

Early records of *Racomitrium s. lat.* (Grimmiaceae, Musci) in the Southern Hemisphere and the correct author citations for *R. crispulum* and *R. rupestre*

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Abstract – A history of the discoveries and descriptions of species of the broadly conceived genus *Racomitrium* Brid. in the Southern Hemisphere in 1800-1850 is briefly outlined. *Dryptodon crispulus* Hook.f. et Wilson and *D. rupestris* Hook.f. et Wilson are the two earliest described species in the Southern Hemisphere, from the Campbell Islands south of New Zealand and Isla Hermite in the Cape Horn area in southern South America, respectively, which are still accepted in modern moss taxonomy. The taxonomic and nomenclatural history of these species is discussed and it is proved that the authorship of their names in *Racomitrium* should be ascribed to “(Hook.f. et Wilson) Wilson”, not to “(Hook.f. et Wilson) Hook.f. et Wilson”, as commonly used in the bryological literature. The problem of the valid publication of *Bucklandiella crispula* (Hook.f. et Wilson) Bednarek-Ochyra et Ochyra is briefly considered and *Dryptodon rupestris* Hook.f. et Wilson is lectotypified.

Author citation / Bryophyta / *Bucklandiella* Campbell Islands / New Zealand / nomenclature / South America / taxonomy / Tierra del Fuego

INTRODUCTION

Most species of the broadly understood genus *Racomitrium* Brid. are large and conspicuous mosses that are easily noted in the field, even by casual collectors. For that reason some species have been known from the beginning of the modern plant science. In the Northern Hemisphere the oldest known species of this genus was described in the early 1620s as *Muscus terrestris candidus ramosus* (Bauhin, 1623). Currently, this phrase name refers to *Racomitrium canescens* (Hedw.) Brid. or *Niphotrichum canescens* (Hedw.) Bednarek-Ochyra et Ochyra if the division of the polyphyletic genus *Racomitrium* into segregates is accepted (Ochyra et al., 2003; Sawicki et al., 2015). Some thirty years later another species of this genus was recognised as *Muscus hirtus capillaceus* (Merret, 1667) which is currently known as *Racomitrium lanuginosum* (Hedw.) Brid.

The broadly conceived genus *Racomitrium* is well represented in cool temperate and cold regions in the Southern Hemisphere. Yet, the real number of species from this vast area cannot not be precisely designated because the genus has not been taxonomically revised on a global scale to provide a sound taxonomic

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framework for assessing the austral material. A brief history of the discoveries in the austral regions of species of *Racomitrium s. lat.* during the first half of the nineteenth century is presented in this article.

A REVIEW OF THE EARLIEST RECORDS OF RACOMITRIUM IN THE SOUTHERN HEMISPHERE

Bryological studies began much later in the Southern than in the Northern Hemisphere and the first bryophytes were collected by naturalists to the great exploratory expeditions in the second half of the eighteenth century. The first racomitrialean moss was reported from the Cape region by Thunberg (1800) as *Trichostomum hypnoides* Willd. ex P.Beauv. (= *Racomitrium lanuginosum*) who collected it during his stay in South Africa in 1772-1775 (Stafleu & Cowan, 1986). The same species was later collected by Jean Baptiste G.M. Bory de St. Vincent in 1801-1802 on Ile de Bourbon (= Réunion Island). It was described as both *Campylopus squalidus* Brid. (Bridel, 1818) and *Racomitrium borbonicum* Brid. (Bridel-Brideri, 1826-1827) which are now considered to be conspecific with *R. lanuginosum* (Vitt & Marsh, 1988). Gaudichaud-Beaupré (1825, 1828), a naturalist to the French naval expedition of the circumnavigation of the earth in 1817-1820 on the ships *Uranie* and *Physicienne* under the command of Admiral Louis C.D. de Freycinet, reported *R. lanuginosum* in the Falkland Islands in 1820.

Another racomitrialean species was collected in the Southern Hemisphere only in the 1830s in the Cape region in South Africa by Johan Franz Drège (Bednarek-Ochyra & Ochyra, 2012a). However, this specimen remained unnamed for over 60 years until Müller (1899) finally described it as *Grimmia pseudoacicularis* Müll.Hal. [= *Racomitrium pseudoaciculare* (Müll.Hal.) Paris] which is currently considered conspecific with *Bucklandiella lamprocarpa* (Müll.Hal.) Bednarek-Ochyra et Ochyra (Bednarek-Ochyra, 2004).

In March 1840, a French Expedition under the command of Jules-Sébastien-César Dumont d'Urville on the ships *Astrolabe* and *Zélée* spent ten days on the Auckland Islands, off the South Island of New Zealand. A few cryptogams were collected by J. Hombron and H. Jacquinot and Montagne (1845a) reported *Racomitrium microcarpon* (Hedw.) Brid. from this archipelago. This record of this Northern Hemisphere species in the antipodal region was generally overlooked and it is not mentioned in *Index bryologicus* (Paris, 1898) or in *Index muscorum* (Wijk *et al.*, 1967). Examination of the voucher specimen deposited in the Montagne herbarium in PC revealed that it actually represents *R. crispulum* s. str. [= *Bucklandiella crispula* (Hook.f. et Wilson) Bednarek-Ochyra et Ochyra].

The first most comprehensive early collection of racomitrialean mosses from various regions in the Southern Hemisphere was made by J.D. Hooker, a naturalist to the British Antarctic Expedition of 1839-1843 on the ships *Terror* and *Erebus*, under the command of Captain James C. Ross. This expedition operated in the region of Îles Kerguelen, Tasmania, the Auckland and Campbell Islands, New Zealand, the Falkland Islands, as well as on Isla Hermite in the Cape Horn area and in the north-eastern Antarctic Peninsula. In all these areas, except for the Antarctic, racomitrialean mosses were collected. Apart from *Racomitrium lanuginosum*, which was recorded from the Campbell Islands (Wilson & Hooker, 1845) as well as the Falkland Islands and the Tierra del Fuego archipelago (Wilson & Hooker, 1847), there have been five other species collected of the

broadly understood *Racomitrium* which currently are included within *Bucklandiella* Roiv., the largest segregate of *Racomitrium* (Sawicki *et al.*, 2015).

Two racomitrialean species collected by J.D. Hooker were described in the next year, after the return of the expedition to England, in a paper describing the most remarkable moss records (Hooker & Wilson, 1844). They were described under the generic name *Dryptodon* Brid as *D. crispulus* Hook.f. et Wilson from the Campbell Islands and *D. rupestris* Hook.f. et Wilson from Isla Hermite. They are actually the first species of the broadly conceived genus *Racomitrium* described from the Southern Hemisphere which gained universal acceptance of bryologists as distinct and unmistakable taxa.

The other three species were reported under the well known and widely used European names in *Flora antarctica*, an extensive report on the botanical results of the British Antarctic Expedition (Wilson & Hooker, 1845, 1847). One collection from the Falkland Islands was named *Racomitrium heterostichum* (Hedw.) Brid. and this specimen actually represents the first record of *R. striatipilum* Cardot [= *Bucklandiella striatipila* (Cardot) Bednarek-Ochyra *et* Ochyra], an amphiatlantic south-temperate species (Blockeel *et al.*, 2009b; Bednarek-Ochyra & Ochyra, 2010; Ellis *et al.* 2010, 2012b, 2013a).

The other three collections originated from Isla Hermite, the Falkland Islands and Îles Kerguelen and they were designated as unnamed varieties of *Racomitrium protensum* (Duby) Bruch *et* Schimp. [= *Codiophorus aquaticus* (Schrad.) Bednarek-Ochyra *et* Ochyra]. The plants from Isla Hermite were later described by Müller (1849) as *Grimmia nigrita* Müll.Hal. which is conspecific with *Racomitrium didymum* (Mont.) Lorentz [= *Bucklandiella didyma* (Mont.) Bednarek-Ochyra *et* Ochyra] (Deguchi, 1984; Ochyra *et al.*, 2008a). On the other hand, the specimens from the Falkland Islands Müller (1849) described as *Grimmia lamprocarpa* Müll.Hal. [= *Racomitrium lamprocarpum* (Müll.Hal.) A.Jaeger ≡ *Bucklandiella lamprocarpa* (Müll.Hal.) Bednarek-Ochyra *et* Ochyra] represent a distinct species, having a wide panholantarctic distribution and extending into the tropics in South America and East Africa (Ochyra *et al.*, 1988; Bednarek-Ochyra & Ochyra, 2012a; Bednarek-Ochyra, 2015). Finally, the specimen from Îles Kerguelen was recognised much later by Müller (1889) as *Grimmia suborthotrichacea* Müll.Hal. var. *robustissima* Müll.Hal. and this name was later shown to be a synonym of *Bucklandiella pachydictyon* (Cardot) Bednarek-Ochyra *et* Ochyra (Ochyra *et al.*, 2008a).

The third species was collected from Isla Hermite and Wilson and Hooker (1847) designated it as two unnamed varieties of *Racomitrium fasciculare* (Hedw.) Brid. [= *Codiophorus fascicularis* (Hedw.) Bednarek-Ochyra *et* Ochyra]. This material was subsequently described by Müller (1849) as *Grimmia symphydonta* Müll.Hal. and it is currently considered to be identical to *Bucklandiella didyma* (Deguchi, 1984; Ochyra *et al.*, 2008a).

A list of the austral species of *Racomitrium s. lat.* described in the first half of the nineteenth century is complemented by two species from Chile. Montagne (1845b) studied a collection of mosses made in this country by Claude Gay and described two species, namely *Racomitrium convolutum* Mont. from central Chile and *Grimmia didyma* Mont. (= *Racomitrium didymum*) from the south part of this country. The two species are considered to be conspecific and the latter epithet was chosen for the final species since it was better known in the literature (Ochyra *et al.*, 2008a).

No fewer than 17 taxa of *Racomitrium s. lat.* have been reported in the literature from the Southern Hemisphere in the first half of the nineteenth century (Table 1). This number includes also five unnamed varieties which were

Table 1. Chronological synopsis of taxa of *Racomitrium* s. lat. described and/or recorded from the Southern Hemisphere in 1800-1850. Names in boldface refer to taxa described from the Southern Hemisphere material

No.	Original name	Publication	Region	Current status	First synonymisation or determination
1.	<i>Trichostomum hypnoides</i> (Willd.) ex P.Beauv.	Thunberg (1800: p. 174)	South Africa	<i>Racomitrium lanuginosum</i> (Hedw.) Brid.	Illegitimate name [<i>Trichostomum lanuginosum</i> Hedw. 1801]
2.	<i>Campylopus squatus</i> Brid.	Bridel (1818: p. 77)	Réunion Island	<i>Racomitrium lanuginosum</i> (Hedw.) Brid.	Vitt & Marsh (1988: p. 253)
3.	<i>Racomitrium borbonicum</i> Brid.	Bridel-Brideri (1826: p. 217)	Réunion Island	<i>Racomitrium lanuginosum</i> (Hedw.) Brid.	Vitt & Marsh (1988: p. 253)
4.	<i>Dryptodon crispulus</i> Hook.f. et Wilson	Hooker & Wilson (1844: p. 544)	Campbell Islands	<i>Bucklandiella crispula</i> (Hook.f. et Wilson) Bednarek-Ochyra <i>et al.</i>	—
5.	<i>Dryptodon rupestris</i> Hook.f. et Wilson	Hooker & Wilson (1844: p. 544)	Isla Hermite	<i>Bucklandiella rupestris</i> (Hook.f. et Wilson) Bednarek-Ochyra <i>et al.</i>	—
6.	<i>Racomitrium microcarpon</i> of Mont. [non (Hedw.) Brid.]	Montagne (1845a: p. 284)	Auckland Islands	<i>Bucklandiella crispula</i> (Hook.f. et Wilson) Bednarek-Ochyra <i>et al.</i>	Present work
7.	<i>Grimmia didyma</i> Mont.	Montagne (1845b: p. 122)	Chile	<i>Bucklandiella didyma</i> (Mont.) Bednarek-Ochyra & Ochyra	—
8.	<i>Racomitrium convolutum</i> Mont.	Montagne (1845b: p. 122)	Chile	<i>Bucklandiella didyma</i> (Mont.) Bednarek-Ochyra & Ochyra	—
9.	<i>Racomitrium protensum</i> (Duby) Bruch et Schimp. var. 1	Wilson & Hooker (1847: p. 402)	Isla Hermite	<i>Bucklandiella didyma</i> (Mont.) Bednarek-Ochyra & Ochyra	Ochyra <i>et al.</i> (2008a: p. 306)
10.	<i>Racomitrium protensum</i> (Duby) Bruch et Schimp. var. 2	Wilson & Hooker (1847: p. 402)	Falkland Islands	<i>Bucklandiella lamprocarpa</i> (Müll.Hal.) Bednarek-Ochyra <i>et al.</i>	Müller (1849: p. 801 as <i>Grimmia nigrita</i> Müll.Hal.)
11.	<i>Racomitrium protensum</i> (Duby) Bruch et Schimp. var. 3	Wilson & Hooker (1847: p. 402)	Îles Kerguelen	<i>Bucklandiella pachydictyon</i> (Cardot) Bednarek-Ochyra <i>et al.</i>	Müller (1849: p. 802 as <i>Grimmia lamprocarpa</i> Müll.Hal.)
					Müller (1889: p. 30 as <i>Grimmia suborthotrichacea</i> Müll.Hal. var. <i>robustissima</i> Müll.Hal.); Ochyra <i>et al.</i> (2008a: p. 298)

Table 1. Chronological synopsis of taxa of *Racomitrium s. lat.* described and/or recorded from the Southern Hemisphere in 1800-1850. Names in boldface refer to taxa described from the Southern Hemisphere material (*continued*)

No.	Original name	Publication	Region	Current status	First synonymisation or determination
12.	<i>Racomitrium fasciculare</i> (Hedw.) Brid. var. 2	Wilson & Hooker (1847: p. 402)	Isla Hermite	<i>Bucklandiella didyma</i> (Mont.) Bednarek-Ochyra et Ochyra	Müller (1849: p. 809 as <i>Grimmia symphydonta</i> Müll.Hal.)
13.	<i>Racomitrium fasciculare</i> (Hedw.) Brid. var. 3	Wilson & Hooker (1847: p. 402)	Isla Hermite	<i>Bucklandiella didyma</i> (Mont.) Bednarek-Ochyra et Ochyra	Müller (1849: p. 809 as <i>Grimmia symphydonta</i> Müll.Hal.)
14.	<i>Racomitrium heterostichum</i> of Wilson et Hooker [<i>non</i> (Hedw.) Brid.]	Wilson & Hooker (1847: p. 402)	Falkland Islands	<i>Bucklandiella striatipila</i> (Cardot) Bednarek-Ochyra et Ochyra	Present work
15.	<i>Grimmia nigrita</i> Müll.Hal. [based on <i>Racomitrium prostenum</i> (Duby) Bruch et Schimp. var. 1]	Müller (1849: p. 801)	Isla Hermite	<i>Bucklandiella didyma</i> (Mont.) Bednarek-Ochyra et Ochyra	Deguchi (1984: p. 30)
16.	<i>Grimmia lamprocarpa</i> Müll.Hal. [based on <i>Racomitrium prostenum</i> (Duby) Bruch et Schimp. var. 2]	Müller (1849: p. 802)	Falkland Islands	<i>Bucklandiella lamprocarpa</i> (Müll.Hal.) Bednarek-Ochyra et Ochyra	—
17.	<i>Grimmia symphydonta</i> Müll.Hal. [based on <i>Racomitrium fasciculare</i> (Hedw.) Brid. var. 2 et 3]	Müller (1849: p. 809)	Isla Hermite	<i>Bucklandiella didyma</i> (Mont.) Bednarek-Ochyra & Ochyra	Deguchi (1984: p. 30)

subsequently described as three separate species and one variety. Of all these species, nine were described as new to science, but only four of them are still accepted. Additionally, two Holarctic species were erroneously reported from the Southern Hemisphere after the correct identity of the voucher specimens was established.

A TAXONOMIC AND NOMENCLATURAL HISTORY OF *DRYPTODON CRISPULUS*

There have been many species which truly belong within *Racomitrium s. lat.* described from Australasia (e.g. Müller, 1898), the Subantarctic (e.g. Müller, 1883, 1890), Africa (e.g. Müller, 1899) and southern South America (e.g. Müller, 1885; Cardot, 1905, 1908; Dusén, 1907). However, the vast majority were subsequently lumped with *Racomitrium crispulum* (Dixon, 1926; Clifford, 1955; Lawton, 1973) and, as a result, for nearly a century this species has served as a convenient repository for a great number of austral species of this genus and its specific epithet has become firmly associated with any collection of racomitrialean mosses throughout the Southern Hemisphere. Studies by various authors have shown that many of these species were incorrectly merged with *R. crispulum* and are distinct and well defined taxa which are only distantly related to this species (e.g. Bell, 1974; Deguchi, 1984; Bednarek-Ochyra & Ochyra, 1998, 2010, 2011, 2012a,b,c, 2013; Bednarek-Ochyra *et al.*, 1999, 2014; Ochyra *et al.*, 2008a,b; Blockeel *et al.*, 2007a,b, 2008, 2009a,b, 2010; Ellis *et al.*, 2010, 2011, 2012a,b, 2013b,c; Larrain *et al.*, 2011; Ochyra & van Rooy, 2013).

Apart from strictly taxonomic problems associated with the interpretation and circumscription of *Racomitrium crispulum*, the species name itself presents some nomenclatural problems which refer to the correct author citation of *R. crispulum*. As stated above, this species was originally described from a single collection made on the Campbell Islands as a species of *Dryptodon* (Hooker & Wilson, 1844). It was subsequently reported from îles Kerguelen (Wilson & Hooker, 1847), but the plants from this archipelago were designated as an unnamed variety, var. 3, with *foliis siccitate patulis rigidioribus*. These plants are only distantly related to those from the Campbell Islands and actually represent *R. pachydictyon* Cardot (= *Bucklandiella pachydictyon*).

Müller (1849) placed *Dryptodon crispulus* in the then all-encompassing genus *Grimmia* Hedw. It is worth noting that the compilers of “*Index muscorum*” (Wijk *et al.*, 1962) provided erroneous bibliographic data for the combination *Grimmia crispula* (Hook.f. et Wilson) Müll.Hal. and, additionally, this name is a later illegitimate homonym. Finally, Wilson (1854) transferred *D. crispulus* to *Racomitrium*. He placed it in the rankless subdivision *Dryptodon* within this genus, following the concept presented in *Bryologia europaea* (Bruch *et al.*, 1845), although in this opus *Dryptodon* is considered as a subgenus. Unfortunately, Wilson (1854) failed to provide the clear authorship of the name under *Racomitrium* and used only the following entry: “*Racomitrium (Dryptodon) crispulus*, Hook. fil. et Wils.; [... (diagnosis)]. — *Fl. Antarct.* p. 124, t. 57, f. 9”. This entry was subsequently repeated by Wilson (1858) in *Flora Tasmaniae* and Hooker (1867) in his handbook of New Zealand mosses, whereas Dixon (1926) cited “(Hook.f. et Wilson) Hook.f. et Wilson” as the authorship for *Racomitrium*.

crispulum. This author citation was adopted in *Index muscorum* (Wijk *et al.*, 1969) and in the well known and commonly used database TROPICOS (<http://www.tropicos.org/>), but it cannot be accepted.

The case of *Racomitrium crispulum* in *Flora Novae-Zelandiae* is covered by Art. 46.3 and it is exactly analogous to the case presented in Ex. 16 of the ICN (McNeill *et al.*, 2012). When Wilson (1854) published “*Racomitrium (Dryptodon) crispulus*, Hook. fil. et Wils.”, he provided a direct reference to *Dryptodon crispulus* Hook.f. et Wilson in *Flora antarctica*, where this name is not the basionym because this species was described a year earlier in *Musci antarctici* (Hooker & Wilson, 1844) and in the cited work the species was only re-described (Wilson & Hooker, 1845). Nevertheless, this may be considered as a formal error. Wilson (1854) did not ascribe the new combination *Racomitrium crispulum* to “Hooker et Wilson” but this combination must be ascribed to “Wilson” alone who is clearly given as the author of the “*Musci*” in *Flora Novae-Zelandiae*.

The next nomenclatural error associated with *Racomitrium crispulum* was committed on the transfer of this species to *Bucklandiella* (Ochyra *et al.*, 2003) where, following *Index muscorum* (Wijk *et al.*, 1959), the basionym was cited as “*Didymodon crispulus* Hook.f. & Wilson, Fl. Antarct. 1: 124, 54 f. 9. 1844” although, in addition, the generic name as the distorted form of *Didymodon* was provided. Despite these errors, the combination *Bucklandiella crispula* (Hook.f. et Wilson) Bednarek-Ochyra *et Ochyra* is validly published on p. 144 in *Census catalogue of Polish mosses*. The applicable articles of the ICN are Art. 41.5 and Art. 41.8 (a). Under Art. 41.5 errors in the citation of the basionym are permitted – the wrong generic name, but nothing omitted and the plate and figure numbers making clear that it is “1. *Dryptodon crispulus*, Hook. fil. et Wils.” on page 124 that is the intended basionym. So far as citing a work other than that in which the basionym was validly published, the present case is covered by Art. 41.8 (a), because there is no mention of the earlier publication in the “*Flora antarctica*” account.

Accordingly, all the nomenclatural issues discussed above are summarized as follows.

Bucklandiella crispula* (Hook.f. et Wilson) Bednarek-Ochyra *et Ochyra

In Ochyra, Żarnowiec *et* Bednarek-Ochyra, *Cens. Cat. Polish Mosses*: 144. 2003 ≡ *Dryptodon cripulus* Hook.f. *et* Wilson, *London J. Bot.* 3: 544. 1844 ≡ *Grimmia crispula* (Hook.f. *et* Wilson) Müll.Hal., *Syn. Musc. Frond.* 1: 804. 1849, hom. illeg. [non *Grimmia crispula* (Hedw.) Turner 1804] ≡ *Racomitrium crispulum* (Hook.f. *et* Wilson) Wilson in Hook.f., *Fl. Nov. Zel.* 2(1): 75. 1854. **Type citation:** Campbell's Island.

The name *Dryptodon crispulus* was lectotypified by Bell (1974) and Frisvoll (1984) but unfortunately, for formal reasons, neither of them can be accepted. This issue will be dealt with in a separate account and the accurate description of the lectotype is of basic importance for the proper circumscription of this earliest species of *Bucklandiella* described in the Southern Hemisphere.

LECTOTYPIFICATION OF *DRYPTODON RUPESTRIS*

During the Antarctic voyage of 1839-1843 J.D. Hooker collected another new species of a racomitrialean moss on Isla Hermite in the Cape Horn area of the southernmost tip of South America. This species has exactly the same

taxonomic and nomenclatural history as that of *Dryptodon crispulus*. It was described as *D. rupestris* Hook.f. et Wilson (Hooker & Wilson 1844) and subsequently re-described and illustrated in *Flora antarctica* (Wilson & Hooker, 1847). Müller (1849) transferred it to the genus *Grimmia* as *G. rupestris* (Hook.f. et Wilson) Müll.Hal. and Wilson (1854) positioned it in *Racomitrium* in the rankless subdivision *Dryptodon*, along with *R. crispulum*. Although he presented the entry for this species in an identical way to that of *R. crispulum*, the compilers of *Index muscorum* ascribed the name *R. rupestre* to "Wilson et Hook.f." (Wijk *et al.*, 1962), but later corrected it to "Wilson in Hook.f." and this is the regular authorship for this name.

Racomitrium rupestre has gained universal acceptance and only Dixon (1926) considered it as a variety of *R. crispulum*, this concept also being adopted by Bell (1974). These two species are rather distantly related and Deguchi (1984) rightly considered *R. rupestre* as a species in its own right and provided a detailed description of the species based upon the original material from Isla Hermite deposited in BM and which he designated as a holotype. In fact, in BM there are several original specimens of this species and Hooker and Wilson did not designate any of them as type. Hence, the lectotypification of this name is necessary and it is effected herein.

Bucklandiella rupestris* (Hook.f. et Wilson) Bednarek-Ochyra *et Ochyra

In Ochyra, Żarnowiec et Bednarek-Ochyra, Cens. Cat. Polish Mosses: 147. 2003 ≡ *Dryptodon rupestris* Hook.f. et Wilson, *London J. Bot.* 3: 544. 1844 ≡ *Grimmia rupestris* (Hook.f. et Wilson) Müll.Hal., *Syn. Musc. Frond.* 1: 803. 1849 ≡ *Racomitrium rupestre* (Hook.f. et Wilson) Wilson in Hook.f., *Fl. Nov. Zel.* 2(1): 75. 1854 ≡ *R. crispulum* var. *rupestre* (Hook.f. et Wilson) Dixon, *New Zealand Inst. Bull.* 3(4): 159. 1926. **Type citation:** Hermite Island, Cape Horn [Lectotype (selected here): "Nº 137. *Dryptodon rupestris* Hook.fil. & Wils. Hermite Island, Cape Horn Antarct. Exped. 1839-1843. J.D.H." – BM-Hooker!; isolectotypes: BM-Hampe!, BM-Hooker!, BR!, NY-Mitten!, PC-Montagne! Syntype: "Nº 137b. *Dryptodon rupestris* Hook.fil. & Wils. Hermite Island, Cape Horn Antarct. Exped. 1839-1843. J.D.H." – BM-Hooker!; isosyntype: PC-Montagne!].

Acknowledgements. This work was financially supported by the Polish National Centre of Science through grant No. N N 303 796 940 for the author and, partly, through the statutory fund of the Institute of Botany of the Polish Academy of Sciences. I am indebted to the curators of the herbaria at BM, BR, NY and PC for kindly allowing me to study the specimens, to Dr John McNeill, Edinburgh, for his valuable suggestions regarding nomenclatural issues and to Rod Seppelt, Hobart, Tasmania for checking the English and valuable comment on the manuscript.

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