Mentzelia gracilenta Torr. & A. Gray  
Coulter 165.  
TCD: Mentzelia gracilenta, California (PL). TCD!  
Coulter 171.  

Mentzelia sp.  
Coulter 163.  
TCD: Mentzelia, California (PL). TCD!  
Coulter s.n.  
TCD: Mentzelia, California (PL). TCD!  
TCD: Mentzelia, California (PL). TCD!

LYTHRACEAE  
Lythrum californicum Torr. & A. Gray  
Coulter 149.  

MALVACEAE  
Abutilon sp.  
Coulter 105.  
TCD: Abutilon, California (SL). TCD!

Anoda cristata (L.) Schltdl.  
Coulter 98.  
TCD: Anoda cristata? , Sida sp. nov.?, San Gabriel, California (SL). TCD!

Malacothamnus fasciculatus (Torr. & A. Gray) Greene var.  
Coulter 671.  

Malva assurgentiflora (Kellogg) M.F. Ray  
Coulter s.n.  
TCD: Lavatera, California (SL). TCD!  

Malvella leprosa (Ortega) Krapov.  
Coulter 109.  
TCD: Malva obtusa Tor. & Gr., Monterey (SL). TCD!

Malvella sp.  
Coulter 97.  
TCD: Malva debilis Harv., Monterey, California (SL). TCD!  
Coulter 101.  
TCD: Malva new?, California (PL). TCD!  
Coulter 104.  
TCD: Malva, Monterey, California (SL). TCD!

Malvella leprosa (Ortega) Krapov.  
Coulter 109.  
Coulter 671.  
TCD: Sida hederacea?, California (PL). TCD!

Malva leprosa, California [no image]. Annotation 1: Sida leprosa var. hederacea by Clement in 1948. GH 00385052.  

Sidalcea malachroides (Hook. & Arn.) A. Gray  
Coulter 107.  

Sidalcea malviflora (DC.) A. Gray subsp. malviflora  
Coulter 102.  
TCD: Sida malviflora? or S. oregana, California (PL). Written on sheet: Sidalcea. TCD!

Coulter 103.
Boerhavia

Sphaeralcea coulteri (S. Watson) A. Gray
Coulter 96.

Sphaeralcea coulteri (S. Watson) A. Gray
Coulter 96.

Sphaeralcea coulteri (S. Watson) A. Gray
Coulter 96.

Sphaeralcea coulteri (S. Watson) A. Gray
Coulter 96.

Sphaeralcea coulteri (S. Watson) A. Gray
Coulter 96.

Mirabilis laevis (Benth.) Curran var. crassifolia (Choisy) Spellenb.
Coulter 600.

Mirabilis multiflora (Torr.) A. Gray var.
Coulter 559.
TCD: Lysianthus?, California (PL). Written on sheet: Mirabilis, Quamocladium multiflorum Torr. TCD!

OLEACEAE

Fraxinus dipetala Hook. & Arn.
Coulter 563.
TCD: Fraxinus dipetala, California (PL). TCD!
GH: Fraxinus dipetala, California [no image]. GH 00401140.

ONAGRACEAE

Camissonia contorta (Douglas) Kearney
Coulter 172.
TCD: Oe. contorta or dentata, California (SL). TCD!

Camissonia sp.
Coulter 180.
TCD: Oenothera n. sp., Monterey, California (SL). TCD!

Camissonia strigulosa (Fisch. & C.A. Mey.) P.H. Raven
Coulter 160.
TCD: Oe. dentata, California (SL). TCD! Note: Coulter 172 on same label.

Camissoniopsis bistorta (Torr. & A. Gray) W.L. Wagner & Hoch
Coulter 158.
TCD: [no name], California (SL). TCD!
K: [no name], California (SL). K 000742400.

Camissoniopsis cheiranthifolia (Spreng.) W.L. Wagner & Hoch subsp. suffrutcosa (S. Watson) W.L. Wagner & Hoch
Coulter 152.
Coulter 153.
Coulter 164.
TCD: Oe. viridescens, California (SL). TCD!

Camissoniopsis sp.
Coulter 152.
TCD: Oenothera, California (SL). TCD!
Coulter 168.
TCD: [no name], California (SL). TCD!
K: Oe. lepida, California (SL). K 000712412.

Coulter 157.
TCD: Oenothera (Godetia), California (SL). TCD!

NYCTAGINACEAE

Abronia sp.
Coulter 581.
TCD: Abronia, S. Miguel to S. Barbara, California (PL). TCD!
Coulter s.n.
TCD: Boerhavia, California (PL). TCD!

Coulter s.n.
TCD: Boerhavia, California (PL). TCD!
**Orobanchaceae**

*Castilleja affinis* Hook. & Arn. subsp.
Coulter 613.  

K: [no name], California (SL). K 000195546. Note: identified in K database as *Castilleja purpurea* in error and filed as that species because mounted on sheet with type material of that species.

*Castilleja affinis* Hook. & Arn. subsp. *affinis*
Coulter 610.  

**Eremothera boothii** (Douglas) W. Wagner & Hoch subsp. *deorticans*  
(Hook. & Arn.) W. L. Wagner & Hoch  
Coulter 151.  
*TCD: Eremothera gauraeflora*, California (SL). TCD!  
Coulter s.n.  
*TCD: Eremothera boothii*, California (SL). TCD!

*Ludwigia* sp.
Coulter 175.  
*TCD: Justicia*, Monterey (SL). TCD!

**Oenothera elata** Kunth subsp. *hookeri* (Torr. & A. Gray) W. Dietr. & W.L. Wagner  
Coulter 155.  
*TCD: Oenothera hookeri* Tor. & Gr., California (SL). TCD!  

**Oenothera sp.**
Coulter 156.  
*TCD: [no name]*, California (SL). TCD!  
Coulter 166.  
*TCD: Oenothera*, California (PL). TCD!  

**Taraxia ovata** (Torr. & A. Gray) Small  
Coulter 179.  
*TCD: Oenothera ovata*, California (PL). TCD!

**Tetrapeteron graciliflorum** (Hook. & Arn.) W.L. Wagner & Hoch  
Coulter 173.  
*TCD: Oenothera graciliflora*, S. Francisco, California (PL). TCD!  
*TCD: [no name]*, S. Miguel, California (PL). TCD!  

**Orthocarpus densiflorus**  
Torr. & Gray, Fl. N. Amer. TCD!

K: *Oe. graciliflora* Hook., California (SL). K 000195546. Note: identified in K database as *Castilleja purpurea* in error and filed as that species because mounted on sheet with type material of that species.

**Castilleja densiflora** Benth. subsp. *densiflora*
Coulter 609.  

**Castilleja exserta** (A. Heller) T.I. Chuang & Heckard subsp.
Coulter 608.  
BRU: [no name], California (PL). Annotation 1: *Herbarium Olneyanum*.

**Castilleja folidiosa** Hook. & Arn.
Coulter 617.  
*TCD: Castilleja foliosa* [sic], California (PL). Annotation 1: *C. foliosa* Torr. & Gray, Fl. N. Amer. TCD!

**Castilleja folidiosa** Hook. & Arn. subsp. *folidiosa*
Coulter 618.  

**Castilleja latifolia** Hook. & Arn.
Coulter 620.  

**Castilleja miniata** Hook. subsp. *miniata*  
Coulter 621.  
K: [no name], California (SL). Written on sheet: *Cast. pallida var. miniata*. K 000195527.

**Castilleja sp.**
Coulter 610.  
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**Plantae Coulterianae**

**Coulter s.n**

**K.:** [no name], California (SL). K 000195510. [Filed as Castilleja angustifolia]

**Coulter 610x.**

**K.:** [no name], California (SL). Written on sheet: parvifolia Bong. K 000195511.

**Coulter 615.**

**TCD: Castilleja hispida, California (PL). Annotation 1: C. hispida Torr. & Gray, Fl. N. Amer. TCD!**

**K.:** [no name], (SL). K 000195547. Note: identified in K database as Castilleja purpurea in error and filed as that species because mounted on sheet with type material of that species; on sheet with Coulter 613 above.

**Coulter 619.**

**TCD: Castilleja hispida, California (PL). Annotation 1: C. hispida Torr. & Gray, Fl. N. Amer. TCD!**

**Coulter 621.**

**TCD: Castl. hispida, California (PL). Annotation 1: C. hispida Torr. & Gray, Fl. N. Amer. TCD!**

**Coulter 622.**

**TCD: Castl. hispida, El Sur, California (PL). Annotation 1: C. hispida Torr. & Gray, Fl. N. Amer. TCD!**

**Orobanche cooperi (A. Gray) A. Heller**

**Coulter 646.**

**TCD: Orobanche ludoviciiana, California (PL). TCD!**

**Pedicularis densiflora Hook.**

**Coulter 665.**

**TCD: Pedicularis densiflora, California (PL). TCD!**

**TCD: Pedicularis densiflora, California (PL). Annotation 1: P. densiflora Torr. & Gray, Fl. N. Amer. TCD!**

**Coulter 606.**


**BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00043940. Note: BRU database lists as 101 in error.**

**K: Pedicularis attenuata, California (SL). Annotation 1: TYPE SPECIMEN. K 000741011.**

**Coulter s.n.**

**TCD: Pedicularis attenuata, California (PL). TCD!**

**NY: Pedicularis attenuata Benth., California (PL). Written on sheet: ISOTYPE. NY 00090880.**

**UC: Pedicularis densiflora, California [no image]. UC 973627.**

**Triphysaria eriantha (Benth.) T.I. Chuang & Heckard subsp. eriantha**

**Coulter 612.**

**TCD: Orthocarpus erianthus, California (PL). Annotation 1: O. erianthus Torr. & Gray, Fl. N. Amer. TCD!**

**BRU: Orthocarpus, California [no image]. PBRU 00045001.**

**E: Triphysaria eriantha var. eriantha, California [no image]. E 272870.**

**Coulter s.n.**

**UC: Triphysaria eriantha subsp. eriantha, California [no image]. UC 973623.**

**Triphysaria pusilla (Benth.) T.I. Chuang & Heckard**

**Coulter 611.**


**BRU: Orthocarpus, California (PL). PBRU 00045000.**

**E: Triphysaria pusilla, California [no image]. E 272567.**

**Coulter s.n.**

**UC: Triphysaria pusilla, California [no image]. UC 973622.**

**PAEO NIACEAE**

**Paeonia californica Nutt.**

**Coulter 17.**

**TCD: [no name], Monterey to San Miguel, California (SL). Written on sheet: Paeonia brownii and P. californica. TCD!**

**Coulter s.n.**

**TCD: Paeonia californica Monterey to San Francisco, California (SL). Written on sheet: Paeonia brownii and P. californica. TCD!**

**TCD: [no name], Monterey to San Miguel, California (SL). Written on sheet: P. brownii. TCD!**

**BRU: Paeonia californica, California (PL). Annotation 1: Herbarium Olneyanum Paeonia californica. PBRU 00031011.**

**UC: Paeonia californica, California [no image]. UC 973816.**

**PAPAVERACEAE**

**Argemone munita Durand & Hilg.**

**Coulter 18.**

**TCD: Argemone mexicana, Monterey, California, 1832 (SL). TCD!**

**Coulter s.n.**

**TCD: [no name], Monterey (SL). TCD!**

**Dendromecon rigidum Benth.**

**Coulter 23.**

**BRU: Dendromecon rigidum, California (PL). Annotation 1: Herbarium Olneyanum Dendromecon rigidum Benth. PBRU 00029201.**

**Coulter s.n.**

**TCD: [no name], between San Miguel & San Barbara, California, 1832 (SL). TCD!**

**TCD: [no name], Monterey California (SL). Written on sheet: Dendromecon rigidum. TCD!**

**TCD: [no name], Between Monterey & El Sur, California, 1832 (SL). TCD!**

**E: Dendromecon rigidum, California [no image]. E 00060071.**

**GH: Dendromecon rigidum, California [no image]. Annotation 1: Dendromecon rigidum by Klier in 1977. GH 381412.**

**K: Dendromecon rigidum, California (PL). K 00010746.**

**UC: Dendromecon rigidum, California [no image]. UC 973617.**

**Ehrendorferia chrysanth (Hook. & Arn.) Rylander**

**Coulter 52.**


**Eschscholzia caespitosa Benth.**

**Coulter 24.**

**TCD: Ch[ryseis] caespitosa?, Monterey to San Francisco, California, 1832 (SL). Written on sheet: Ch[ryseis] tenuifolia Benth. TCD!**


**Coulter 24*.**

**TCD: Ch[ryseis] caespitosa Lindl., Monterey to San Miguel, California (SL). TCD!**

**Coulter s.n.**

**K: [no name], California [script on sheet]. Annotation 1: Eschscholzia tenuifolia Benth. [ = E. caespitosa sensu lat.] by Ernst in 1964. K 000653325.**

**Eschscholzia californica Cham.**

**Coulter 25.**

**TCD: Ch[ryseis] douglasii H. & A., Monterey, California, 1832 (SL). TCD!**

Eschscholzia hypecoides Benth.


ESCHSCHOLZIA HYPECOIDES BENTH.

TCD: [no name], Monterey to San Francisco, California (SL). Written on sheet: **Echl. [sic] hypecoides** B[enth.]. TCD!

K: Chryseis pilosa [crossed out] **hypecoides** var., California (SL). K 000304219. Note: on sheet with Coulter 24x above.

Coulter 24x.

TCD: [no name], California (SL). Written on sheet: **E. hypecoides**. TCD!

Coulter s.n.


Hesperomecon linearis (Benth.) Greene

Coulter s.n.


PH: Platy stigma lineare Benth., California (PL). Annotation 1: Hesperomecon linearis (Benth.) Greene by Ernst in 1968. PH 00006545.

UC: Platy stigma lineare, California (PL). UC 973615.

Popaver heterophyllum (Benth.) Greene

Coulter 19.

TCD: [no name], Monterey & San Francisco, California (SL). Written on sheet: *Meconopsis heterophylla*. TCD!

K: Meconopsis heterophylla, California, 1832 (SL). Written on sheet: *Meconopsis heterophylla*. TCD!

Coulter s.n.

TCD: [no name], California (SL). Written on sheet: *Meconopsis heterophylla*. TCD!


UC: Stylomecon heterophylla, California (PL). UC 973614.

Platystemon californicus Benth.

Coulter 22.


Coulter s.n.

BRU: Platystemon californicum, Monterey, California, 1832 (SL). TCD!

TCD: [no name], Monterey to San Miguel, California, 1832 (SL). TCD!

TCD: Platystemon californicum, between San Miguel & San Barbara, California, 1832 (SL). TCD! Note: on sheet with Coulter s.n. [no name] above.

TCD: [no name], Monterey, California, 1832 (SL). Written on sheet: *Platystemon californicum*. TCD!


GH: Platystemon californicus, California [no image]. GH 00295021.

UC: Platystemon californicus, California [no image]. UC 973616.

Romneya coulteri Harv.

Coulter 20.


Coulter s.n.

TCD: Romneya coulteri Harv., California (PL, top line cut off). TCD 0016618!


MIMULUS AURANTIACUS Curtis var.

Coulter 638.


GH: *Mimulus aurantiacus* var. pubescens, California [no image]. Annotation 1: *Mimulus aurantiacus* var. pubescens by Thompson in 1993. GH 00549472.

Coulter 639.


Coulter 641.

TCD: Diplacus glutinosus, California (PL). Annotation 1: Diplacus glutinosus Torr. & Gray, Fl. N. Amer. TCD!


Coulter 642.


PHRYMACEAE

Mimetanthe pilosa (Benth.) Greene

Coulter 623.

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. [Filed as *Herpestis*]. PBRU 00046655.

**MIMULUS AURANTIACUS CURTIS var.**

Coulter 638.


Coulter 641.

TCD: Diplacus glutinosus, California (PL). Annotation 1: Diplacus glutinosus Torr. & Gray, Fl. N. Amer. TCD!


Coulter 642.

Note: K database lists as Coulter s.n. and J.M. Coulter as collector in error.

Mimulus aurantiacus Curtis var. puniceus (Nutt.) D.M. Thomps.
Coulter 642.  
TCD: Diplacus gluttonus, California (PL). Annotation 1: D. gluttonus β puniceus Torr. & Gray. FL. N. Amer. TCD!

Mimulus brevipes Benth.
Coulter 640.  

Mimulus cardinalis Benth.
Coulter 637.  
TCD: Mimulus cardinalis, California (PL). Annotation 1: M. cardinalis Torr. & Gray. FL. N. Amer. TCD!

Mimulus douglasii (Benth.) A. Gray
Coulter 636.  
TCD: [no name], California (PL). TCD!  

coulter s.n.

UC: Mimulus douglasii, California [no image]. UC 973626.

Mimulus fremontii (Benth.) A. Gray var.
Coulter 631.  
TCD: Euanthus fremontii β major, California (PL). TCD!  

Mimulus guttatus DC.
Coulter 623.  
BRU: [no name], California (PL). [Not sure of genus, pedicels flexuous]. PBRU 00046655.

Coulter 643.  
TCD: Mimulus luteus, Monterey to S. Gabriel, California (PL). TCD!

Coulter 644.  
TCD: Mimulus luteus, Mimulus parviflorus, California (PL). Written on sheet: M. luteus A. Gr. TCD!

Mimulus tricolor Lindl.
Coulter 614.  
TCD: Euanthus coulteri, California (PL). TCD!

PLANTAGINACEAE

Antirrhinum coulterianum A. DC.
Coulter 607.  


Antirrhinum nuttallianum A. DC. subsp.
Coulter 599.  


Collinsia heterophylla Graham var.
Coulter 602.  
TCD: Collinsia bicolor Benth., California (PL). TCD!  
BRU: Collinsia, California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00046768.

Coulter s.n.

UC: Collinsia heterophylla, California [no image]. UC 973625.

Collinsia parryi A. Gray
Coulter 597.  
GH: Collinsia parryi, California [no image]. Annotation 1: Collinsia parryi by Newsom in 1927. GH 00365623.

Collinsia parviflora Lindl.
Coulter 604.  
TCD: Collinsia parviflora, California (PL). Annotation 1: Collinsia parviflora Torr. & Gray, FL. N. Amer. TCD!

Collinsia sparsiflora Fisch. & C.A. Mey. var.
Coulter 597.

TCD: Collinsia sparsiflora, California (PL). Annotation 1: Collinsia sparsiflora F. & Meyer. TCD!

Collinsia sparsiflora Fisch. & C.A. Mey. var. collina (Jeps.) Newsom
Coulter 604.


UC: Collinsia sparsiflora var. collina, California [no image]. UC 973624.

Keckiella antirrhinoide (Benth.) Straw var. antirrhinoide
Coulter 633.


GH: Keckiella antirrhinoide, California [no image]. Annotation 1: Keckiella antirrhinoide by Michener in 1984. GH 00365676. [This is type material]


Keckiella corymbosa (A. DC.) Straw
Coulter 629.


BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00042376. [Name listed as Ehretia in BRU database]
**Coulter 569** *Coulter 630* Benth.

**Coulter 568** *Coulter 572* Plantago

**Coulter 616** *Mohavea confertiflora* (A. DC.) A. Heller

**Coulter 626.** *Penstemon heterophyllus* Lindl. var.

**Coulter 635.** *Penstemon centranthifolius* Benth. ex DC. by G. Wallace in 2016. Written on sheet: *Mohavea viscosa Gray*. **TCD!**

**K:** *Mohavea confertiflora*, California (SL). Annotation 1: TYPE SPECIMEN. K 00079975. [As Schweinfurthia confertiflora]

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**Penstemon centranthifolius** Benth.

**TCD:** Penstemon centranthifolius, California (PL). Annotation 1: Penstemon centranthifolius* Torr. & Gray. Fl. N. Amer. **TCD!**

**Coulter 635.**

**TCD:** Penstemon centranthifolius, California (PL). Annotation 1: Penstemon centranthifolius* Torr. & Gray. Fl. N. Amer. **TCD!**

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**Penstemon heterophyllus** Lindl. var.

**Coulter 626.**

**BRU:** *Cocoeba multifida*, California (PL). Annotation 1: Herbarium Olneyanum *Cocoea multifida*. **PBRU** 00046670.

**Coulter 632.**

**TCD:** Penstemon heterophyllus (SL). Note on label: The form with the narrow calyx (α Hook. & Arn.). Torr. & Gray, Fl. N. Amer. **TCD!**

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**Platago major** L.

**Coulter 571.**

**TCD:** [no name], California (PL). Annotation 1: Platago major* L. by Parnell in 2002. **TCD!**

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**Plantago sp.**

**Coulter 568.**

**TCD:** *Pl. mexicana*, California (PL). **TCD!**

**Coulter 568 bis.**

**TCD:** [no name], California (PL). **TCD!**

**Coulter 569.**

**TCD:** *Pl. mexicana*, California (PL). **TCD!**

**BRU:** Plantago mexicana, California (PL). Annotation 1: Herbarium Olneyanum. **PBRU** 00046838.

**Coulter 569s.**

**TCD:** [no name], California (PL). **TCD!**

**Coulter 570.**

**TCD:** *Pl. mexicana*, California (PL). **TCD!**

**Coulter 572.**

**TCD:** *Pl. mexicana*, California (PL). **TCD!**

**Coulter 573.**

**TCD:** *Pl. mexicana*, California (PL). **TCD!**

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**Platanus racemosa** Nutt.

**Coulter 703.**

**TCD:** Platanus Nutt., S. Miguel to S. Barbara, California (PL). Written on sheet: Bot. Beechey. **TCD!**

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**PLUMBAGINACEAE**

**Armeria maritima** (Mill.) Willd. subsp. *californica* (Boiss.) A.E. Porsild

**Coulter 577.**


**BRU:** Armeria, California (PL). Annotation 1: Herbarium Olneyanum. **PBRU** 00041054.

**GH:** Armeria maritima subsp. californica, California [no image]. Annotation 1: Armeria maritima var. californica by Lawrence in 1940. **GH** 00376103. Note: this is type material of Armeria maritima var. californica.

**K:** [no name], California (SL). Annotation 1: TYPE *Armeria andina* var. californica. **K** 000724630.

**Coulter s.n.**

**UC:** Armeria maritima subsp. californica, California [no image]. **UC** 973611.

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**POLEMONIACEAE**

**Allophyllum glutinosum** (Benth.) A.D. Grant & V.E. Grant

**Coulter 461.**

**TCD:** Collomia glutinosa Benth., Monterey (SL). Annotation 1: Collomia glutinosa Torr. & Gray, Fl. N. Amer. **TCD!**

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**Eriastrum densifolium** (Benth.) H. Mason subsp. elongatum (Benth.) H. Mason

**Coulter 453.**

**TCD:** Gilia (*Huegelia*) elongata, California (PL). Ex is crossed out. Annotation 1: Eriastrum densifolium subsp. elongatum by De Groot in 2007. **TCD!**

**BRU:** Gilia elongata, California (PL). Annotation 1: Herbarium Olneyanum. **PBRU** 00042680.

**GH:** [no name], California [no image]. **GH** 00303692.

**Coulter s.n.**

**BM:** Huegelia elongata, California (PL). **BM** 000939588.

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**Eriastrum virgatum** (Benth.) H. Mason

**Coulter 452.**

**TCD:** Gilia (*Huegelia*) virgata B., California (PL). **TCD!**

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**Gilia achilleifolia** Benth. subsp.

**Coulter 468.**


**BRU:** Gilia capitata, California (PL). Annotation 1: Herbarium Olneyanum Gilia capitata Douglas. **PBRU** 00042849.

**Coulter 468x.**

**TCD:** Gilia capitata, California (PL). Annotation 1: Gilia achilleifolia Benth. by M. Porter in 2007. **TCD!**

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**Gilia achilleifolia** Benth. subsp. *multicaulis* (Benth.) V.E. Grant & A.D. Grant

**Coulter 466.**

**TCD:** [no name], California (PL). Annotation 1: Gilia multicaulis B. depauperata. Torr. & Gray. Fl. N. Amer. **TCD!**

**GH:** Gilia achilleifolia subsp. multicaulis, California [no image]. **GH** 01083906.

**K:** [no name], California (SL). Written on sheet: G. multicaulis var. tenera A. Gr. **K** 000769103.
Coulter s.n. Benth.

Coulter 460

Coulter 457

Coulter 455

Coulter 459

Coulter 461

Coulter 463

Coulter 464

Coulter 465

Coulter 452

Coulter 461

Coulter 464

Coulter 463

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Coulter 463

Coulter 462


TCD: Gilia, California (PL). Written on sheet: multicaulis. TCD!

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00043125.


K: [no name], California (SL). Written on sheet: G. multicaulis var. terna A. Gr. K 000769104.

Coulter s.n.


Gilia sp.

Coulter 474.

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00043126.

Langoisia setossissima (Torr. & A. Gray) Greene

Coulter 449

TCD: Navarretia setossissima, Aegochloa, California (PL). TCD!

Leptosiphon androsaceus Benth.

Coulter 460.


Coulter s.n.


Leptosiphon floribundus (A. Gray) J.M. Porter & L.A. Johnson subsp. floribundus

Coulter 454.


GH: [no name], fragment folder only (SL). Annotation 1: Linanthus floribundus (Gray) Greene ex Milikan subsp. floribundus HOLOTYPE by Patterson in 1974. GH 78872. Note: listed as LECTOTYPE in GH database.


Leptosiphon grandiflorus Benth.

Coulter 455.


GH: Linanthus grandiflorus, San Miguel to Santa [likely corrected from original “San”] Barbara, California [no image]. GH 00385233.

Leptosiphon liniflorus (H. Mason) R. Battaglia

Coulter 452.

TCD: Gilia pharmacoideas Benth., California (PL). TCD!

GH: Leptosiphon liniflorus, California [no image]. GH 1105541.

Leptosiphon parviflorus Benth.

Coulter 461.

TCD: Gilia parviflora?, California (PL). Written on sheet: G. micrantha. TCD!

BRU: Gilia parvifolia [sic], California (PL). Annotation label: Herbarium Olneyanum. PBRU 00042188.

Coulter s.n.

UC: Linanthus parviflorus, California [no image]. UC 973812.

Linanthus californicus (Hook. & Arn.) J.M. Porter & L.A. Johnson

Coulter 481.


Linanthus dianthiflorus (Benth.) Greene

Coulter 463.


GH: [no name], California (PL). GH 00872604.

Coulter 463x.


Coulter 464.


K: [no name], California. Written on sheet: Leptosiphon (Fenzelia) dianthiflorus (Gilia Benth.) var. couleri: Gray, floribunda corolla lobis vix erosix A. Gray, 1869. K 0006140809.

Coulter s.n.

UC: Linanthus dianthiflorus, California [no image], UC 973809.

Linanthus dichotomus Benth.

Coulter 462.


Linanthus sp.

Coulter s.n.

UC: Linanthus, California [no image]. UC 973808.

Loeseliastrum schottii (Torr.) Timbrook

Coulter 449.

TCD: Navarretia setossissima, California (PL). TCD!

GH: Navarretia schottii, California [no image]. Annotation 1: Loeseliastrum schottii. GH 267259.

Microsteris gracilis (Hook.) Greene

Coulter 459.

TCD: Collinsia gracilis, S. Francisco, California (PL). TCD!

BRU: Collinsia gracilis, California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00041508.

GH: Collinsia gracilis, California (PL). GH 967221.

Coulter s.n.

UC: Phlox gracilis, California [no image]. UC 973807.

Navarretia atractyloides (Benth.) Hook. & Arn.

Coulter 450.

TCD: Navarretia atractyloides β, California (PL). TCD!
Coulter 456.
TCD: Navarretia atractyloides var., Monterey (SL). TCD!

POLYGONACEAE

Chorizanthe fimbriata Nutt. var. fimbriata
Coulter 574 in part.
TCD: Chorizanthe staticoides, California (PL). Annotation 1: Chorizanthe fimbriata Nutt. var. fimbriata by Reveal in 1987. TCD!

Chorizanthe fimbriata Nutt. var. laciniata (Torr.) Jeps.
Coulter 574*.
TCD: Chorizanthe fimbriata, California (PL). Annotation 1: Chorizanthe fimbriata Nutt. var. laciniata (Torr.) Jeps. by Reveal in 1987. TCD!

Chorizanthe leptotheca Goodman
Coulter 579.
TCD: Chorizanthe staticoides, California (PL). Annotation 1: Chorizanthe leptotheca Goodman by Reveal in 1987. TCD!

Chorizanthe sp.
Coulter 575.
TCD: Eriogonum, California (PL). TCD!

Chorizanthe staticoides Bentham.
Coulter 576.
TCD: Chorizanthe staticoides, California (PL). Annotation 1: Chorizanthe staticoides Bentham, by Reveal in 1987. TCD!
Coulter s.n.
TCD: Macronea, California (Part of PL). TCD!

Eriogonum angulosum Bentham.
Coulter 193.
TCD: Eriogonum angulosum Bentham, California (PL). TCD!

Eriogonum elatum Bentham. var. elatum
Coulter 693.
TCD: Eriogonum elatum, California (PL). TCD!

Eriogonum fasciculatum Bentham. var.
Coulter 191.
TCD: Eriogonum fasciculatum, California (PL). TCD!

Eriogonum gracile Bentham. var.
Coulter 694.
TCD: Eriogonum gracile Bentham, California (PL). TCD!

Eriogonum parvifolium Sm.
Coulter 700.
TCD: Eriogonum parvifolium, California (PL). TCD!

Lastarriaea coriacea (Goodman) Hoover
Coulter 190 (in part).
TCD: Macronea californica, California (SL). Annotation 1: Lastarriaea coriacea (Goodman) Hoover by Reveal in 1987. TCD!

Macronea californica Bentham.
Coulter 190 (in part).
TCD: Macronea californica, California (SL). Annotation 1: Macronea californica Bentham, by Reveal in 1987. TCD!

Polygonum sp.
Coulter 696.
TCD: [no name], California (PL). TCD!
Coulter 697.
TCD: [no name], California (PL). TCD!
Coulter 697x.
TCD: [no name], California (PL). TCD!
Coulter 698.
TCD: [no name], California (PL). TCD!

Pterostegia drymarioides Fisch. & C.A. Mey.
Coulter 89.

Rumex sp.
Coulter 602.
TCD: Rumex, California (PL). TCD!
Coulter 605.
TCD: [no name], Monterey to S. Gabriel, California (PL). TCD!

PRIMULACEAE

Dodecatheon hendersonii A. Gray
Coulter s.n.
UC: Dodecatheon hendersonii, California [no image]. Annotation 1: Dodecatheon hendersonii A. Gray by Reveal in 2006. UC 973610.

Dodecatheon sp.
Coulter 567.
BRU: Dodecatheon integrifolium, California (PL). Annotation 1: Herbarium Olneyanum PBRU 00040884.
Coulter s.n.
TCD: [no name], California (PL). Note on label: something [illegible] from the other specimens. TCD!

RANUNCULACEAE

Aquilegia formosa DC.
Coulter 7.
TCD: A. formosa Monterey, California (SL). TCD!

Clematis lasiantha Nutt.
Coulter s.n.
UC: Clematis lasiantha Nutt., Monterey, California (SL). TCD!

Delphinium califorunicum Torr. & A. Gray subsp. californicum
Coulter 9.
TCD: D. californicum Tor. & Gr., Monterey to El Sur, California, 1832 (SL). TCD!

Delphinium hesperium A. Gray subsp.
Coulter 11.
K: [no name], California (SL). Name written on sheet: D. hesperium. K 000692540.

Delphinium nudicaule Torr. & A. Gray
Coulter 10.
TCD: Delphinium nudicaule Tor. & Gr., Monterey, California, 1832 (SL). TCD!

Delphinium sp.
Coulter 11.
TCD: Delphinium simplex, Monterey, California, 1832 (SL). TCD!
Ranunculus hebecarpus Hook. & Arn.
Coulter 12.

Delphinium variegatum Torr. & A. Gray subsp. variegatum
Coulter 8.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Delphinium menziesii, Between Monterey & San Francisco, California, 1832 (SL). TCD!
Coulter 12.

Delphinium menziesii. Monterey, California, 1832 (SL). TCD!
Coulter 13.

Delphinium menziesii? Monterey to El Sur, California, 1832 (SL). TCD!

Coulter 14.

Delphinium menziesii, Monterey, California, 1832 (SL). TCD!
Coulter 15.

D. menziesii. Between Monterey & San Miguel, California (SL). TCD!

Coulter 113.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter s.n.

Coulter 122.

Coulter 124.

Coulter 123.

Ceanothus divaricatus, California (PL). TCD!

Ceanothus oliganthus Nutt. var.
Coulter 122.


Ceanothus rigidus Nutt.
Coulter 123.

TCD: Ceanothus rigidus, California (PL). TCD!
BRU: Ceanothus rigidus, California (PL). Annotation 1: Herbarium Olneyanum Ceanothus rigidus. PBRU 00006277

GH: Ceanothus rigidus, California [no image]. GH 00425228.
K: C (ceanothus) rigidus, California (SL). K 000729173.

Ceanothus sp.
Coulter 113.

TCD: [no name], California (PL). TCD!

Ceanothus thyrsiflorus Eschsch. var.
Coulter 124.

TCD: Ceanothus thyrsiflorus, California (PL). TCD! [three sheets]

Ceanothus thyrsiflorus Eschsch. var. griseus Trel.
Coulter 124.

GH: Ceanothus thyrsiflorus var. griseus, California [no image]. GH 00425494.
Coulter 124x.

Coulter 718.


Ceanothus verrucosus Nutt.
Coulter s.n.

UC: Ceanothus rigida, California (PL). UC 973620.

Frangula californica (Eschsch.) A. Gray subsp.
Coulter 117.

TCD: Rhamnus oleifolius, California (PL). TCD!
GH: Rhamnus californica, California [no image]. Annotation 1: Frangula californica. GH 00425913.
K: Rh. oleifolius, California (SL). K 000729125.

Rhamnus crocea Nutt.
Coulter 116.

TCD: Rhamnus crocea Nutt., California (PL). TCD!
BM: Rhamnus crocea, California (PL). BM 001024172.
K: [no name], California (SL). K 000729136.
Coulter s.n.

UC: Rhamnus crocea, California [no image]. UC 973619.

Rhamnus ilicifolia Kellogg
Coulter 114.

TCD: Rhamnus, California (PL). TCD!
ROSACEAE

Acaena pinnatifida Ruiz & Pav. var. californica (Bitter) Jeps. Coulter 135.

TCD: Acaena, California (PL). TCD!

Adenostoma fasciculatum Hook. & Arn. var. Coulter 132.


Coulter s.n.

TCD: Adenostoma fasciculatum, California (PL). TCD!

GH: Adenostoma fasciculatum, California (PL). TCD!

Oemleria cerasiformis (Hook. & Arn.) J.W. Landon

Coulter 141.

TCD: Oemleria cerasiformis, S. Francisco, California (PL). TCD!

Heteromeles arbutifolia Coulter 133.

TCD: Heteromeles arbutifolia, California (PL). TCD!

Cercocarpus betuloides Nutt. var. betuloides

Coulter 141.

TCD: Cercocarpus parvifolius Nutt., S. Francisco, California (PL). TCD!

Coulter 142.

TCD: Cercocarpus, California (PL). TCD!

Drymocallis glandulosa (Lindl.) Rydb. var. Coulter 138.

TCD: Potentilla arguta, El Sur, California (PL). TCD!

Coulter s.n.

TCD: Potentilla arguta, California (PL). TCD!

Fragaria chiloensis (L.) Mill.

Coulter 139.

TCD: Fragaria chiloensis [sic], El Sur, California (PL). TCD!

Coulter 140.

TCD: Fragaria chiloensis?, California (PL). TCD!

Heteromeles arbutifolia (Lindl.) M. Roem.

Coulter 239.

TCD: Photinia arbutifolia, California (PL). TCD!

Horkelia cuneata Lindl. var.

Coulter 133.


K: Horkelia cuneata, California (SL). Written on sheet: Horkelia californica Cha. & Sch. var. cuneata. K 000730047. Note: K database lists as Coulter s.n. in error.

Oemleria cerasiformis (Hook. & Arn.) J.W. Landon

Coulter 148.

TCD: Nuttallia cerasiformis, California (PL). TCD!


Coulter s.n.

TCD: Nuttallia cerasiformis, California (PL). TCD!


Potentilla anserina L. subsp. pacifica (Howell) Rouxi

Coulter 137.

TCD: Potentilla anserina, California (PL). TCD!

Prunus ilicifolia (Hook. & Arn.) D. Dietr. subsp. ilicifolia

Coulter 115.

TCD: Cerasus ilicifolia Nutt., California (PL). TCD!

Coulter 716.

TCD: Cerasus ilicifolia Nutt., California (SL). Annotation 1: Torr. & Gray, Fl. N. Amer. TCD!

Rosa californica Cham. & Schultl.

Coulter 134.

TCD: Rosa californica Cham., California (PL). TCD!


Rubus parviflorus Nutt.

Coulter 147.

TCD: Rubus velutinus, Monterey to El Sur, California (PL). TCD!

Rubus ursinus Cham. & Schultl.

Coulter 143.

TCD: Rubus ursinus?, California (PL). TCD!

GH: Rubus ursinus, California [no image]. GH 00346318.

Coulter 144.

TCD: Rubus ursinus?, California (PL). TCD!

Coulter 145.

TCD: Rubus ursinus?, California (PL). TCD!

Coulter 166.

GH: Rubus ursinus, California [no image]. GH 00346254.

RUBIACEAE

Galium angustifolium A. Gray subsp. angustifolium

Coulter 197.

TCD: Galium trichocarpum T. & G., California (PL). TCD!

GH: Galium angustifolium, California [no image]. GH 00385687.

Galium aparine L.

Coulter 195.

TCD: Galium aparine, California (PL). TCD!

GH: Galium aparine var. spurium, California [no image]. GH 00417118.

Galium californicum Hook. & Arn. subsp.

Coulter 196.

TCD: Galium californicum, California (PL). TCD!


Galium sp.

Coulter 192.

TCD: Galium, California (PL). TCD!

SALICACEAE

Populus fremontii S. Watson subsp. fremontii

Coulter 648.

TCD: Populus, California (PL). TCD!

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00032470.

Salix exigua Nutt. var.

Coulter 651.

TCD: [no name], California (PL). TCD!

F: Salix taxifolia, California [no image]. F V038211F.

Coulter 651x.

TCD: [no name], California (PL). TCD!

Salix lasiolepis Bentham.

Coulter 657.

TCD: [no name], California (PL). TCD!

GH: Salix lasiolepis, California [no image]. GH 0038524.

Salix scouleriana Hook.

Coulter 656.

TCD: [no name], California (PL). TCD! Note: needs annotation label as type material of Salix capreaeoides.

GH: 1. Salix brachystachys Bentham. 2. var. capreaeoides, California (PL). Annotation 1: 656 (Coulter) (2) TYPE of S. capreaeoides And. (et S.
Salix stichensis Bong.
Coulter 655.
TCD: [no name], California (PL). TCD! Note: needs annotation label as type material of Salix coulteri.
GH: Salix coulteri Ands., California (SL). Annotation 1: Type of Salix coulteri; Isotype of S. coulteri. GH 000030945.

Salix sp.
Coulter 650.
TCD: [no name], California (PL). TCD!
Coulter 652.
TCD: [no name], California (PL). TCD!
Coulter 653.
TCD: [no name], California (PL). TCD!
Coulter 654.
TCD: [no name], California (PL). TCD!

Acer macrophyllum Pursh
Coulter 93.
TCD: Acer macrophyllum, California (PL). TCD!
GH: Acer macrophyllum, California [no image]. GH 00363551.

Acer negundo L.
Coulter 704.
TCD: Acer negundo, California (PL). TCD!
GH: Acer negundo var. californicum, California [no image]. GH 00363368.
Coulter 704 [706 in CCH].
UC: Acer negundo var. californicum, California [no image]. UC 973800.

SAXIFRAGACEAE

Boykinia occidentalis Torr. & A. Gray
Coulter 183.
TCD: Boykinia occidentalis, S. Gabriel, California (PL). TCD! [two sheets]

Heuchera pilosissima Fisch. & C.A. Mey.
Coulter 182.
TCD: Heuchera hispida, California (PL). TCD! [two sheets]

Lithophragma heterophyllum (Hook. & Arn.) Torr. & A. Gray
Coulter 186.
TCD: Tellima heterophylla, California (PL). TCD!
TCD: Tellima heterophylla, El Sur, California (PL). TCD!
K: Tellima heterophylla, California (SL). K 000732609 and K 000732608.
Coulter s.n.
TCD: Tellima heterophylla, California (PL). TCD!
TCD: Tellima heterophylla, California (PL). TCD!

Micranthes californica (Greene) Small
Coulter 184x.
TCD: Saxifraga integrifolia, California (PL). TCD!
Coulter 185.
TCD: Sax. virginiensis?, California (PL). TCD!
Coulter 186.
GH: Saxifraga californica, California [no image]. Annotation 1: Saxifraga californica by Piper GH 381146.

SCROPHULARIACEAE

Scrophularia californica Cham. & Schltr.
Coulter 595.
TCD: Scrophularia, California (PL). TCD!
Coulter 596.
TCD: Scrophularia nodosa, S. Miguel to El Sur, California (PL). TCD!
†Verbascum virgatum Stokes
Coulter 580.
TCD: Verbascum, California (PL). TCD!

SIMMONDSIACEAE

Simmondsia chinesis (Link) C.K. Schneid.
Coulter 717.

SOLANACEAE

Lycium sp.
Coulter 582.
TCD: [no name], California (PL). TCD!
Coulter 583.
TCD: [no name], California (PL). Written on sheet: Lycium. TCD!

Nicotiana sp.
Coulter 460.
TCD: [no name], California (PL). TCD!
Coulter 579.
TCD: Nicotiana, San Gabriel, California (PL). TCD!
TCD: Nicotiana, California (PL). TCD!

Petunia parviflora Juss.
Coulter 626.
TCD: Leptophragma prostrata, California (PL). Written on sheet: Petunia parviflora. TCD!
E: Petunia parviflora, California [no image]. E 00019754.

Physalis acutifolia (Miers) Sandwith
Coulter 593.
K: [no name], California (SL). Annotation 1: Physalis the name of the species I shall send later Bitter. Annotation 2: Cited as possibly syn-
Physalis sp.
Coulter 584.
TCD: Physalis, California (PL). TCD!

Solanum sp.
Coulter s.n.
TCD: [no name], California (PL). Annotation 1: Solanum by Vickery in 2005. TCD!

Solanum umbelliferum Eschsch.
Coulter 586.
Coulter 587.
TCD: Solanum umbelliferum, California (PL). TCD!
Coulter 588.
TCD: Solanum umbelliferum, S. Miguel, California (PL). TCD!
Coulter 589.
TCD: Solanum umbelliferum, California (PL). TCD!
Coulter 590.
TCD: Solanum umbelliferum, California (PL). TCD!
Coulter s.n.
BM: Solanum umbelliferum, California (PL). BM 000846437.
UC: Solanum umbelliferum, California [no image]. UC 973820.

Solanum wallacei (A. Gray) Parish
Coulter 586.

STYRACACEAE
Styrax redivivus (Torr.) L.C. Wheeler
Coulter 551.
TCD: [no name], California (PL). TCD!

URTIACEAE
Urtica sp.
Coulter 705.
TCD: [no name], California (PL). TCD!

VALERIANACEAE
Plectritis macrocera Torr. & A. Gray
Coulter 534.
TCD: Valeriana, El Sur, California (PL). Written on sheet: see Plectritis macrocera. TCD!
Coulter 624.
TCD: [no name], S. Miguel, California (PL). Written on sheet: Plectritis macrocera Tor. & Gr. TCD!
TCD: [no name], California (SL). TCD!

VERBENACEAE
Phyla lanceolata (Michx.) E. Greene
Coulter 547.
TCD: [no name], California (PL). TCD!

VOXACEAE
Physa nodiflora (L.) E. Greene
Coulter 546.
TCD: Zapania [sic] nodiflora, California (PL). Written on sheet: Lippia nodiflora. TCD!
Coulter 548.
TCD: Lippia chamaedrioides [sic], California (PL). TCD!

VIOLACEAE
Viola adunca Sm. subsp. adunca
Coulter 69.
Coulter s.n.
TCD: Viola longipes Nutt. var., Monterey, California (SL). TCD!
GH: [no name], California [no image]. Annotation 1: Viola adunca Sm. f. glabra (Brainard) G.N. Jones by Ballard in 1992. GH 381865.

Viola douglasii Steud.
Coulter 67.
TCD: Viola chrysanthaca Hook., Monterey to S. Miguel, California (SL). Written on sheet: V. douglasii Steud., V. chrysanthaca Hook. TCD! Note: Douglas s.n. mounted on same sheet may be type material of Viola chrysanthaca Hook.
Coulter s.n.
UC: Viola douglasii, California [no image]. UC 973827.
Viola pedunculata Torr. & A. Gray
Coulter 68.

*TCD*: Viola pedunculata T. & G., San Miguel to S. Barbara, California (SL). *TCD!*
*TCD*: Viola pedunculata Tor. & Gr., Monterey, California (SL). *TCD!*

*Note*: Douglas s.n. is on same sheet.

Coulter s.n.

UC: Viola pedunculata, California [no image]. UC 973821.

Viola quercetorum M.S. Baker & J.C. Clausen
Coulter s.n.


**MONOCOTS**

AGAVACEAE

Agave desertii Engelm.
Coulter s.n.

*TCD*: Agave, California (PL). *TCD!*

ALLIACEAE

Allium sp.
Coulter 745.

*TCD*: [no name], S. Miguel to S. Barbara, California (PL). *TCD!*

CYPERACEAE

Bolboschoenus maritimus (L.) Palla subsp. paludosus (A. Nelson) T. Koyama
Coulter 804.

*TCD*: Scirpus maritimus, California (PL). *TCD!*

Carex douglasii Boott
Coulter 805.

*TCD*: [no name], California (PL). Annotation 1: Type material Carex douglasii var. brunea by G. Wallace in 2016. *TCD!*

K: C. douglasii, California (SL). Annotation 1: C. douglasii Boott by Clarke in 1899. Annotation 2: Coulter 805 is the “type” of Carex douglasii var. brunea Olney in King’s Report (1871) 363. This again is the [illegible] of Carex usta sp. nov. Bailey in Mem. Torrey Club v 1 (1889) p. 20. Bailey however says that his C. usta bears no immediate relation to C. douglasii and that its reference to that species is [illegible] erroneous. If this n. 805 is the number Bailey had I do not agree with him. But I think it is probable that Bailey had something else. By Clarke in 1900. K 000907696.
K: [no name], (SL). Annotation 1: Coulter 805 from California was the “type” of Carex douglasii var. brunea Olney which Bailey made a species Carex usta Bailey. By Clarke in 1902. K 000907695.

Carex sp.
Coulter 806.

TCD: [no name], California (PL). *TCD!*
Coulter 807.

*TCD*: [no name], California (PL). *TCD!*

*Cyperus articulatus L. [not known from California but is known from Sonora, Mexico]*
Coulter 795.


*Cyperus erythrorhizos Muhl.*
Coulter 796.


Eleocharis sp.
Coulter 799.

*TCD*: [no name], California (PL). *TCD!*
BRU: [no name], California (PL). PBRU 00010672.

Schoenoplectus californicus C.A. Mey., & Sojak
Coulter 803.

*TCD*: cf. Scirpus riparius (Elytroserpum C.A. Mey.), California (PL). *TCD!*

Schoenoplectus sp.
Coulter 797.

*TCD*: Scirpus aff. triqueter, California (PL). *TCD!*
Coulter 798.

*TCD*: [no name], California (PL). *TCD!*

Scirpus sp.
Coulter 800.

*TCD*: [no name], California (PL). *TCD!*
Coulter 802.

*TCD*: [no name], California (PL). *TCD!*

HYDROCHARITACEAE

Najas marina L.
Coulter 188.

*TCD*: Near Ruppii?, California (PL). *TCD!*

IRIDACEAE

Iris longigeta Herb.
Coulter 744.

GH: Iris longigeta, California [no image]. GH 00357724.

Iris sp.
Coulter 724.

*TCD*: Iris tenax, California (PL). *TCD!*
BRU: [no name], California (PL). Written on sheet: probably Iris douglassiana. Annotation 1: Herbarium Olneyanum. PBRU 00009189.
Coulter 726.

*TCD*: [no name], California (PL). *TCD!*
BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00009203.

Sisyrinchium bellum S. Watson
Coulter 723.

*TCD*: [no name], California (PL). *TCD!*
Coulter 725.

*TCD*: [no name], California (PL). *TCD!*
BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00009302.

Sisyrinchium californicum (Ker Gawl.) W.T. Aiton
Coulter 723.

UC: Sisyrinchium californicum, California [no image]. UC 973618.
Sisyrinchium sp.
Coulter s.n.
BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum.
PBRU 00009303.

JUNCACEAE

Juncus bufonius L. var.
Coulter 810.

TCO: Juncus bufonius, California (PL). TCO!

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum.

Juncus bufonius (Benth.) Benth.

Coulter 809.

TCO: af. Juncus scirpoideus, California (PL). TCO!

MO: Juncus megacephalus, California (SL). MO 3266550.

Coulter 812

TCO: Juncus, California (PL). Note on label: Bot. Beechey. TCO!

Luzula sub sessilis (S. Watson) Buchenau
Coulter 811.

TCO: Luzula campestris, California (PL). TCO!

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum.
PBRU 00012245.


UC: Luzula comosa, California [no image]. UC 973801.

JUNCAGINACEAE

Triglochin scilloides (Poir.) Mering & Kadereit
Coulter 813.

TCO: Lilaea H. & Bonpl., Heterostylus Hook., California (PL). TCO!

LILIACEAE

Calochortus albus (Benth.) Benth.
Coulter 730.

TCO: [no name], California (PL). TCO!

Calochortus catalinae S. Watson
Coulter 732.

TCO: [no name], California (PL). TCO!

BRU: Calochortus, California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00008052.

GH: Calochortus catalinae, California [no image]. Annotation 1: Calochortus catalinae by F.M. Ownbey in 1938 GH 00357302.

Coulter 733.

TCO: [no name], California (PL). TCO!


NY: Calochortus, California [no image]. Annotation 1: not determinable by Ownbey in 1939. NY 1104591.

Calochortus sp.
Coulter 731.

TCO: [no name], California (PL). TCO!

BM: Calochortus, California (PL). BM 1009899. Note: filed as C. luteus, "possible type" because mounted on sheet with Douglas specimen.

Coulter 734.

TCO: [no name], California (PL). TCO!

BRU: Calochortus, California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00008053.

Coulter 735.

TCO: [no name], California (PL). TCO!

Calochortus uniflorus Hook. & Arn.
Coulter 735.

TCO: Calochortus uniflorus Hook. & Arn. by F.M. Ownbey in 1939.

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum [corm is included on sheet] PBRU 00008055.

K: [no name], California (SL). Written on sheet: Calochortus uniflorus Hook. K 000203629.

Fritillaria affinis (Schult. & Schult. f.) Sealy
Coulter 740.

TCO: [no name], California (PL). Written on sheet: F. lanceolata. TCO!

Fritillaria biflora Lindl. var.
Coulter 737.

TCO: [no name], California (PL). Annotation 1: Fritillaria biflora Lindl. by Macfarlane in 1982. TCO!

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00008146.


Coulter 738.

TCO: [no name], California (PL). Annotation 1: Fritillaria biflora. Lindl. by Macfarlane in 1982. TCO!

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00008142.


Fritillaria liliacea Lindl.
Coulter 739.

TCO: [no name], California (PL). Written on sheet: Frit. liliacea. TCO!

Coulter 739x.

TCO: [no name], California (PL). Written on sheet: Frit. liliacea. TCO!

BRU: [no name], California (PL). Annotation 1: Herbarium Olneyanum. PBRU 00008142.

GH: Fritillaria liliacea, California [no image]. GH 357417.

Coulter s.n.

GH: Fritillaria liliacea, California [no image]. GH 00357417.

Lilium sp.
Coulter s.n.

TCO: [no name], California. Written on sheet: L. martagon. TCO!

MELANTHIACEAE

Toxicoscordion fontanum (Eastw.) Zomlefe & Judd
Coulter 744.

TCO: Zygadenus [sic] glaucus, California (PL). TCO!

Coulter 746.

TCO: Zygadenus [sic] glaucus, California (PL). TCO!

Trillium chloropetalum (Torr.) Howell
Coulter s.n.

TCO: [no name], California (PL). Written on sheet: Trillium sessile. TCO!

TCO: Trillium sessile, California (PL). TCO!

BRU: Trillium sessile, California (PL) PBRU 00008437.

UC: Trillium chloropetalum, California (PL). UC 973621.
**POACEAE**

*Anthoxanthum occidentale* (Buckley) Veldkamp
Coulter 786.
- **GH**: Hierochloë occidentalis, California [no image]. Annotation 1: Hierochloë macrophylla, **GH**: 360155.

*Anthoxanthum sp.*
Coulter 784.
- **TCD**: [no name], California (PL). **TCD**! Note: in Hierochloë folder.

*Aristida adscensionis* L.
Coulter 768.
- **GH**: Aristida adscensionis, California [no image]. **GH**: 341039.

†Avena barbata Link
Coulter 767.
- **TCD**: [no name], California (PL). **TCD**!

*Bromus carinatus* Hook. & Arn. var.
Coulter 760.
- **K**: Bromus carinatus, California (SL). **K** 000913858.
- **Coulter 764.**
- **TCD**: Bromus, California (PL). **TCD**! Note: image verified to genus by J.T. Columbus.
- **BRU**: [no name], California (PL). Annotation 1: Herbarium Olneyanum Bromus compare carinatus, **PBRU** 0025961.
- **GH**: Bromus carinatus, California [no image]. **GH**: 00361739.
- **K**: B. carinatus, California (SL). **K** 000913857.
- **Coulter 766.**
- **GH**: Bromus carinatus, California [no image]. Annotation 1: Bromus carinatus var. hookeriensis (Thurber) Shear. **GH**: 00361757.

†*Cenchrus sp.*
Coulter 758.
- **TCD**: Cenchrus tribuloides?, California (PL). **TCD**!

†*Digitaria ciliaris* (Retz.) Koeler var. ciliaris
Coulter s.n.
- **GH**: Digitaria ciliaris, California [no image]. Annotation 1: Digitaria ciliaris by Webster. **GH**: 00355505.

†*Digitaria sanguinalis* (L.) Scop.
Coulter 786.
- **TCD**: Digi. sanguinalis, California (PL). **TCD**!

*Distichlis spicata* (L.) Greene
Coulter 779.
- **TCD**: Poa, Brizopyrum, California (PL). **TCD**! Note: image identified as Distichlis spicata by J.T. Columbus.
- **BRU**: [no name], California (PL). **PBRU** 00026412.
- **GH**: Distichlis spicata var. nana Beetle, California [no image]. **GH**: 00355665.

†*Echinocloa colona* (L.) Link
Coulter 794.
- **TCD**: Panicum crus-galli, California (PL). **TCD**! Note: image identified by J.T. Columbus.

*Elymus multisetus* (J.G. Sm.) Burtt Davy
Coulter 750.

*Elymus sp.*
Coulter 748.
- **TCD**: Elymus, California (PL). **TCD**!
- **Coulter 755.**
- **TCD**: Elymus, California (PL). **TCD**!

*Eragrostis pectinacea* (Michx.) Nees var. pectinacea
Coulter 773.
- **TCD**: Eragrostis aff. pilosa, S. Gabriel, California (PL). Written on sheet: Eragrostis pilosa. **TCD**! Note: image identified as E. pectinacea by J.T. Columbus.

*Eragrostis sp.*
Coulter 777.
- **TCD**: [no name], California (PL). Written on sheet: Eragrostis paaoides. **TCD**! Note: image identified to genus by J.T. Columbus.
- **BRU**: Eragrostis ciliaris, California [no image]. **PBRU** 00026969.
- **Coulter 774.**
- **TCD**: Eragrostis, California (PL). **TCD**! Note: image identified to genus by J.T. Columbus.

*Eriochloa acuminata* (J. Presl) Kunth var. acuminata
Coulter 787.
- **TCD**: [no name], California (PL). **TCD**! Note: image identified by J.T. Columbus.

*Festuca microstachys* Nutt.
Coulter 762.
- **TCD**: Vulpia, California (PL). **TCD**! Note: image identified by J.T. Columbus.
- **BRU**: [no name], California (PL). Annotation 1: Herbarium Olneyanum V. microstachya Nutt. **PBRU** 00027047.
- **GH**: Vulpia microstachya var. pauciflora, California [no image]. Annotation 1: Festuca pacifica. **GH**: 341875.
- **Coulter 763.**
- **TCD**: Festuca, California (PL). **TCD**! Note: image identified by J.T. Columbus.
- **Coulter 763 bis.**
- **TCD**: [no name], California (PL). **TCD**! Note: image identified by J.T. Columbus.

*Hilaria rigida* (Thurb.) Benth. ex Scribn.
Coulter 752.
- **TCD**: [no name], California (PL). **TCD**!
- **GH**: Hilaria rigida, California [no image]. **GH**: 00341005.

*Hordeum depressum* (Scribn. & J.G. Sm.) Rydb.
Coulter 756.

*Hordeum jubatum* L. subsp. jubatum
Coulter 750.
- **TCD**: Hordeum jubatum, California (PL). **TCD**!

*Hordeum pusillum* Nutt.
Coulter 756.
- **TCD**: Hordeum, California (PL). Written on sheet: Hordeum pusillum. **TCD**!

*Leptochloa fusca* (L.) Kunth subsp. uninervia (J. Presl) N. Snow
Coulter 777.

*Leptochloa sp.*
Coulter 776.
- **TCD**: Leptochloa, California (PL). Written on sheet: Diplachne obtusiflora, Leptochloa dubia H.B.K. **TCD**!
- **Coulter 785.**
- **TCD**: Leptochloa, California (PL). **TCD**!

*Melica californica* Scribn.
Coulter 781.
- **TCD**: Melica, California (PL). Written on sheet: Melica speciosa Much. [? illegible] nov. sp. **TCD**! Note: image identified by J.T. Columbus.
**Melica imperfecta Trin.**
Coulter 771.  
**TCD:** [no name], California (PL). Note on label: same as 780. Written on sheet: Reuboea nov. sp. R. californica (Muns). **TCD**! Note: filed in Reuboea folder.  
**Coulter 780.**  
**TCD:** Diplachne same as 771 (PL). Written on sheet: Reuboea nov. sp. say [sic] R. californica. **TCD**!  
**GH:** Melica imperfecta, California [no image]. Annotation 1: Melica imperfecta by Boyle in 1943. **GH** 00360377.

**Muhlenbergia microsperma (DC.) Trin.**
Coulter 761.  
**TCD:** Muhlenbergia/Indochloa, California (PL). **TCD**! Note: image identified by J.T. Columbus.  
**GH:** Muhlenbergia microsperma, California [no image]. Annotation 1: Muhlenbergia microsperma by Peterson in 1988. **GH** 00355850.

**?Paspalum dilatatum Poir.**
Coulter 788.  
**TCD:** [no name], California (PL). **TCD**!

**Paspalum sp.**
Coulter 790.  
**TCD:** [no name], California (PL). **TCD**! Note: image identified by J.T. Columbus.

**Phalaris californica Hook. & Arn.**
Coulter 754.  
**TCD:** [no name], California (PL). Annotation 1: Phalaris californica Hook. & Arn. by Baldwin in 1992. **TCD**!  
**GH:** Phalaris californica, California [no image]. Annotation 1: Phalaris californica by Anderson in 1959. **GH** 00360496.

**Poa bolanderi Vasey**
Coulter 783.  
**GH:** Poa bolanderi, California [no image]. **GH** 00360669.

**Poa douglasii Nees**
Coulter 753.  
**TCD:** Poa douglasii, Brizoyprium, California (PL). **TCD**!  
**BRU:** [no name], California (PL). Annotated: Herbarium Olneyanum Poa douglasii (Hook.). **PBRU** 00028032.  
**GH:** Poa douglasii, California [no image]. Annotation 1: Poa douglasii by Marsh in 1942. **GH** 00360701.  
**GH:** Poa douglasii, California [no image]. Annotation 1: Poa douglasii by Marsh in 1942. **GH** 00360706.  

**Poa secunda J. Presl subsp.**
Coulter 782.  
**GH:** Poa secunda, California [no image]. **GH** 00360892.

**Poa sp.**
Coulter 777.  
**TCD:** Poa, California (PL). **TCD**!  
**Coulter 783.**  
**TCD:** Poa, California (PL). **TCD**!  

**?Polygonoa viridis (Gouan) Breistr.**
Coulter 775.  
**TCD:** Agrostis verticillata?, California (PL). **TCD**! Note: image identified by J.T. Columbus.  
**Coulter 778.**  
**TCD:** Agrostis alba, California (PL). **TCD**! Note: image identified by J.T. Columbus.
BRYOPHYES
MOSES
BRACHYTHECIACEAE

Brachythecium sp.
Coulter 837.

TCD: [no name?], California (SL). Written on sheet: Brachythecium asperum [sic]. TCD! (This specimen does not seem to fit this species determination according to L. Ellis (BM) October 2018, and other experts, D. Kelly (TCD). J. Shevock and D. Toren [CAS] are not in agreement as to a species name).

Homalothecium aureum (Spruce) H. Rob.
Coulter 836.

TCD: [no name?], California (SL). Annotation 1: most likely Homalothecium aureum (Spruce) H. Rob. by L. Ellis (BM) October 2018. TCD!

Orthotrichum alpestre Hornsch. ex Bruch & Schimp.
Coulter 832.


Orthotrichum cylindrocarpum Lesq.
Coulter 839.

TCD: [no name?], California (SL). Annotation 1: Orthotrichum tenellum by Daniel Kelly (TCD) 20 September 2018. To be filed as ISOLECTOTYPE Orthotrichum coulteri. TCD!

BRYACEAE

Ptychostomum sp.
Coulter 832.

TCD: [no name?], California (SL). Annotation 1: as 832-II by D. Kelly (TCD) to differentiate this from 832 identified as Orthothrichum. It is either Bryum or a related taxon by D. Kelly (TCD, October 2018). Seems to belong to the segregate of Bryum now widely recognized as Ptychostomum (L. Ellis (BM) October 2018). TCD!

DALTONIACEAE

Daltonia splachnoides (Smith) Hook. & Taylor
Coulter s.n.

TCD: Daltonia heteromala, [no location] TCD!

DITRICHACEAE

Ceratodon purpureus (Hedw.) Brid.
Coulter 834.

TCD: [no name?], California (SL). Annotation 1: Ceratodon purpureus (Hedw.) Brid. by L. Ellis (BM) October 2018. TCD!

FUNARIACEAE

Funaria hygrometrica Hedw.
Coulter 831.

TCD: [no name?], California (SL). Annotation 1: Funaria hygrometrica by Daniel Kelly (TCD) 24 September 2018. TCD!

LEPTODIANTACEAE

Al sia californica (Hook. & Arn.) Sull.
Coulter s.n.

NY: [no name?], California [no image]. NY 845788.

ORTHOTRICHACEAE

Orthotrichum alpestre Hornsch. ex Bruch & Schimp.
Coulter 832.


Orthotrichum cylindrocarpum Lesq.
Coulter 839.

TCD: [no name?], California (SL). Annotation 1: Orthotrichum tenellum by Daniel Kelly (TCD) 20 September 2018. To be filed as ISOLECTOTYPE Orthotrichum coulteri. TCD!


Coulter 840.

TCD: [no name?], California (SL). Annotation 1: Identified as Orthothrichum tenellum by Daniel Kelly (TCD) 20 September 2018. Filed as ISOLECTOTYPE Orthotrichum coulteri. TCD!

BM: Ortho(richum), California (SL). Note on label: (see 839). BM 000982230. Note: Identified as TYPE of Orthotrichum coulteri Mitt. Filed as Orthotrichum tenellum var. coulteri.


Note: Coulter 839, 840 was designated the LECTOTYPE of Orthotrichum coulteri Mitt. by Vitt in 1973.

Orthotrichum lyellii Hook. & Taylor
Coulter 838.

TCD: [no name?], California (PL). Annotation 1: Orthotrichum lyellii by Daniel Kelly (TCD) 24 September 2018. TCD!

FH: Orthotrichum lyellii, California [no image]. FH 00913628.

Coulter s.n.


POLYTRICHACEAE

Polytrichum juniperinum Hedw.
Coulter 835.

TCD: [no name?], California (PL). Annotation 1: Polytrichum juniperinum by Daniel Kelly (TCD) 6 October 2018. TCD!

FH: Polytrichum juniperinum, California [no image]. FH 00913303.

POTTIACEAE

Timmiella anomala (Bruch & Schimp.) Limpr.
Coulter 833.

TCD: [no name?], California (SL). Annotation 1: Timmiella anomala by Daniel Kelly (TCD) 24 September 2018. TCD!

TCD: [no name?], California (SL). Annotation 1: Timmiella anomala by Daniel Kelly (TCD) 24 September 2018. TCD!

FH: Barbula anomala, California [no image]. FH 01137572.

LIVERWORTS

AYTONIACEAE

Asterella bolanderi (Austin) Underw.
Coulter 841.

TCD: Note: Coulter 841 two mounted packets at TCD. The numbers were amended to 841a and 841b by D. Kelly in 2018.


Coulter 841a.

TCD: Timmiella, California (SL). TCD!

TCD: [no name?] (SL). Identified as Asterella bolanderi (Austin) Underw. By Daniel Kelly (TCD) 10 October 2018, and confirmed by D.G. Long (E) 20 November 2018. TCD!

Coulter s.n.

FH: Timmiella violacea, California [no image]. FH 1137041
APPENDIX II

COULTER’S CALIFORNIA MARINE ALGAE EXSICCATA

This list is arranged alphabetically by phylum, family, and genus. The format of the entries follows that in Appendix I. There are few attributions of type status among Coulter’s California marine algae. Most specimens lack annotations and there are no exsiccat numbers assigned to most of the specimens which would aid in the identification of duplicates and type material. Several of these specimens are likely misidentified and/or represent taxa not known to occur in California. A special acknowledgement and thanks are due Kathy Ann Miller (KAM), Curator of Algae, UC Berkeley for her suggestions and corrections to this appendix. My search of the marine algae collections was not complete. Some additional algal taxa based on references to Coulter’s Californian specimens are included with citations to Harvey (1852, 1853, 1858).

CHLOROPHYTA

CLADOPHORACEAE

Cladophora microcladioides Collins
Coulter s.n.
TCD: Cladophora laetevirens Dillw., California, Dr. Coulter (v.v.) (Harvey 1858, p. 82).

CODIACEAE

Codium fragile (Suringar) Har. subsp. californicum, (J. Agardh) Maggs & Kelly
Coulter s.n.

Codium sp.
Coulter s.n.
BRU: Codium tomentosum, California (PL). ABRU 00000623.

ULVACEAE

Ulva tenuiata (Setch.) Setch. N.L. Gardner
Coulter s.n.
TCD: Ulva fasciata Delile, California, Dr. Coulter …(v.v.) (Harvey 1858, p. 59).

OCHROPHYTA

FUCACEAE

Silvetia compressa (J. Agardh) E. Serrão, T.O. Cho, S.M. Boo & Brawley
Coulter s.n.
S: Silvetia compressa, California [no image]. S-Algae A 13665.

MACROCYSTIS PYRIFERA

Coulter s.n.
TCD: [no name]. Written on sheet: Macrocystis pyrifera, California. TCD!
S: Macrocystis pyrifera, California [no image]. S-Algae A 11260.

SARGASSACEAE

Stephanocystis osmundacea (Turner) Trevis.
Coulter s.n.
TCD: Halidrys osmundacea Harv., Monterey, Dr. Coulter (v.s. in Herb. T.C.D.) (Harvey 1852, p. 64). TCD!
TCD: Cystoseira expansa C. Agardh, at Monterey, California, Mr. Douglas; Dr. Coulter (v.s. in Herb. T.C.D.) (Harvey 1852, p. 66).
BRU: Halidrys osmundacea H., California (PL). ABRU 00000229.
BRU: Cystoseira osmundacea Harvey., California (PL). Annotation 1: Herbarium Olneyanum. ABRU 0000093.
NY: Cystoseira osmundacea (W.B. Turner) C. Agardh, California. NY 02229663.
PC: Halidrys osmundacea Harv., California (PL). PC 0044669.

LESSONIACEAE

Egregia menziesii (Turner) Aresch.
Coulter s.n.
TCD: [no name]. Written on sheet: Phyllospora menziesii, California. TCD!

RHODOPHYTA

CERAMIACEAE

Ceramium sp.
Coulter s.n.
TCD: [no name]. Written on sheet: Ceramium coulteri H., California. TCD!
BRU: Ceramium obsOLETUM, California (PL). ABRU 00001141.

Microcladia coulteri Harv.
Coulter s.n.
TCD: Microcladia coulteri H., California. Annotation 1: Type. TCD 012510!
UC: Microcladia coulteri Harv., California, Dr. Coulter. Ex. Herb. W.H. Harvey, Trinity College, Dublin, Ireland. Annotation 1: Type material Microcladia coulteri Harv. AHF 53940 in UC.

DELESSERIACEAE

Cryptopleura ruprechtiana (J. Agardh) Kylin
Coulter s.n.
TCD: Botryoglossum platycarpum Kütz., Monterey, California, Mr. Douglas!, Dr. Coulter!, Dr. Sinclair!, Capt. Wilkes! (v.v.) (Harvey 1853, p. 100).
Coulter s.n. (Harv.) Harv. 
Prionitis lanceolata 
Coulter 872. 

Gelidium coulteri Harv. 
Coulter 872. 

Endocladiaceae 

Gelidiaceae 

Chondracanthus canaliculatus (Harv.) Guiry 
Coulter 856. 

Chondracanthus corymbiferus (Kütz.) Guiry 
Coulter s.n. 

Chondracanthus harveyanus (Kütz.) Guiry 
Coulter s.n. 

Chondracanthus spinosus (Kütz.) Guiry 
Coulter s.n. 

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Hymenella sp. 
Coulter s.n. 

PC: Delesseria platycarpa var. an sp. nov.? vidi Postels & Ruppt., California (PL). PC 0048318. 

Hymenella sp. 
Coulter s.n. 

BRU: Hymenella, California (PL). ABRU 00001546. 

Endocladiaceae 

Endocladium muricata (Endl.) J. Agardh 
Coulter s.n. 

TCD: Endocladium muricata J. Ag., California, Beechey! Coulter! Wosnenssky! Capt. Pike! (v.s. in Herb. T.C.D.) (Harvey 1853, p. 182). 

Gloioptilus furcata (Postels & Rupr.) J. Agardh 
Coulter s.n. 

PC: Dumontia saccata, California (Coulter) amiciss. Harvey (SL). PC 0048516. 

Gelidium coulteri Harv. 
Coulter 872. 

Bru: Gel. cartilagineum, California (PL). ABRU 00001417. 

BRU: Gelidium corneum, California (PL). ABRU 00001397. 


YU: Gelidium corneum, Algae Californiae. Annotation 1: Gelidium coulteri by Eaton. YU 245966. 

Coulter s.n. 

TCD: [no name]. Written on sheet: Gelidium coulteri H., California. Type. TCD 0011891! 

BM: Gelidium coulteri. Type. BM 000610919. 


PC: Gelidium corneum 3 varieties, California (PL). PC 0048651. 

UC: Gelidium coulteri Harv., California. Annotation 1: Type material Gelidium coulteri Harv. AHFH 53929 in UC. 

Prionitis lanceolata (Harv.) Harv. 
Coulter 871. 


Coulter s.n. 

TCD: Prionitis lanceolata (Harv.) Harv., California, Douglas, Dr. Coulter (v.s. in Herb. T.C.D.) (Harvey 1853, p. 197). 


Gigartinaeae 

Chondracanthus canaliculatus (Harv.) Guiry 
Coulter 856. 


F: Gigartina canaliculata, Algae Californiae. F C05000997F. Coulter s.n. 

TCD: [no name]. Written on sheet: Gigartina canaliculata Harv. In type folder TCD 00012212! 

FH: Gigartina canaliculata, California. FH 907423. 

NY: Gigartina canaliculata Harv. [no image]. NY 02209943. 

PC: Gigartina canaliculata Harv. in Beechey, G. lindleyana J. Ag. in Linnaea, California (PL). Filed as Gigartina acicularis (Roth) J.V. Lamour. PC 0048848. 

Chondracanthus corymbiferus (Kütz.) Guiry 
Coulter s.n. 


Chondracanthus harveyanus (Kütz.) Guiry 
Coulter s.n. 

TCD: Gigartina microphylla Harv., Monterey, California, Douglas, Dr. Coulter (v.s. in Herb. T.C.D.) (Harvey 1853, p. 176). 


Chondracanthus spinosus (Kütz.) Guiry 
Coulter s.n. 

TCD: [no name]. Written on sheet: 1847 Mastocarpus spinosus, 1849 Gigartina ornithorynchos, California. TCD! 


Plantae Coulterianae
Mazzaella affinis (Harv.) Fredericq

Coulter s.n.

NY: Mastocarpus corymbiferus Kg., M. papillatus Harv., California [no image]. NY 02196768.

Mazzaella sp.

Coulter 851.

Coulter s.n.


LOMENATARIACEAE

Neogastroclonium subarticulatum (Turner) L. Le Gall, J. Dalen & G. Saunders

Coulter 858.

PC: Chylocladia coulteri Harv. MS., California (PL). PC 0059866.
Coulter s.n.

TCD: Lomentaria ovalis Endl., β at Monterey, Dr. Coulter (v.s. in Herb. T.C.D.) (Harvey 1853, p. 78).

PALARIAEACEAE

Halosaccion glandiforme (S.G. Gmel.) Rupr.

Coulter s.n.


PHYLLOPHORACEAE

Mastocarpus papillatus (C. Agardh) Kütz.

Coulter s.n.

BRU: Gigartina papillata, California (PL). Annotation 1: Herbarium Olneyanum. ABRU 00001439.

PLOCAMIACEAE

Plocanium pacificum Kylin

Coulter s.n.


RHODOMELACEAE

Laurencia pacifica Kylin

Coulter s.n.

TCD: Laurencia virgata J. Ag., Monterey, California, Dr. Coulter (v.v.) (Harvey 1853, p. 71).

Neorhodomela larix (Turner) Masuda

Coulter s.n.


Odonthalia floccosa (Esper) Falkenb.

Coulter s.n.

TCD: Rhodomela floccosa Ag., ...Monterey, Dr. Coulter ... (v.s. in Herb. T.C.D.) (Harvey 1853, p. 25).

Osmundea spectabilis (Postels & Rupr.) K.W. Nam

Coulter s.n.


Polyisophora sp.

Coulter 865.


Coulter s.n.


SOLIERIACEAE

Sarcodictyothea gaudichaudii (Mont.) P.W. Gabrielson

Coulter s.n.

BM: Rhabdonia couleri barren frond of...California (SL). BM 000054003.

Coulter 861.

BM: Laurencia sp. nov. Rhabdonia couleri, California (SL). Note: BM database lists J.M. Coulters as collector in error. BM 000937085.

Coulter s.n.

TCD: Rhabdonia couleri Harv., Monterey, California, Dr. Coulters specimen (v.s. in Herb. T.C.D.) (Harvey 1853, p. 154).

PC: Rhabdonia couleri, California [no image]. PC 0061815.

APPENDIX III

NEW TAXA BASED ON COULTER SPECIMENS FROM CALIFORNIA AND MEXICO

With emphasis on specimens at TCD

The entries here begin with the basionyms and author name(s), publica
tion citation and relevant specimen citation from the protologue. This is fol-
lowed by the current name and author(s) of the combination if it is different
and a note of the taxons range if it is not known to occur in California. Coulters
specimen at TCD is indicated with an exsiccata number or s.n. This is fol-
lowed by reference to any annotations on the TCD specimen. Coulter's TCD
exsiccata are followed by the acronyms of additional herbaria with on-
line catalogues known to hold the same Coulter exsiccata material and any
note of type status provided by the institution. The type status of Coulters
specimens at several institutions has not been recorded by annotation of the
specimens or in the databases. In a few instances additional references and
comments are included. I encourage specialists in these groups to compare
all of the type material available and make the appropriate designations of
type status.


TCD: Coulter 313. Annotated: Isotype of Acarphaea artemisaefolia by G.D. Wallace August 2016. Also, at GH (possible type), K.


TCD: Coulter 497. Annotated: Type material of Amsinckia microcarpa by G.D. Wallace November 2017. Also, at GH (type), K, NY.

Antirrhinum confertiflorum Benth. ex A. DC. Prodromus 10: 592. 1846. "...in California, (Coulter?)" "(v. in Herb. Hook.)" = Mohavea conferti-
flora (Benth. ex A. DC.) A. Heller.


Antirrhinum coulterianum Benth. ex A. DC. Prodromus 10: 592. 1846. "...in California (Coulter?)" and "(v. in Herb. Hook.)" = Antirrhinum coulterianum Benth. ex A. DC.


NOTE: Thompson misquoted Bentham, see above. He also miscitied the authority as Bentham in de Candolle: A. De Candolle is the author of the Addenda et Corrigenda section of the volume that starts on p. 587 and includes p. 591.

Armeria andina Poep. var. californica Boiss. De Candolle Prodromus 12: 682. 1848. "In California (Dr. Coulters in h. Hook.)." = Armeria maritima (Mill.) Wildl. subsp. californica (Boiss.) A.E. Porsild.


Astragalus couleri Benth. in Herb. cit. [this means same as Phaca crotalariae that is just above this species on p. 307 = Herb. Coll. SS. Trin., Dubl.]. Plantas Hartwegianas p. 307. 1848. "Juxta Monterey legit Coult-
ter." = Astragalus lentiginosus Douglas var. borreganus Jones.


Baileya multiradiata Harv. & A. Gray ex Torr. In Emory: Notes of a Militray Reconnaissance from Fort Leavenworth ...144. 1848. "California, Coult-
ter." =

TCD: Coulter 326. Annotated: Isolectotype by G.D. Wallace August 2016. Also, at GH (type), K.


TCD: Coulter 312. Baileya multiradiata. Annotated: Baileya pauciradi-
ata H. & Gr., Torr. & Gray, Fl. N. Amer. Also, at GH (holotype), NY.


TCD: Coulter 312. Baileya multiradiata [likely source of fragment at GH]. Also, Lectotype fragment at GH.


TCD: Coulter 603. Annotated: Isotype by Tom Daniel in 2015. Also, at GH (isotype), K (holotype and two isotypes).

teri A. Gray var. coultleri. Known from Arizona, Texas and Mexico.

TCD: Coulter 293. Annotated: Isotype by G.D. Wallace November 2017. Also, at GH (holotype), K.

Brodiaea capitata Benth. Plantas Hartwegianas p. 339. 1848. "In sylvis prope Monterey. Occurrunt etiam inter plantas Californicas Douglassi, Coulteri (n. 743), Jefroyi (n. 1026), et Bigelowii: = Dietcholostenum capi-
tatum (Bentham) A. Wood.


Malvastrum coulteri S. Watson. Proc. Amer. Acad. Arts and Sci. 11: 125, 1876. “Collected probably in south-eastern California by Coulter (n. 96) and in the valley of the Gila by Schott, on the Mexican Boundary survey.”


Lupinus splendidus Benth. Proc. Amer. Acad. Arts and Sciences 2: 48, 1851. “S. California “unique specimen” on label. Annotated: Type material by G.D. Wallace August 2016. [This is likely the holotype].


TCD: Coulter 96. Annotated: Type material by G.D. Wallace November 2017. Also, at GH (holotype).


TCD: Coulter 463 bis. Annotated: Type material by G.D. Wallace November 2017. Also, at GH (lectotype).


TCD: Coulter 331. Annotated: Holotype by D.J. Keil in 1972. Also, at GH (isotype), K (two isotypes).

*Pedicularis attenuata* Benth. Prodromus 10: 574. 1846. “…in California (Coulter!)” and ”(v. in Herb. Hook.)”. = *Pedicularis densiflora* Hook.


TCD: Coulter 629. Annotated: Type material by G.D. Wallace November 2017. Also, at GH (probable isotype), K (two specimens, presumed type material).


TCD: Coulter 278. Annotated: Isotype by G.D. Wallace August 2016. Also, at GH (possible type), K (presumed type material).

According to Powell 1974, p. 270 “Type Mexico: “California”, Coulter 278 (Holotype GH, isotypes NY).”


According Powell 1974, p. 292 “Type: Mexico; Sonora: “vicinity of Hermosillo.” 1829–1830, Coulter 277 (Holotype GH!, fragment US!).” [There is no mention of Mexico or Hermosillo in the protologue.]


TCD: Coulter 279. Annotated: Isotype by G.D. Wallace August 2016. Also, at K (holotype), K (presumed type material).


*Phaca crotalariae* Benth. in Herb. Coll. SS. Trim., Dubl. MS. Plantas Botanicas 278 (Holotype).]


TCD: No specimens found.


TCD: Coulter 712. Annotated: Isotype [in error] by Farjon and cited as isotype by Farjon (2017, p. 741). Note: this specimen, consisting of stem and leaves and lacking an associated cone, cannot be an isotype because as stated by Farjon (2010, p. 718 and 2017, p. 741) “(holotype not located)” and an isotype is defined as a duplicate of the holotype. Additionally, the TCD specimen may not be suitable as type material because in the protologue Don states “I regret that I have not seen the leaves of this [*P. muricata* D. Don] and the two following species [*P. radiata* D. Don and *P. tuberculata* D. Don].” Coulter was unable to locate them at the time among his “vast collections” (Don 1836, p. 440, 441).

discovered by Dr. Coulter in California.] “Habitat in California in maris littore ad Monterey. Coulter. *T. (v.s.sp.)*” “about Monterey 36d near sea level almost close to beach.”

**TCD:** No specimen found.


**TCD:** No specimen found.

**Prosopis pubescens** Benth. London J. Bot. 5: 82-83. 1846. “California between San Miguel [in the northern part of San Luis Obispo County] and Monterey. Coulter.”


**TCD?!** Coulter 661. Annotated: Type material by G.D. Wallace November 2017. Also, at **GH** (isotype), **K** (holotype).


**TCD?!** Coulter s.n. [Needs annotation as type material].


**TCD?!** Coulter 656 [Needs annotation as Isotype], Also, at **GH** (type).


**TCD?!** Coulter 655 [Needs annotation as Name], Also, at **GH** (probable isotype). **K** (holotype).


**TCD?!** Coulter 414. Not found at **TCD** but Coulter s.n. labeled *Trifolium ciliolatum* sp. n. Annotated: Type material by G.D. Wallace November 2017. Also, at **K** (presumed type material).


**TCD?!** Coulter 62. Annotated: Isotype by G.D. Wallace November 2017. Also, at **K**.


**APPENDIX IV**

**BASIONYMS OF PLANTS AND MARINE ALGAE NAMED FOR THOMAS COULTER**

The basionym is followed by current name, author and notation of whether the protologue refers to Coulter’s collection from California, Mexico or elsewhere. Most of the vascular plant taxa were previously listed by Coville (1895).

**Flowering Plants**

*Acacia coulteri* Benth. = *Acacia macilenta* Rose (Mexico)

*Antirrhinum coulterianum* Benth. ex A. DC. (California)

*Asclepias coulteri* A. Gray (Mexico)

*Astragalus coulteri* Benth. = *Astragalus lentiginosus* Doug. ex Hook. var. *borreganus* M.E. Jones (California)

*Bauhinia coulteri* J.F. Macbr. (Mexico)

*Berendtia coulteri* A. Gray = *Hemichaena coulteri* (A. Gray) Thieret (Mexico)

*Boltonia coulteri* A. Gray (Mexico)

*Brickellia coulteri* A. Gray (Mexico)

*Caulanthus coulteri* S. Watson (Mexico)

*Cœreus coulteri* Boott ex HemsI. (Mexico)

*Coulanthus coulteri* S. Watson = *Coulanthus streptanthus* (S. Watson) Greene (California)

*Cirsium coulteri* Harv. & A. Gray ex A. Gray = *Cirsium occidentale* var. *coulteri* (Harv. & A. Gray ex A. Gray) Jeps. (California)

*Clomella coulteri* Harv. ex A. Gray = *Clomella longipes* Torr. (Mexico)

*Conyza coulteri* A. Gray = *Laennecia coulteri* (A. Gray) G.L. Nesom (California)

*Coulteria Kunth* = *Caespitina L*. (Mexico)

*Cupressus coulteri* Forbes (Mexico)

*Decatropis coulteri* Hook. f. ex Benth. & Hook. f. May be nom. nud. [just name, no description] (Mexico)

*Echinocactus coulteri* Don (Mexico)

*Echites coulteri* S. Watson = *Mandevilla tonosa* (Jacq.) Woodson (Mexico)

*Elatierium coulteri* A. Gray = *Echinopegon coulteri* (A. Gray) Rose (Mexico)

*Euanthus coulteri* Harv. & A. Gray ex Benth. (California)

*Exostema coulteri* Hook. f. = *Syringantha coulteri* (Hook. f.) T. McDowell (Mexico)

*Geniostemon coulteri* Engelm. & A. Gray (Mexico)

*Guaiacum coulteri* A. Gray (Mexico)

*Gutierrezia coulteri* HemsI. = *Gutierrezia sphaerocephala* A. Gray (Mexico)

*Helianthemum coulteri* S. Watson (Mexico)

*Hibiscus coulteri* Harv. ex A. Gray (Mexico)

*Kosteletzya coulteri* A. Gray = *Kosteletzya hispidula* (Spreng.) Garcke (Mexico)

*Lathenia glabrata* Lindl. var. *coulteri* A. Gray = *Lathenia glabrata* subsp. *coulteri* (A. Gray) Ornduff (California)

*Leptoglossis coulteri* A. Gray = *Hunzickeria coulteri* (A. Gray) D’Arcy (Mexico)

*Linum coulterianum* Planch. = *Linum schiedeanum* Schltdl. & Cham. (Mexico)

*Lycocarpus coulteri* Hook. & Harv. (California)

*Malacothrix coulteri* Harv. & A. Gray ex A. Gray (California)

*Malvarstrum coulteri* S. Watson = *Sphaeralcea coulteri* (S. Watson) A. Gray (Mexico)

*Marsdenia coulteri* HemsI. = *Marsdenia selerorum* Loes. (Mexico)

*Menodora coulteri* A. Gray (Mexico)
Micropleum coulteri Hook. f. in Benth. & Hook. f. (Mexico)
Nama coulteri A. Gray (California)
Obione coulteri Moq. (California)
Oerya coulteriana Tul. = Neoleva coulteriana (Tul.) C.T. Philbrick (Mexico)
Pectis coulteri Harv. & A. Gray ex A. Gray (Mexico)
Peperonia coulteri C. DC. (Mexico)
Perezia coulteri A. Gray = Acourtia coulteri (A. Gray) Reveal & R.M. King (Mexico)
Phacelia coulteri Greenm. (Mexico)
Philadelphus coulteri S. Watson (Mexico)
Pinus coulteri D. Don (California)
Psilactus coulteri A. Gray = Arida coulteri (A. Gray) D.R. Morgan & R.L. Hartm. (Mexico)
Pterocephalus coulteri Boiss. (Mexico)
Romneya coulteri Harv. (California)
Salix coulteri Andersson = Salix xichensis Sanson ex Bong. (California)
Salvia coulteri Fernald (Mexico)
Schoenoaulon coulteri Baker = Schoenoaulon caricifolium (Schltdl.) A. Gray var. caricifolium (Mexico)
Senkenbergia coulteri Hook. f. = Boerhavia coulteri (Hook. f.) S. Watson (Mexico)
Sisymbrium coulteri Hems. (Mexico)
Spigelia coulteri Benth. = Spigelia hedystidea A. DC. (Mexico)
Tauschia coulteri A. Gray & Harv. ex A. Gray = Arracacia atropurpurea (Lehm.) Benth. & Hook. f. ex Hems. (Mexico)
Tetroclea coulteri A. Gray (Mexico)
Uragoga coulteriana Kunze (Brazil)
Verbexina coulteri A. Gray (Mexico)
Zaluzania coulteri Hems. = Zaluzania megacephala Sch. Bip. var. megacephala (Mexico)

Mosses
Orthotrichum coulteri Mitt. = Orthotrichum tenellum Bruch ex Brid. (California)

Marine Algae
Geidium coulteri Harv. (California)
Hyppea coulteri Harv. = Sarcodiotheca gaudichaudii (Mont.) P.W. Gabrielson (California)
Lomentaria ovalis var. coulteri Harv. = Neogastroclonium subarticulatum (Turner) L. Le Gall, Dalen & G.W. Saunders (California)
Microcladia coulteri Harv. (California)

APPENDIX V

PLANT TAXA FIRST COLLECTED BY THOMAS COULTER

Taxa reported to have been first collected by Coulter in Gray's Synoptical Flora of North America vol. 1 part 1 (fasc. 1 pp. 1–208, 1895; fasc. 2 pp. 209–506, 1897) and part 2 (1884), and vol. 2 part 1 (1878). These determinations would have been made based on specimens or information available to Gray at the time. Taxa for which a Coulter Californian specimen is type material are not included in this list.

Burrielia microglossa DC.: “first coll. by Coulter and Douglas” (Gray 1884, 1(2): 324).
Encelia farinosa A. Gray: “first coll. by Coulter” (Gray 1884, 1(2): 282).
Eriophyllum multiscale (A. DC.) A. Gray: “first coll. by Coulter & Douglas” (Gray 1884, 1(2): 328).
Franseria dumosa A. Gray: “first coll. by Coulter” (Gray 1884, 1(2): 251).

Leptosyne gigantea Kellogg: “first coll. by Coulter” (Gray 1884, 1(2): 300).
Malacothrix saxatilis var. tenuifolia (Nutt.) A. Gray: “first coll. by Coulter” (Gray 1884, 1(2): 423).
Simia (Geraea) canescens A. Gray: “first coll. by Coulter” (Gray 1884, 1(2): 282).
Symphoricarpos mollis Nutt.: “first coll. by Coulter and Nuttall” (Gray 1884, 1(2): 14).
Wislizenia refracta Engel.: “first coll. by Th. Coulter” (Gray 1895, 1(1): 186).

APPENDIX VI

LESSER-KNOWN GENERIC EPITHETS AND THE EQUIVALENTS USED HERE

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