Romulea pilosa and R. quartzicola (Iridaceae: Crocoideae), two new species from the southern African winter rainfall region, with nomenclatural corrections including new names for R. amoena, R. neglecta and R. rosea var. reflexa

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ABSTRACT

Romulea pilosa J.C. Manning & Goldblatt and R. quartzicola J.C. Manning & Goldblatt are two narrow endemics from the southern African winter rainfall region. An early, fragmentary collection of R. pilosa from Riviersonderend lacked the diagnostic corn and was thus mistakenly associated with R. tetragona (sect. Ciliatae) as var. flavandra M.P.de Vos because of the highly distinctive pilose, H-shaped leaf. The rediscovery of the taxon in the wild shows it to be a previously unrecognized member of sect. Aggregatae, distinguished by its unusual foliage and bright orange flowers. R. quartzicola was grown to flowering from seeds collected from quartz patches in southern Namakalund and proved to be a new species of sect. Ciliatae, distinguished by its early flowering, short, subclavate leaves with reduced sclerenchyma strands, and bright yellow flowers with short bracts. R. neglecta M.P.de Vos, a rare endemic from the Kamiesberg in Northern Cape, is a later homonym for the Mediterranean R. neglecta Jord. & Fourr., and the earliest name for this plant is shown to be R. speciosa (Ker Gawl.) Baker, typified by an illustration in Andrews' The botanist's repository. An epitype is designated to fix the application of the name. We have also examined the type illustration of R. pudica (Sol. ex Ker Gawl.) Baker, hitherto treated as an uncertain species, and are confident that it represents the species currently known as R. amoena Schltr. ex Bég., and takes priority over it as being the earlier name. The type of R. reflexa Eckl., a new name for the later homonym I. reflexa Thumb. and the basionym of R. rosea var. reflexa (Eckl.) Bég., has been mistakenly identified as an Ecklon collection but is in fact the collection that formed the basis of Thunberg’s I. reflexa. This collection is actually a form of R. flava Lam., and the name R. rosea var. reflexa is thus moved to the synonymy of that species. The variety currently known under this name should now be known as R. rosea var. muirii (N.E. Br.) Goldblatt & J.C. Manning. Finally, the protologue of R. parviflora Eckl., until now treated under the synonymy of R. obscura Klatt var. obscura, is in fact consistent with R. rosea var. australis (Ewart) M.P.de Vos, and we therefore include the name in the synonymy of the latter.

INTRODUCTION

Romulea Maratti, one of the larger genera of Iridaceae (Goldblatt & Manning 2008), is widely distributed through eastern sub-Saharan Africa, the Mediterranean and the Near East. It is centred in the winter rainfall region of southern Africa, where 80% of the species occur (De Vos 1972, 1983; Manning & Goldblatt 2001, 2004, 2006).

Flower structure in the genus is conservative (Goldblatt et al. 2002), with a few notable exceptions, and characters of the corm are essential in the primary subdivision of the genus into subgenera and sections (Manning & Goldblatt 2001, 2004). Flower colour and markings, as well as the texture and details of the membranous margins of the bracts provide the primary specific characters. Additional valuable anatomical characters include the distribution of vascular bundles in the leaf and the development of sclerenchyma caps and strands.

Five new species have been described since the last review of the genus (Manning & Goldblatt 2001, 2004, 2006), and a further two highly local endemics are described here, bringing to 83 the number of species recorded from southern Africa and raising the total number in the genus to ± 97 spp.

Romulea pilosa, a spring-flowering species endemic to stony renosterveld in the Overberg south of Riviersonderend, was collected at least as long ago as the early 1930s but the fragmentary material was misidentified until recently. It is named for the distinctive, pilose leaves. R. quartzicola, a recently discovered, winter-flowering species from quartz patches in the southwestern corner of the Knersvlakte, is named for its unusual flowering species from quartz patches in the southwestern corner of the Knersvlakte, is named for its unusual habitat. We also deal with the nomenclature of Romulea neglecta M.P.de Vos (1983), a later homonym. The earliest legitimate name for the species is R. speciosa (Ker Gawl.) Baker (1877), which coincidentally has the same type as R. neglecta.

Collections at BOL, NBG, PRE and SAM, the main herbaria with good representation of Cape species, were consulted (herbarium acronyms after Holmgren et al. 1990).

TAXONOMY

1. Romulea pilosa J.C. Manning & Goldblatt, sp. nov.

Ad sectionem Aggregatae M.P.de Vos pertinens et recognita caule subterraneo vel breviter aereo, foliis relative brevibus falcatis H-formibus 4–6 mm latis, margin-
bus late alatis ciliatissque, floribus salmoneis vel aurantiacis cupulo flavo, tubo perianthii infundibuliformi ± 5 mm longo parte inferiori ± 1 mm longo, tepalis obovate 20–30 × 7–10 mm, filamentis 5–6 mm longis minute pilosis in dimidio inferiori, antheris ± 4 mm longis.

TYPE.—Western Cape, 3420 (Bredasdorp): Farm Fonteinkloof, between Riviersonderend and Proteen, hill W of homestead, (–AA), 15 Aug. 2009, Manning 3220 (NBG, holo.; MO, iso.).

Plants ± 60 mm high; stem subterranean or short aerial, simple or with up to 2 branches. Corolla subglobose, asymmetric. obliquely flattened towards base with crescent-shaped basal ridge; tunic hard, smooth, dark brown, split into clusters of convergent fibrils on basal ridge and splitting along clusters into narrow vertical strips, drawn into short fibrils up to 2 mm long above. Cataphylls 3, membranous, flushed greenish above ground. Foliage leaves 2, lowermost 1 basal, blades falcate, H-shaped in section, lowermost 50–70 × 4–6 mm, upper shorter, lateral ribs reduced, median (apparently marginal) ribs extended laterally to form flange-like wings 1–2 mm wide along each side of blade, densely villous along margins of wings with hairs 1–2 mm long in two diverging rows. Inflorescence of solitary flowers; peduncles angled in section and villous along angles in distal part; outer bracts subobtuse, 13–15 mm long, green with narrow, translucent membranous margins, strongly keeled along median and submarginal veins, longitudinally inflexed along submarginal veins, median keel sometimes double, keel and submarginal veins densely pubescent, inner bracts green with broad translucent white margins, ± as long as outer, bicornate with keels densely pubescent. Flowers deeply cup-shaped, cup ± 10 mm deep, salmon-pink to dull orange but golden yellow in lower half to two thirds, yellow extending beyond cup margin onto lower third of limb, outer tepals flushed coppery on reverse, uniformly unscented, 30–40 mm diam.; perianth tube funnel-shaped, 5 mm long with lower narrow portion ± 1 mm long, tepals obovateolate, 20–30 × 7–10 mm. Stamens yellow; filaments inserted at base of cup, free, 5–6 mm long, minutely pilose in lower half; anthers parallel, 4 mm long. Style dividing opposite lower half of anthers, branches ± 1.5 mm long, divided for ± half their length. Capsules obov-ellipsoid, 7–9 × 5 mm long, fruiting peduncles diverging, straight. Seeds subglobose, ± 2 mm diam. Flowering time: Aug. Figure 1.

Distribution and ecology: known with certainty only from a single locality south of Riviersonderend on the Farm Fonteinkloof (Figure 2), where a small population, numbering less than fifty plants, occurs in a remnant patch of renosterveld vegetation, too stony to plough. The plants are wedged among small vertical ripples of shale on the crest of a hill as part of a Rëns Silcrete Renosterveld community, a highly endangered vegetation type found as scattered pockets in the Overberg region (Mucina & Rutherford 2006).

Diagnosis and relationships: the oblique corm with tunics split along the basal ridge into clusters of converging fibrils place Romulea pilosa in sect. Aggregatae M.P.de Vos (1972), making it the ninth member of this small group. Its relatively short, falcate, H-shaped leaves 4–6 mm wide, with ciliate, winged margins, and its salmon to orange flowers with a yellow cup, make it instantly recognizable in the genus. Similar winged, ciliate leaves are known only in two other species in the genus, R. hirsuta Schltr. and R. tetragona M.P.de Vos. Although associated in sect. Hirtae Bég. by De Vos (1972) on the basis of their similar leaf morphology, these two species have fundamentally different corn tunic morphologies, leading Manning & Goldblatt (2001) to segregate them respectively subgen. Romulea sect. Cilatae (M.P.de Vos) J.C.Manning & Goldblatt and subgen. Spatulanthus (Sweet) Baker. The discovery of a third, evidently unrelated species with similar, H-shaped and winged leaves now suggests that this unusual leaf morphology has evolved independently at least three times within the genus. The three species concerned occupy quite different geographic regions with differing ecology, and the adaptive value of this leaf type is not immediately clear.

Within sect. Aggregatae, Romulea pilosa is evidently most closely allied to R. dichotoma (Thunb.) Baker and R. jugicola M.P.de Vos, both of which typically have aerial stems, ciliate peduncles, and a solitary basal leaf with ciliate rib margins. The leaves of R. dichotoma in particular tend to have wider longitudinal grooves, with the marginal ribs prominently expanded and almost wing-like. Both species are found on clay soils in renosterveld communities in the southern Cape. R. jugicola, known only from the foothills of the Kammanassie Mtns in the Little Karoo, is distinguished by its well-exserted aerial stems, up to 30 mm tall, with a well-developed, fibrous neck around the base, and orange-yellow perianth; R. dichotoma is more widespread, extending from Stanford to Humansdorp, and has mostly magenta or rarely salmon-pink flowers with a yellow cup. It is most evidently separated from R. pilosa by its generally taller stem, up to 350 mm high, usually branched dichotomously near the top, and narrower, distinctly 4-ribbed leaves, 1–2 mm in diameter.

The leaves of Romulea pilosa are anatomically consistent with sect. Aggregatae in their well-developed sclerenchyma girders joining the primary vascular bundles to the epidermis (Manning & Goldblatt 2001), an evidently apomorphic character state that is only intermittently developed in subgen. Romulea. Although girders are also developed in the secondary bundles in other members of the series, they are almost confined to the primary bundles in R. pilosa (occurring only rarely in one or two secondary bundles near the wing margins in some leaves). Stomata are present on the blade and ‘inner’ wing surfaces but are lacking on the ‘outer’ wing surface, i.e. those making the acute angle along the leaf margins.

 Morphologically similar, H-shaped leaves have evolved repeatedly in several genera of the Cape Irisaceae. Notable examples in Gladiolus sect. Homoglossum are the Gladiolus gracilis–G. caeruleus–G. recurvus group in ser. Carinatus as well as most members of ser. Homoglossum and Tristis; and some members of Geissorhiza sect. Engysiphon. We have observed that the wings in these species curve inward over the stomatiferous grooves when the plants are water-stressed, and
speculate that this mechanism facilitated the development of a relatively broader photosynthetic leaf surface while still controlling water loss.

**History:** described here from a population discovered in August 2009 by Napier residents and dedicated conservationists, Cameron and Rhoda McMaster, the species appears to have been first collected in 1932 or 1933 by Grace Neethling of Riviersonderend. This discovery is represented by a fragmentary specimen in the Bolus herbarium, comprising a solitary detached leaf and a single dissected flower. The plant from which these parts were picked was cultivated at Kirstenbosch but subsequently disappeared and thus no corm was preserved. The fragments are accompanied by a coloured painting of the floral parts showing the distinctive orange tepals with their yellow cup. Although initially intending to describe the collection as a new species, De Vos (1972) subsequently treated it as *Romulea tetragona var. flava* M.P.de Vos (otherwise endemic to the southwestern Karoo), although noting the anomalous colour of the flowers of the Riviersonderend collection. With the discovery of a wild population, it is now evident that this plant is quite unrelated to *R. tetragona* and does indeed represent a distinct species. The locality where Miss Neethling found her plant is unknown, although the Neethling family owned the Farm Bon Esperance at the foot of the Riviersonderend Mtns at the time (Lewis 1947). Most of the natural vegetation below these mountains has since disappeared under cultivation and we will never know if her collection came from the present locality or from another population in the vicinity.

**FIGURE 1.—** *Romulea pilosa, Manning 3220.* A, whole plant; B, outer bract; C, inner bract; D, stamens and style; E, detail of leaf margin; F, t/s leaf; G, detail of corm fibril clusters. Scale bars: A–C, 10 mm; D, 2.5 mm; E, 1 mm; F, 0.5 mm; G, 0.2 mm. Artist: John Manning.
FIGURE 2.—Known distribution of Romulea pilosa, O; R. quartzicola, ●.

Additional material seen


2. Romulea quartzicola J.C.Manning & Goldblatt, sp. nov.

Ad sectionem Ciliatae (M.P.de Vos) J.C. Manning & Goldblatt pertinens et recognita florentia praecoci, foliis relative brevibus obtusis subclavatis, floribus grandis canarisin, tubo perianthii profundo 7–8 mm longo, tepalis 20–22 × 6–10 mm, filamentis, 7–9 mm longis quem antheris longioribus, bracteis ovatis vel suborbicularibus 8–13 mm longis, marginibus membranaceis angustis ecoloratis vel purpureo-suffusis.

TYPE.—Western Cape, 3118 (Vanrhynsdorp): Knersvlakte, Farm Moedverloor, ± 15 km NE of Lutzville, (–AD), 21 June 2010, A.D. Harrower & J.C. Manning 4395 (NBG, holo.; MO, iso.).

Plants 50–80 mm high; stem aerial, up to 35 mm long, simple or with 1 branch. Corm subglobose, ± 10 mm diam., asymmetric, obliquely flattened towards base with crescent-shaped basal ridge; tunics hard, smooth, dark brown, split into numerous fine parallel fibrils on basal ridge and into narrow teeth up to 5 mm long above. Cataphylls 3, membranous, flushed greenish above ground. Foliage leaves (1,2), all basal, blades mostly ± as long as flowering stem, cylindrical-subclavate, obtuse, narrowly 4-grooved, 30–80 × (1.0–) 1.5–2.5 mm; cauline leaf present only when lateral inflorescence developed, inserted midway or two thirds up stem, much shorter than basal leaves, entirely sheathing or with blade up to 30 mm long. Inflorescence of solitary flowers; outer bracts broadly elliptical-suborbicular, concave, obtuse, green with narrow, translucent (sometimes purplish tinted) membranous margins, 8–13 mm long, inner bracts similar but with broader membranous margins, ± as long as outer, notched apically. Flowers deeply cup-shaped, 25–30 mm diam., cup 12–15 mm deep, bright chrome-yellow (rarely peach-coloured), with 3–5 inconspicuous dark veins at base of cup, rarely flushed copper or pale green on reverse, weakly clove-scented; perianth tube funnel-shaped, 7–8 mm long with lower narrow portion ± 1 mm long, tepals oblanceolate, 20–22 × 6–10 mm. Stamens yellow; filaments inserted at base of cup, lower 2–4 mm included within perianth tube, free, pubescent in lower two thirds, especially towards base, 7–9 mm long; anthers parallel, 4–5 mm long, thecae well separated by broad connective 0.50–0.75 mm wide. Style dividing opposite upper half of anthers, branches ± 3 mm long, divided for entire length into six filiform branchlets. Capsules and seeds unknown. Flowering time: mid-June to July. Figure 3.

Distribution and ecology: known so far from several small populations on the Farm Moedverloor, northeast of Lutzville in the extreme southwestern Knersvlakte (Figure 2). Plants are restricted to the drainage basin of the Moedverloor River, where they are localized on southern or southwestern-trending slopes, typically just below the crest of the quartzite outcrops that fringe the eastern edge of the basin, but occasionally on the lower slopes. The species is relatively common where it occurs but populations never extend over a large area. Plants grow among quartz pebbles only in relatively dense stands of Knersvlakte Dwarf Vygieveld (Mucina & Rutherford 2006), a dwarf succulent shrubland dominated by various small Aizoaceae in the genera Argyroderma, Cheiridopsis, Conophytum and Monilia. This highly specific ecology appears to be determined largely by the cooler aspect and by the associated higher precipitation. The rocky crests on which the species mostly occurs face the ocean, and the localized presence of lichens on the summit rocks suggests that coastal fogs, which are a feature of the region in the autumn and winter, play an important role in providing additional moisture to these sites, as attested also by the relatively dense associated succulent shrublets compared with adjacent slopes with a more northerly aspect. The Moedverloor basin has exposed an extensive and rather localized area of these quartzite slopes, the Moedverloorberg to the north being granitic and the hills to the south primarily loamy sand. A localized distribution and low population size is a characteristic of other quartz-loving species in the region (Snijman & Harrower 2009). Local changes in soil chemistry, depth, particle size, aspect, insolation and available moisture appear to be responsible for this very patchy ecology (Schmiedel & Jürgens 1999).

Other locally endemic geophytes from the southwestern Knersvlakte include Bulbine dactylopusoides and B. havorthioides (Asphodelaceae), Lachenalia patula, Ornithogalum naviculum, and the recently described Drimia fimbrimarginata (all Hyacinthaceae) (Snijman & Harrower 2009).

The flowers open between 13:00–14:00 in the afternoon and close in the evening near sunset. They remain closed in cold and overcast weather.

Diagnosis and relationships: the corm with a fimbriate basal ridge places Romulea quartzicola in sect. Ciliatae (M.P.de Vos) J.C. Manning & Goldblatt of subgen. Romulea, where it is distinguished by its early flowering, relatively short, obtuse, subclavate leaves, large, deeply funnel-shaped, canary-yellow flowers with tepals 20–22 × 6–10 mm and perianth tube 7–8 mm long, and the relatively long filaments, 7–9 mm long, much longer than the anthers. The bracts are ovate or suborbicular,
8–13 mm long, and both the inner and outer bracts have narrow, colourless or purple-flushed membranous borders. The leaves of *R. quartzicola* are morphologically distinctive in broadening appreciably in the distal half, thus somewhat clavate in appearance, but they are anatomically simple in lacking vascular girders as well as rib marginal bundles or strands. All four primary bundles have incomplete sclerenchyma sheaths restricted to phloem caps, and even these are absent in the secondary bundles. This is a relatively uncommon condition, as most species in the section have complete sclerenchyma bundle sheaths around the lateral primary bundles (De Vos 1972; Manning & Goldblatt 2001). The leaves of *R. quartzicola* are thus among the least sclerified in the entire genus, matched in this regard, as far as is known, only by *R. namaquensis* M.P.de Vos.

The combination of yellow flowers and green bracts without the conspicuous, brown-streaked membranous margins that characterize the *Romulea pearsonii* group of species, places *R. quartzicola* in a small group of sect. *Ciliatae* that comprises *R. citrina* Baker, *R. elliptica* M.P.de Vos, *R. lutea* J.C.Manning & Goldblatt, *R. montana* Bég. and *R. sulphurea* Bég. Among this group it is readily distinguished from all except *R. sulphurea* by the relatively long filaments, ± twice as long as the

**FIGURE 3.—** *Romulea quartzicola*, Harrower 2756. A, whole plants; B, outer bract; C, inner bract; D, stamens and style; E, anther, outer face; F, details of style branches; G, t/s leaf. Scale bars: A–C, 10 mm; D, E, 2.5 mm; F, 0.5 mm. Artist: John Manning.
anthers. The rarely collected *R. sulphurea*, which was represented only by the type (collected in 1897) until we relocated it in 1999 (Manning & Goldblatt 2001), is still known only from the Pakhuis Pass in the northern Cedarberg, where it forms dense populations on seasonally wet sandstone pavement, flowering in early spring, in July and August. It is distinguished from *R. quartzicola* not only by its ecology and distribution but by its filiform leaves, ± 0.5 mm diam., smaller, sweetly scented flowers with elliptical tepals 12–20 mm long, mostly smaller bracts, 7–10 mm long, the inner with broad, brown-speckled membranous margins, and by the shorter anthers, 2.5–3.0 mm long.

Perianth colour is an important character in *Romulea* to the extent that species are either pink- or yellow-flowered but never both. Plain yellow flowers without dark blotches on the inner surface are uncommon in *Romulea* and restricted to a handful of species of sect. *Ciliatae*, only one of which, *R. lutea* J.C. Manning & Goldblatt, has been recorded from southern Namaqualand. This species, a recent discovery from sandy washes west of Koekenaap (Manning & Goldblatt 2008), has plain, golden yellow flowers superficially similar to those of *R. quartzicola* but it differs not only in its later flowering, August to September, but in its narrower leaves, ± 1 mm in diameter, with only the lowermost leaf basal, shorter perianth tube, ± 3 mm deep, and shorter filaments, 4 mm long and ± as long as the anthers. The two species differ also in leaf anatomy. In *R. lutea* the lateral primary bundles have complete sclerenchyma sheaths and the secondary bundles have well-developed phloem caps extending to the epidermis as girders. Both of these conditions are lacking in *R. quartzicola*.

**History:** the species was originally collected as a single fruit in July 2005. Seed was germinated in April 2006 in the nursery at Kirstenbosch Botanical Garden, and four plants were grown to maturity. These flowered for the first time on 6 June 2009, when it became clear that they represented an undescribed species. Type material was collected the following year.

**Additional material seen**


**NAME CHANGES AND NOMENCLURAL CORRECTIONS**

1. The protologue of *Trichonema pudica* (Ker Gawler 1810), the basionym for *Romulea pudica* (Ker Gawl.) Baker (1877), includes a painting of a pink-flowered species of *Romulea* with dark longitudinal streaks in a pale cup. This plant was brought from the Cape by a Miss Symonds and given to Messrs Whitley and Borne of Brompton, London, in whose greenhouse it was raised. They later provided the flowering specimen to the artist who executed the painting reproduced in *Curtis’s Botanical Magazine*. Depicting a plant with two basal leaves and a symmetrical, bell-shaped corn with a neatly scalloped basal rim, this illustration clearly represents the species currently known under the name *R. amoena*, a narrow endemic of the Bokkeveld Mtns south of Nieuwoudtville in Northern Cape. Ker Gawler (1810) cited one specimen in the protologue, *Ixia pudica* Sol. *ms* in Herb. Banks (now the herbarium of the British Museum of Natural History). The plant so annotated by Solander was collected by Oldenburg and has no date, precise locality or number. De Vos (1972, 1983) identified it as *R. flav a* Lam. and we agree with her determination after having examined a digital image of the specimen.

Ker Gawler first listed the name *Ixia pudica* when he described the genus *Trichonema* (Ker Gawler 1802), including it among one of several species that he believed correctly belonged in his new genus. He later (Ker Gawler 1804, 1809) listed ‘*Trichonema pudica* Gawl.’ as one of several species of *Trichonema* but it was only in 1810 that the validating protologue was published (Ker Gawler 1810). De Vos (1983) cited the painting as the type (‘iconotype’) of *T. pudica* and we endorse her action. The painting, showing a plant with red perianth, pale, darkly striped cup, and two basal leaves, differs sharply from the alternative choice of type, the Oldenburg specimen, which has a single basal leaf and apparently had a white perianth with a plain yellow cup. Significantly, the trivial name, rose-flowered trichonema, that accompanies the protologue, provides a direct and clear reference to the painting. Only the painting, therefore, accords with the words and title of the protologue and we formally designate it the lectotype. Although De Vos (1983) was not able to associate the painting (and thus the name) with any wild species, we are confident that it is a good representation of *R. amoena* (Béguinot 1907), the only known species of this genus with a dark pink to red perianth with pale, streaked cup, two basal leaves, and a bell-shaped corn scalloped along the basal rim. We accordingly reduce *R. amoena* to synonymy under *R. pudica*, a combination provided by Baker (1877). Daniel Solander evidently provided the inspiration for the name of the species but the specimen bearing his annotation is not the type.


*R. amoena* Schltr. ex Béguinot: 334 (1907), syn. nov. Type: South Africa. [Northern Cape], Bokkeveld Mtns, Papelfontein [Papkuilsfontein], Schlechter 10896 (G, hol.: BM, BOL, GRA, K, MO, PRE, S, Z, iso.).

2. The phrase ‘Blumen rosenroth klein’ (flowers rose-red, small) constitutes the entire diagnosis for C.F. Ecklon’s *Romulea parviflora*, which he collected on the Cape Peninsula near Green Point. The species, typified by a specimen in the Stockholm Herbarium so annotated by Ecklon (Nordenstam 1972), was determined as
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R. obscura Klatt by De Vos (1972). Nordenstam (1972) felt that this diagnosis was sufficient to validate Ecklon’s species, and that, as the earlier name it should thus replace R. obscura. De Vos (1973) disagreed, regarded Ecklon’s species as inadequately diagnosed and therefore invalidly published, and accordingly listed the name in synonymy both under R. obscura var. obscura and under R. rosea var. australis Eaton (De Vos 1972). Later, in the Journal of South African Botany, Supplement 9: 1907. Type: Australia, Victoria, near Melbourne, 254 (1972). We are of the opinion that the species is therefore better assigned to R. rosea on the basis of flower colour. The small flower size indicates that it should be assigned to synonymy under R. rosea var. australis.


3. First described as Ixia reflexa by Thunberg (1811), the epithet was transferred to Romulea by Ecklon (1827), who explicitly cited Thunberg’s species as the basionym. Ixia reflexa of Thunberg is, however, a homonym for a species of that name described by Andrews (1797) [now, incidentally, Ixia scillaris L.]. Ecklon’s use of the name is to be treated nomenclaturally as a new name dating from 1827 (McNeil et al. 2006: Art. 58.1) but it remains typified by the type of Thunberg’s homonym. The taxon is conspecific with R. flava var. flava (De Vos 1972: 1983). Béguinot (1908), and later De Vos, however, mistakenly regarded Ecklon’s name as typified by his (Ecklon’s) own collections bearing that name, which are a form of R. rosea, and accordingly treated them as var. reflexa of that species. Based on the actual type, however, R. rosea var. reflexa is a nomenclatural synonym of R. flava. The variety var. reflexa sensu Béguinot, a local endemic of the Riversdale District, then requires a new name and its only synonym, at species rank, is R. muiiri, which is available for the taxon. We accordingly provide the combination below.

Romulea rosea var. muiiri (N.E.Br.) J.C.Manning & Goldblatt, comb. et stat. nov. Romulea muiiri N.E.Br.: 467 (1932). Type: South Africa, [Western Cape], Riversdale, Muir 4848 (K, holo.).

R. rosea var. reflexa sensu Bég. (1908) and De Vos (1972), non (Eckl.) Bég. (1908) [= R. flava (Lam.) M.P.de Vos].


4. In her Flora of southern Africa account of Romulea, De Vos (1983) recognized Ixia neglecta Schult. (1822) as an earlier name for what was until then R. Oliveri M.P.de Vos, a narrow endemic of the Kamiesberg in Namaqualand, Northern Cape. While true, the combination that she proposed in Romulea is technically a new name because she deliberately excluded the type of both I. neglecta and its synonym Trichonema speciosum Ker Gawl. Her new name is, however, a homonym for the Mediterranean R. neglecta Jord. & Fourr. (1868). Ixia neglecta of Schultes (1822) was itself a new name in Ixia for Trichonema speciosum (Ker Gawler 1804)—not the later account of the species in 1812 cited by De Vos—but I. speciosa Andrews bars its transfer to Ixia. The type of T. speciosum (and of I. neglecta Schult.) is a plate in Andrews (1801) titled Ixia bulbochodium var. speciosissimo, a polynomial. Ker Gawler’s Trichonema speciosa is based solely on the Andrews illustration and not, as De Vos and others believed, on the illustration in Curtis’s Botanical Magazine: t. 1476 (Ker Gawler 1812), which is the type that De Vos cited for R. neglecta. This plate is, nevertheless, evidently the same species (and probably the same plant or its descendants) as was illustrated by Andrews. Baker (1877) provided the combination R. speciosa, citing Ixia bulbochodium var. speciosa Andrews (in error for the polynomial listed above), and Ker Gawler’s Trichonema speciosa. In addition, Baker listed in synonymy R. tabularis Eckl., at the time a manuscript name on specimens distributed by Ecklon, later R. tabularis Eckl. ex Bég. in 1907. Baker also correctly listed in synonymy, Ixia neglecta Schult.

The type of Trichonema speciosa and Ixia neglecta is a painting of a red-flowered Romulea, the dark tepal cup pale at the base and the reverse of the outer tepals boldly striped with pale and dark longitudinal lines. The poorly rendered corm seems consistent with R. neglecta but the plant is illustrated with one basal and one subbasal leaf. The bracts are consistent with R. neglecta as understood by De Vos, the inner with membranous, darkly streaked margins. Andrews’s plant was provided in 1801 by George Hibbert, Member of Parliament and patron of botany, who we suspect received corms from James Niven. Hibbert had commissioned Niven in 1798 to collect plants for him at the then Cape Colony and Niven is known to have visited the Kamiesberg in 1799, where he collected specimens of the endemic Moraea longiflora Ker Gawl., which was illustrated in Curtis’s Botanical Magazine: t. 712 (Ker Gawler 1804; Goldblatt 1986: 104). Thus this early illustration of a then remote Namaqualand endemic is not unprecedented.

The presence of two, rather than a single basal leaf, is not consistent with Romulea neglecta, which usually has a single basal leaf, but the anomaly may be the result of its cultivation in England or of a misrepresentation by the artist. The plant illustrated later in Curtis’s Botanical Magazine however, also from stock derived from Hibbert’s introduction, has a single basal leaf. Because of this inconsistency, we designate an epitype for R. speciosa, the name that must now be applied to the species. As the type collection of R. Oliveri still represents the
only actual specimen of *R. speciosa* that is known, we designate this collection as the epitype.


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**REFERENCES**


