

Rumicastrum* Ulbrich (Montiaceae): a beautiful name for the Australian calandrinias*Mark A. Hershkovitz**

Santiago, Chile

cistanthe@gmail.com

ABSTRACT:

For more than 30 years, Montiaceae specialists have agreed that Australian species classified in *Calandrinia* Kunth pertain to a distinct and divergent lineage whose oldest validly published name is *Rumicastrum* Ulbrich. In 1998, more than half of accepted species were transferred erroneously to a new genus, *Parakeelya* Hershk. However, taxonomists and databases have continued to classify the species in *Calandrinia*, confounding the taxonomy of the latter. Here, 65 Australian species classified in *Calandrinia* are transferred to *Rumicastrum*. This consummates the phylogenetic revision of Montiaceae taxonomy initiated more 30 years ago. Published on-line www.phytologia.org *Published on-line www.phytologia.org Phytologia 102(3): 116-123 (Sept 21, 2020). ISSN 030319430.*

KEY WORDS: *Rumicastrum*, *Calandrinia*, *Parakeelya*, Montiaceae, Australia.

Carolin (1987) published a seminal analysis of classical Portulacaceae (including Montiaceae) that found, among other things, polyphyly of the classical circumscription of the genus *Calandrinia* Kunth, which then included ca.120 accepted species. He determined that the 30–35 accepted Australian species then classified in *Calandrinia* represented a lineage distinct and divergent from other members of *Calandrinia* s. lato. He also determined that the monotypic Australian genus *Rumicastrum* Ulbrich [TYPE: *R. chamaecladum* (Diels) Ulbrich]), originally classified in Chenopodiaceae, pertained to this lineage. He prepared but did not publish a manuscript that recombined all named Australian calandrinias in *Rumicastrum*. Hershkovitz (1993) substantially revised Carolin's (1987) analysis and established the current circumscription of *Calandrinia* (see Hershkovitz, 2019), comprising then only ca. 14 accepted New World species. He likewise confirmed that the Australian calandrinias pertained to a distinct lineage.

Hancock et al. (2018) corroborated Carolin's (1987) interpretation using genomic data that sampled broadly the Australian calandrinias and *Rumicastrum*. However, several earlier molecular studies, 1997–2015 (reviewed in Hershkovitz, 2019) sampling fewer Australian species already had found them to be highly divergent from other Montiaceae lineages. But in the meantime, the taxonomy of the Australian species remained in limbo. In Hershkovitz and Zimmer (1997), I was prevented from recombining an Australian calandrinia in *Rumicastrum* by an editor who maintained that *Rumicastrum* pertained to Chenopodiaceae. For this reason, preliminary to submitting an invited treatment of the Australian calandrinias (Hershkovitz, 2002), I transferred the species to a new genus, *Parakeelya* Hershk. (Hershkovitz, 1998). But in 1999, at the International Botanical Congress in St. Louis, J. G. West (CANB) assured me that I had erred and that *Rumicastrum* indeed was an Australian calandrinia. Yet, since then, Australian botanists have described an additional 24 Australian species in *Calandrinia*, including J. G. West and Chinnock (2013), who did not even mention *Rumicastrum* or *Parakeelya*.

Owing to the results of Hancock et al. (2018), Thiele et al. (2018; including J. G. West) recognized that continued classification of the Australian species in *Calandrinia* was untenable. Surprisingly, they have proposed to conserve the generic name *Parakeelya* over *Rumicastrum*, arguing that the former had become more commonly used than the latter. Thus, they argued, switching to the latter would disrupt established taxonomic usage. The argument is a red herring, because *neither* name has been used commonly; overwhelmingly *Calandrinia* is used. Indeed, *Parakeelya* and/or the existing combinations are listed as synonyms of *Calandrinia* and/or combinations therein in current databases

(COL [Catalog of Life], Hassler, 2020; GBIF, GBIF Secretariat, 2017; POWO [Plants of the World Online], POWO, 2019; and WFO, World Flora Online, without date). Most recently, a new Australian species was described in *Calandrinia* by Obbens (2019; coauthor of Thiele, et al. 2018). Obbens (2019) reported that the new species pertained to the same species group as *Rumicastrum chamaecladum*, but did not explain therein why the generic classifications therefore differed.

Scrutiny reveals something peculiar. Up to 30 years before Hancock et al. (2018), all concerned parties (except one unqualified editor) had agreed that the Australian calandrinias form a distinct lineage of Montiaceae, and that this lineage includes *Rumicastrum*. Inexplicably, therefore, Hancock et al. (2018) described *Calandrinia* as a genus comprising only *Calandrinia* sensu Hershkovitz (1993) plus the Australian calandrinias, and excluding *Rumicastrum*. Conceptually, this was a *new* genus; there *never* had been a proposal to combine just these two particular lineages. And Hancock et al. (2018) obviously knew the circumscription was erroneous before they proposed it, and indeed, their article rejected it.

Both the posture of Thiele et al. (2018) and the *Calandrinia* circumscription of Hancock et al. (2018) are puzzling. The authors clearly prefer *Parakeelya*. So why have they not applied the name they prefer? And, seemingly contradictorily, why do they then cite frequent historical application as the reason for its nomenclatural conservation? Evidently because they realize that *Parakeelya* is not monophyletic without *Rumicastrum*, which still has priority. But no law, nomenclatural or otherwise, imposes phylogeny as a taxonomic criterion. This is the authors' preference. In the meantime, in contradiction to this preference, they have used and continue to use a contrived circumscription of *Calandrinia* they know is *not* monophyletic. Hershkovitz (2019, 2020) surmised that Thiele et al. (2018) have avoided using *Rumicastrum* (except for *R. chamaecladum*) not for scientific, but for aesthetic reasons, and have bended science in the process. The result is that more than 30 years after Carolin's (1987) proposal, the taxonomy of *Calandrinia* at the *global* scale remains unnecessarily muddled.

Here, I complete what Roger Carolin started in his unpublished manuscript, providing below recombinations of all accepted names (per POWO) of Australian calandrinias in *Rumicastrum*. This also corrects my erroneous classification of the species in *Parakeelya* (Hershkovitz, 1998) and also *finally* consummates Carolin's (1987) phylogenetic revision of Montiaceae taxonomy. It is a shame that Carolin or I had not published these recombinations decades ago, in Carolin's case because of his retirement, in mine because of my unjustified deference to my specialist Montiaceae colleagues (Hershkovitz, 2019: 50). To recognize Carolin's contribution, I credit him as the author for all names in *Rumicastrum* included in his manuscript. This, especially, renders them *beautiful* names for these lovely and remarkable plants.

Rumicastrum Ulbrich, Nat. Pflanzenfam., ed. 2 [Engler & Prantl] 16c: 519. 1934. TYPE: *Rumicastrum chamaecladum* (Diels) Ulbrich ≡ *Atriplex chamaeclada* Diels, Repert. Spec. Nov. Regni Veg. 16: 194. (31 Dec.) 1919. [= *Calandrinia* sect. *Apicales* Poelln., Repert. Spec. Nov. Regni Veg. 35: 164. (15 June) 1934. TYPE: non design.; = *Calandrinia* sect. *Basales* Poelln., Repert. Spec. Nov. Regni Veg. 35: 164. (15 June) 1934. TYPE: non design.; = *Calandrinia* sect. *Tuberosae* Poelln., Repert. Spec. Nov. Regni Veg. 35: 165. (15 June) 1934. TYPE: non design.; = *Calandrinia* sect. *Pseudodianthoideae* Poelln., Repert. Spec. Nov. Regni Veg. 35: 166. (15 June) 1934. TYPE: non design.; = *Calandrinia* sect. *Uniflorae* Poelln., Repert. Spec. Nov. Regni Veg. 35: 165. (15 June) 1934. TYPE: *C. uniflora* F. Muell., Trans. & Proc. Philos. Inst. Victoria 3: 41. 1859.; = *Parakeelya* Hershk., Phytologia 84(2): 101. (Feb.) 1998. TYPE: *P. ptychosperma* (F. Muell.) Hershk. ≡ *Calandrinia ptychosperma* F. Muell., Fragm. 4(29): 137. (Nov.) 1864. ≡ *Claytonia ptychosperma* (F. Muell.) F. Muell., Syst. Census Austral. Pl. 27. 1882.

Rumicastrum arenicolum (Syeda) Hershk., comb. nov. Basionym: *Calandrinia arenicola* Syeda, Proc. Linn. Soc. New South Wales 116: 153. 1996. ≡ *Parakeelya arenicola* (Syeda) Hershk., Phytologia 84(2): 101. (Feb.) 1998.

- Rumicastrum baccatum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia baccata* Obbens, Nuytsia 24: 37. (1 May) 2014.
- Rumicastrum balonense*** (Lindl.) Carolin, comb. nov. Basionym: *Calandrinia balonensis* Lindl. in T. L. Mitchell, J. Exped. Trop. Australia. 148. (16 Feb.–31 Mar.) 1848. ≡ *Claytonia balonnensis* (Lindl.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya balonensis* (Lindl.) Hershk., Phytologia 84(2): 101. (Feb.) 1998.
- Rumicastrum brevipedatum*** (F. Muell.) Carolin, comb. nov. Basionym: *Calandrinia brevipedata* F. Muell., Fragm. 10(84): 69. (July) 1876. ≡ *Claytonia brevipedata* (F. Muell.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya brevipedata* (F. Muell.) Hershk., Phytologia 84(2): 101. (Feb.) 1998.
- Rumicastrum butcherense*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia butcherensis* Obbens, Nuytsia 24: 208. (21 Aug.) 2014. [NOTE: For reasons not specified, IPNI lists *Calandrinia butcherensis* as “nom. inval.”; POWO lists it as an “unplaced name.” It was published together with *Calandrinia rubrisabulosa* Obbens, which is accepted by both databases, and I am unable to detect the nomenclatural flaw in the publication of *C. butcherensis*.]
- Rumicastrum calyptratum*** (Hook. f.) Carolin, comb. nov. Basionym: *Calandrinia calyptrata* Hook. f. in Hook., Icon. Pl. 3: 296. 1840. ≡ *Claytonia calyptrata* (Hook. f.) F. Muell., Fragm. 3(20): 89. (Sept.) 1862. ≡ *Parakeelya calyptrata* (Hook. f.) Hershk., Phytologia 84(2): 101. (Feb.) 1998.
- Rumicastrum compositum*** (Nees) Carolin, comb. nov. Basionym: *Calandrinia polypetala* Fenzl in Endl. et al. var. *composita* Nees in Lehm., Pl. Preiss. 1: 247. (9–11 Feb.) 1845. ≡ *Claytonia composita* (Nees) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya composita* (Nees) Hershk., Phytologia 84(2): 101. (Feb.) 1998.
- Rumicastrum corrigioloides*** (F. Muell. ex Benth.) Carolin, comb. nov. Basionym: *Calandrinia corrigioloides* F. Muell. ex Benth., Fl. Austral. 1: 175. (30 May) 1863. ≡ *Claytonia corrigioloides* (F. Muell. ex Benth.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya corrigioloides* (F. Muell. ex Benth.) Hershk., Phytologia 84(2): 101. (Feb.) 1998.
- Rumicastrum creethae*** (Tratman ex Morrison) Carolin, comb. nov. Basionym: *Calandrinia creethae* Tratman ex Morrison, J. Bot. 50: 165. (May) 1912. ≡ *Parakeelya creethae* (Tratman ex Morrison) Hershk., Phytologia 84(2): 101. (Feb.) 1998.
- Rumicastrum crispisepalum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia crispisepala* Obbens, Nuytsia 16(1): 100. (30 Dec.) 2006.
- Rumicastrum cygnorum*** (Diels) Carolin, comb. nov. Basionym: *Calandrinia cygnorum* Diels in Diels & E. Pritz., Bot. Jahrb. Syst. 35(2-3): 199. (6 Dec.) 1904.
- Rumicastrum cylindricum*** (Poelln.) Carolin, comb. nov. Basionym: *Calandrinia cylindrica* Poelln., Repert. Spec. Nov. Regni Veg. 35: 163. (15 June) 1934.
- Rumicastrum dielsii*** (Poelln.) Carolin, comb. nov. Basionym: *Calandrinia dielsii* Poelln., Repert. Spec. Nov. Regni Veg. 35: 162. (15 June) 1934.
- Rumicastrum dipetalum*** (J. M. Black) Carolin, comb. nov. Basionym: *Calandrinia dipetala* J. M. Black, Trans. & Proc. Roy. Soc. S. Austral. 51: 379. 1927.

- Rumicastrum dispermum*** (J. M. Black) Carolin, comb. nov. Basionym: *Calandrinia disperma* J. M. Black, Trans. & Proc. Roy. Soc. South Australia 45: 11, t. 3. 1921. ≡ *Parakeelya disperma* (J. M. Black) Hershk., Phytologia 84(2): 101. (Feb.) 1998.
- Rumicastrum eremaeum*** (Ewart) Carolin, comb. nov. Basionym: *Calandrinia eremaea* Ewart. Fl. Victoria 486. (Apr.) 1931 [1930]. ≡ *Calandrinia pusilla* Lindl., in T. L. Mitchell, J. Exped. Trop. Australia. 360. (16 Feb.–31 Mar.) 1848, nom. illegit., non *Calandrinia pusilla* Barnéoud in Gay, Fl. Chil. 2(4): 485. 1847 [1846]. ≡ *Parakeelya eremaea* (Ewart) Hershk., Phytologia 84(2): 101. (Feb.) 1998.
- Rumicastrum flavum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia flava* Obbens, Nuytsia 21(1): 2. (24 June) 2011.
- Rumicastrum gracile*** (Benth.) Carolin, comb. nov. Basionym: *Calandrinia gracilis* Benth., Fl. Austral. 1: 173. (30 May) 1863. ≡ *Claytonia gracilis* (Benth.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya gracilis* (Benth.) Hershk., Phytologia 84(2): 102. (Feb.) 1998.
- Rumicastrum granuliferum*** (Benth.) Carolin, comb. nov. Basionym: *Calandrinia granulifera* Benth., Fl. Austral. 1:176. (30 May) 1863. ≡ *Claytonia granulifera* (Benth.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya granulifera* (Benth.) Hershk., Phytologia 84(2): 102. (Feb.) 1998. [= *Talinum nanum* Nees in Lehm., Pl. Preiss. 1: 246. (9–11 Feb.) 1845. ≡ *Calandrinia pygmaea* F. Muell. Fragm. 1(7):175. (Sept.) 1859, nom. illegit. ≡ *Calandrinia neesiana* Eichler, ref. ≡ *Parakeelya nana* (Nees) Hershk., Phytologia 84(2): 102. (Feb.) 1998.]
- Rumicastrum holtumii*** (Obbens & L. P. Hancock) Hershk., comb. nov. Basionym: *Calandrinia holtumii* Obbens & L. P. Hancock, Nuytsia 28: 218. (8 June) 2017.
- Rumicastrum hortiorum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia hortiorum* Obbens, Nuytsia 22(6): 352. (18 Dec.) 2012.
- Rumicastrum kalanniense*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia kalanniensis* Obbens, Nuytsia 16(1): 102. (18 Dec.) 2006.
- Rumicastrum lefroyense*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia lefroyensis* Obbens, Nuytsia 29: 198. (13 July) 2018.
- Rumicastrum lehmannii*** (Endl.) Carolin, comb. nov. Basionym: *Calandrinia lehmannii* Endl. in Lehm., Pl. Preiss. 2(2–3): 235. (2–5 Aug.) 1848. ≡ *Claytonia lehmannii* (Endl.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya lehmannii* (Endl.) Hershk., Phytologia 84(2): 102. (Feb.) 1998.
- Rumicastrum liniflorum*** (Fenzl) Carolin, comb. nov. Basionym: *Calandrinia liniflora* Fenzl in Endl. et al., Enum. Pl. 52. (Apr.) 1837. ≡ *Claytonia liniflora* (Fenzl) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya liniflora* (Fenzl) Hershk., Phytologia 84(2): 102. (Feb.) 1998.
- Rumicastrum maryonii*** (S. Moore) Carolin, comb. nov. Basionym: *Calandrinia maryonii* S. Moore, J. Linn. Soc., Bot. 45: 164. (7 Dec.) 1920.
- Rumicastrum mirabile*** (Chinnock & J. G. West) Hershk., comb. nov. Basionym: *Calandrinia mirabilis* Chinnock & J. G. West, J. Adelaide Bot. Gard. 26(4): 97. 2013.

- Rumicastrum monogynum*** (Poelln.) Carolin, comb. nov. Basionym: *Calandrinia monogyna* Poelln., Repert. Spec. Nov. Regni Veg. 35: 163. (15 June) 1934.
- Rumicastrum monospermum*** (Syeda ex Obbens) Hershk., comb. nov. Basionym: *Calandrinia monosperma* Syeda ex Obbens, Nuytsia 30: 238. (15 Oct.) 2019.
- Rumicastrum morrisae*** (Goy) Carolin, comb. nov. Basionym: *Calandrinia morrisae* Goy, Proc. Roy. Soc. Queensland 50: 68. (8 June) 1939.
- Rumicastrum oblongum*** (Syeda & Carolin) Hershk., comb. nov. Basionym: *Calandrinia oblonga* Syeda & Carolin, Proc. Linn. Soc. New South Wales 133: 11. 2012 [2011].
- Rumicastrum opertum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia operta* Obbens, Nuytsia 22(6): 359. (18 Dec.) 2012.
- Rumicastrum orarium*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia oraria* Obbens, Nuytsia 24: 41. (1 May) 2014.
- Rumicastrum papillatum*** (Syeda) Carolin, comb. nov. Basionym: *Calandrinia papillata* Syeda, Telopea 2(1): 60. 1980. ≡ *Parakeelya papillata* (Syeda) Hershk., Phytologia 84(2): 102. (Feb.) 1998.
- Rumicastrum pentavalve*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia pentavalvis* Obbens, Nuytsia 21(1): 9. (24 June) 2011.
- Rumicastrum pickeringii*** (A. Gray) Carolin, comb. nov. Basionym: *Calandrinia pickeringii* A. Gray, U.S. Expl. Exped., Phan. 1: 144. 1854. ≡ *Claytonia pickeringii* (A. Gray) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya pickeringii* (A. Gray) Hershk., Phytologia 84(2): 102. (Feb.) 1998.
- Rumicastrum pleiopetalum*** (F. Muell.) Carolin, comb. nov. Basionym: *Calandrinia pleiopetala* F. Muell, Fragm. 10(84): 10. (July) 1876. ≡ *Claytonia pleiopetala* (F. Muell.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya pleiopetala* (F. Muell.) Hershk., Phytologia 84(2): 102. (Feb.) 1998.
- Rumicastrum polyandrum*** (Benth.) Carolin, comb. nov. Basionym: *Calandrinia polyandra* Benth., Fl. Austral. 1: 172. (30 May) 1863. ≡ *Talinum polyandrum* Hook., Bot. Mag. 4833. 1855, nom. illegit. [non *Talinum polyandrum* Ruiz & Pav., Syst. Veg. Fl. Peruv. Chil. 115. (late Dec) 1798.] ≡ *Claytonia polyandra* (Benth.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya polyandra* (Benth.) Hershk., Phytologia 84(2): 102. (Feb.) 1998. [= *Calandrinia polyandra* var. *leptophylla* Benth., Fl. Austral. 1: 173. (30 May) 1863.]
- Rumicastrum polypetalum*** (Fenzl) Carolin, comb. nov. Basionym: *Calandrinia polypetala* Fenzl in Endl. et al., Enum. Pl. 51. (Apr.) 1837. ≡ *Claytonia polypetala* (Fenzl) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya polypetala* (Fenzl) Hershk., Phytologia 84(2): 102. (Feb.) 1998.
- Rumicastrum poriferum*** (Syeda) Carolin, comb. nov. Basionym: *Calandrinia porifera* Syeda, Telopea 2(1): 59. 1980. ≡ *Parakeelya porifera* (Syeda) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum primuliflorum*** (Diels) Carolin, comb. nov. Basionym: *Calandrinia primuliflora* Diels in Diels & E. Pritz., Bot. Jahrb. Syst. 35(2–3): 198. (6 Dec.) 1904. ≡ *Parakeelya primuliflora* (Diels) Hershk., Phytologia 84(2): 103. (Feb.) 1998.

- Rumicastrum ptychospermum*** (F. Muell.) Carolin, comb. nov. Basionym: *Calandrinia ptychosperma* F. Muell., Fragm. 4(29): 137. (Nov.) 1864. ≡ *Claytonia ptychosperma* (F. Muell.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya ptychosperma* (F. Muell.) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum pumilum*** (Benth.) Carolin, comb. nov. Basionym: *Calandrinia calyptrata* Hook. f. var. *pumila* Benth., Fl. Austral. 1: 175. (30 May) 1863. ≡ *Claytonia pumila* (Benth.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya pumila* (Benth.) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum quadrivalve*** (F. Muell.) Carolin, comb. nov. Basionym: *Calandrinia quadrivalvis* F. Muell., Fragm. 1(7): 176. (Sept.) 1859. ≡ *Claytonia quadrivalvis* (F. Muell.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Cosmia quadrivalvis* (F. Muell.) Britten, J. Bot. 38: 77. 1900. ≡ *Parakeelya quadrivalvis* (F. Muell.) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum quartziticum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia quartzitica* Obbens, Nuytsia 29: 194. (13 July) 2018.
- Rumicastrum remotum*** (J. M. Black) Carolin, comb. nov. Basionym: *Calandrinia remota* J. M. Black, Trans. & Proc. Roy. Soc. South Australia 47: 369. 1923. ≡ *Parakeelya remota* (J. M. Black) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum reticulatum*** (Syeda) Carolin, comb. nov. Basionym: *Calandrinia reticulata* Syeda, Telopea 2(1): 60. 1980. ≡ *Parakeelya reticulata* (Syeda) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum rubrisabulosum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia rubrisabulosa* Obbens, Nuytsia 24: 210. (21 Aug.) 2014.
- Rumicastrum schistorhizum*** (Morrison) Carolin, comb. nov. Basionym: *Calandrinia schistorhiza* Morrison, J. Bot. 50: 164. (May) 1912. ≡ *Parakeelya schistorhiza* (Morrison) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum sculptum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia sculpta* Obbens & J. G. West, Nuytsia 21(1): 12. (24 June) 2011.
- Rumicastrum spergularinum*** (F. Muell.) Carolin, comb. nov. Basionym: *Calandrinia spergularina* F. Muell., Fragm. 1(7): 175. (Sept.) 1859. ≡ *Claytonia spergularina* (F. Muell.) F. Muell., Syst. Census Austral. Pl. 27. 1882. ≡ *Parakeelya spergularina* (F. Muell.) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum sphaerophyllum*** (J. M. Black) Carolin, comb. nov. Basionym: *Calandrinia sphaerophylla* J. M. Black, Trans. & Proc. Roy. Soc. South Australia 51: 378. 1927. ≡ *Parakeelya sphaerophylla* (J. M. Black) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum stagnense*** (J. M. Black) Carolin, comb. nov. Basionym: *Calandrinia stagnensis* J. M. Black, Trans. & Proc. Roy. Soc. South Australia 51: 379. 1927. ≡ *Parakeelya stagnensis* (J. M. Black) Hershk., Phytologia 84(2): 103. (Feb.) 1998.
- Rumicastrum stenogynum*** (Domin) Carolin, comb. nov. Basionym: *Calandrinia stenogyna* Domin, Biblioth. Bot. 22(89): 97. (Jan.) 1926 [1925]. ≡ *Parakeelya stenogyna* (Domin) Hershk., Phytologia 84(2): 103. (Feb.) 1998.

- Rumicastrum strophiolatum*** (F. Muell.) Carolin, comb. nov. Basionym: \equiv *Claytonia strophiolata* F. Muell., *Fragm.* 11(91): 82. (Feb.) 1880. \equiv *Calandrinia strophiolata* (F. Muell.) Poelln., *Feddes Repert. Spec. Nov. Regni Veg.* 35: 173. 1934. \equiv *Parakeelya strophiolata* (F. Muell.) Hershk., *Phytologia* 84(2): 103. (Feb.) 1998.
- Rumicastrum tepperianum*** (W. Fitzg.) Carolin, comb. nov. Basionym: *Calandrinia tepperiana* W. Fitzg., *J. Proc. Roy. Soc. Western Australia* 3: 141. 1918 [1916–1917].
- Rumicastrum tholiforme*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia tholiformis* Obbens, *Nuytsia* 21(1): 6. (24 June) 2011.
- Rumicastrum translucens*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia translucens* Obbens, *Nuytsia* 16(1): 104. (20 Dec.) 2006.
- Rumicastrum tumidum*** (Syeda) Hershk., comb. nov. Basionym: *Calandrinia tumida* Syeda, *Proc. Linn. Soc. New South Wales* 116: 156. 1996. \equiv *Parakeelya tumida* (Syeda) Hershk., *Phytologia* 84(2): 103. (Feb.) 1998.
- Rumicastrum umbelliforme*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia umbelliformis* Obbens, *Nuytsia* 22(6): 356. (18 Dec.) 2012.
- Rumicastrum uncinellum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia uncinella* Obbens, *Nuytsia* 30: 242. (15 Oct.) 2019.
- Rumicastrum uniflorum*** (F. Muell.) Carolin, comb. nov. Basionym: *Calandrinia uniflora* F. Muell., *Trans. & Proc. Philos. Inst. Victoria* 3: 41. 1859. \equiv *Claytonia uniflora* (F. Muell.) F. Muell., *Syst. Census Austral. Pl.* 27. 1882. \equiv *Parakeelya uniflora* (F. Muell.) Hershk., *Phytologia* 84(2): 104. (Feb.) 1998.
- Rumicastrum vernicosum*** (Obbens) Hershk., comb. nov. Basionym: *Calandrinia vernicosa* Obbens, *Nuytsia* 21(1): 15. (24 June) 2011.
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CORRECTION

In *Phytologia* 102(3): 118 (Sept 21, 2020), I published the combination “*Rumicastrum butcherense* (Obbens) Hershk.,” while noting that, for reasons not clear to me, IPNI indicated that the basionym, “*Calandrinia butcherensis* Obbens,” was invalid. In fact, IPNI duly noted that in the designation of the holotype, Obbens had listed two different PERTH sheets. Thus, effectively, no holotype was designated. Consequently, neither “*Calandrinia butcherensis* Obbens,” nor “*Rumicastrum butcherense* (Obbens) Hershk.” are validly published. I apologize for the error and will cheerfully refund the full personal purchase price of this article.

Mark A. Hershkovitz
Santiago, Chile
21 September 2020