

***Rumicastrum* Ulbrich (Montiaceae): a beautiful name for the Australian calandrinias**

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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.

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 *Rumic astrum 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 *Rumic astrum*. Inexplicably, therefore, Hancock et al. (2018) described *Calandrinia* as a genus comprising only *Calandrinia* sensu Hershkovitz (1993) plus the Australian calandrinias, and excluding *Rumic astrum*. 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 *Rumic astrum*, 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 *Rumic astrum* (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 *Rumic astrum*. 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 *Rumic astrum* included in his manuscript. This, especially, renders them *beautiful* names for these lovely and remarkable plants.

Rumic astrum Ulbrich, Nat. Pflanzenfam., ed. 2 [Engler & Prantl] 16c: 519. 1934. TYPE: *Rumic astrum 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.

Rumic astrum 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 dispernum*** (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.
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