



Chorological, nomenclatural and taxonomic notes on *Carex* (Cyperaceae) from Bolivia and northern Argentina

P. Jiménez-Mejías^{1,2}, M. Fabbroni³ & A. Haigh⁴

Summary. Here, we present relevant records of three species that are new at national level (*Carex jamesonii* Boott and *C. pseudomacloviana* G.A.Wheeler for Bolivia, and *C. ruthsatziae* G.A.Wheeler for Argentina), six new regional records for Bolivia (*C. acutata* Boott, *C. bonariensis* Desf. ex Poir., *C. crassiflora* Kük., *C. feddeana* H.Pfeiff., *C. fuscula* d'Urv., and *C. pachamamae* Jim.Mejías & Reznicek), and additional records of rare plants (*C. pachamamae* and *C. ruthsatziae*). We describe *C. giovanniana* Jim.Mejías as a new species previously misidentified as *C. subdivulsa* (Kük.) G.A.Wheeler. In addition, we perform the typification for four names (*C. acutata*, *C. crassiflora*, *C. jamesonii*, and *C. tessellata* Spruce ex C.B.Clarke). Comments on the taxonomy of *C. ruthsatziae* are provided. We synonymise *C. obtusisquama* (Gross) G.A.Wheeler & S.Beck to *C. crassiflora*, and *C. tessellata* to *C. acutata*.

Key Words. boreotemperate, herbaria, neotropic, sedges, taxonomy, typification.

Introduction

With c. 2,000 spp., *Carex* is among the five largest genera of angiosperms (Global *Carex* Group 2015; Jiménez-Mejías *et al.* 2016a; Govaerts *et al.* 2018, continuously updated). In South America, there are about 200 species of the genus. Here, we present new data for the genus that is relevant for Bolivia and northern Argentina. This work adds to a series of recent works on the taxonomy, chorology, and nomenclature of the Neotropical species of *Carex* that aim for the better understanding of the genus in South and Central America, and the Caribbean (Jiménez-Mejías & Escudero 2016; Jiménez-Mejías & Roalson 2017; Jiménez-Mejías *et al.* 2016b; Poindexter *et al.* 2017; Jiménez-Mejías & Reznicek 2018; Jiménez-Mejías *et al.* 2018).

Materials and Methods

Material of Bolivian and Argentinian collections deposited at F, K, MCNS, MICH, MO, NHA, NY, SI, UC, UPOS, and US was studied (acronyms according to *Index Herbariorum* (Thiers 2015, continuously updated)), as were materials from a fieldwork campaign performed in 2016 in Argentina. In addition, type specimens and digital images of original material

housed in F, FI, G, GH, K, LPB, MO, MPU, NY, P, S, UPOS, and US were also studied.

Specimens were identified using the specialised taxonomic literature cited under each taxon. The results are presented by species in alphabetical order, according to names accepted in the World Checklist of Selected Plant Families (WCSP): Cyperaceae (Govaerts *et al.* 2018, continuously updated). Terminology used to describe the inflorescence prophylls (utricles and cladophylls) follows Jiménez-Mejías *et al.* (2016b).

Results and Discussion

Three new records are provided at national level, plus six new records at regional level. Three lectotypifications and one neotypification are performed. *Carex obtusisquama* (Gross) G.A.Wheeler & S.Beck is synonymised to *C. crassiflora* Kük., extending the distribution of this poorly understood species to central Bolivia. *Carex tessellata* Spruce ex C.B.Clarke is also synonymised to *C. acutata* Boott. *Carex giovanniana* Jim.Mejías is described as a new species. Comments on the taxonomy of *C. ruthsatziae* G.A.Wheeler and its distinction from *C. maritima* Gunnerus are provided. Specimens inspected directly are noted with an exclamation mark "!", those studied in the form of high-resolution digital images are denoted as "di!").

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Taxonomic Treatment

Carex acutata Boott, *Proc. Linn. Soc. London* 1: 287 (1846). Lectotype (here designated): Colombia. In monte Pilylum, 12,000 fr, Jameson, from Herb. Hooker (K-000584700 di!; iso- K-000584701 di!). Syntypes: see discussion.

= *Carex tessellata* Spruce ex C.B. Clarke, *Bull. Misc. Inform., Kew, Addit. Ser.* 8: 86 (1908). Lectotype (here designated): Ecuador. In: *Andibus Ecuadoriensibus*, Valle de Leite, Sept. 1857, Spruce 5939 (K-000584703 di!; isotype: NY!; syntype: Ecuador, Valle de Leite, April 1857 Spruce 5939 (K-000584702 di!)).

ILLUSTRATION. Boott (1858 – 60: tabs. 446 – 447).

DISTRIBUTION. Central and Northern Andes, from Central Bolivia to Venezuela. Previously known only from La Paz Department, here first cited for the Bolivian department of Cochabamba.

SPECIMENS EXAMINED. BOLIVIA: Cochabamba Department. On the summit E of Siberia, 3,100 m, 18 Feb. 1995, *J. R. I. Wood* 9452 (K-001319227 di!). Carrasco Province, alongside the old highway to Santa Cruz at kilometre 219, 2,800 m, 3 Feb. 1996, *N. Ritter* & *J. Wood* 2900 (MO-5865950!, NHA-76221!).

NOTES. The indicatio locotypica of *Carex acutata* Boott indicated that the name was described on the basis of materials from Chile and Colombia: “Hab. in America Meridionali; in Ins. Chiloe, *Cuming* no. 43; in Monte Pilylum Columbiae, ad alt. ped. 12,000, Jameson (*Herb. Hooker*)”. The materials correspond to what we consider to be two different species: the Tropical American *C. acutata* and the Chilean *C. multispicata* Kunze ex Kunth (Jiménez-Mejías & S. Gebauer, pers. obs.). To preserve the use of the name *C. acutata*, we have designated a specimen from Colombia as the lectotype, while the Chilean syntypes (CHILE: Chiloé, 43 *Cuming*, from Herb. Hooker (K-000584759 di!)) must be regarded as *C. multispicata*. In addition, the specimen that we selected as the lectotype was also studied by Boott, and the isolectotype contains a note from C. B. Clarke in which he states that this plant corresponds to his concept of *C. acutata*, subsequently excluding the Chilean plants from his concept of *C. acutata*. Remarkably, the description of the synonym *C. tessellata* seems to have been an unfortunate consequence of the publishing of the late C. B. Clarke’s notes after he passed away.

Carex bonariensis Desf. ex Poir. in J.B.A.M. de Lamarck, *Encycl., Suppl.* 3: 250 (1813). Holotype: Argentina. Buenos Aires, *P. Commerson* s.n. (FI-012272 di!; isotypes: MPU-020514 di!, P-00303478 di!).

ILLUSTRATION. Holff Silveira & Longhi-Wagner (2012: 380).

DISTRIBUTION. South Cone, north to Southern Brazil, scattered through the Andes north to Ecuador (Govaerts *et al.* 2018, continuously updated). Previously known from the Bolivian departments of Chuquisaca, Tarija and Santa Cruz, here first cited for the department of Cochabamba.

SPECIMENS EXAMINED. BOLIVIA: Cochabamba Department, c. 5 km from Monte Puncu towards Sehuencas, 2,900 m, 5 Feb. 1995, *J. R. I. Wood* 9336 (K-001319218 di!).

Carex crassiflora Kük. in Engler (ed.), *Pflanzenr.* IV, 20 (38): 403 (1909).

Carex brunnescens Boeckeler, *Beitr. Cyper.* 1: 44 (1888), nom. subs., non *Carex brunnescens* (Pers.) Poir. (in Lamarck 1813). Holotype: “*Carex brunnescens* Böcker. n. sp., umgebungen des Nevado del Castillo; Prov. Salta. 19/[illegible].III.1873, Leg. P.G. Lorentz” (photograph of B material [lost during WWII] F-0BN13391, photo!). Neotype (here designated): Salta, Santa Victoria, road to Abra de Lizoite, 22°16'22.6"S 65°6'28.3"W, 3,952 m, *G. E. Rodríguez*, *M. Fabbroni* & *P. Jiménez Mejías* 4GERP15 (SI!; iso- MCNS!UPOS!).

= *Carex obtusisquama* (Gross) G.A. Wheeler & S. Beck, *Revista Soc. Boliv. Bot.* 5: 48 (2011).

= *Carex pichinchensis* var. *obtusisquama* Gross, *Notizbl. Bot. Gart. Berlin-Dahlem* 14: 193 (1938) [basionym]. Lectotype (designated by Wheeler & Beck 2011): “Bolivia, Cochabamba, Sailapata - Ayopaya, 3,000 m, XI.1935, en suelo húmedo en el bosque, M. Cárdenas n. 3204” (LIL, photo!; iso- US-1594133!).

DISTRIBUTION. Known from NW Argentina and reported from S Bolivia in the department of Tarija (Wheeler & Beck 2011). Here, its distribution is extended to the departments of La Paz and Cochabamba.

SPECIMEN EXAMINED. BOLIVIA: La Paz Department, Inquisivi Province, Serranía de Lulini, 2 km NW of Cerro Lulini, 16°44'S 67°20'W, 3,500 m, 10 Dec. 1991, *M. Lewis* 40875 (MICH!).

ADDITIONAL MATERIALS STUDIED. ARGENTINA: Tucumán, Chicligasta, Estancia Las Pavas, 3,000 m, Dec. 1926, *S. Venturi* 4656 (MO-960081! UC-376186! F-637534! US-1545748!). Jujuy, Humahuaca, Cerro La Soledad, 3,000 m, 21 Jan. 1929, *S. Venturi* 8846 (US-1545891!).

NOTES. Wheeler & Beck (2011) raised the name *Carex pichinchensis* var. *obtusisquama* Gross to species level after examining the type material deposited at LIL. They reported that the obtuse to subacute female glumes were a character that contrasted with *C. pichinchensis* Kunth, which always displays narrowly

acute to mucronate female glumes (P.J.-M., pers. obs.). Unfortunately, the type material was immature and they could not study fully formed utricles, reporting them as "elliptical". Upon observation of different specimens of the rarely collected *C. crassiflora*, together with careful examination of an isotype of *C. pichinchensis* var. *obtusisquama*, we have reached the conclusion that both taxa belong to the same species. The female glumes of *C. crassiflora* range from almost rounded to subacute. On the other hand, the isotype of *C. pichinchensis* var. *obtusisquama* displayed utricles that vary from widely elliptical forms to obovate forms that closely approach those of *C. crassiflora* (obovate to suborbicular; P.J.-M. pers. obs.). Accordingly, we propose that *C. obtusisquama* should be treated as a synonym of *C. crassiflora*.

Carex feddeana H.Pfeiff., *Repert. Spec. Nov. Regni Veg.* 17: 30 (Pfeiffer 1921). Lectotype (designated by Wheeler 1996): Brazil. Parana, "Brasilia, Paraná, prope Pinhaes" [885 m, 14 Oct. 1914], *Dusén* 1134a (BREM; isotypes G di!, GH di!, MO di!, NY di!, S di!).

ILLUSTRATIONS. Hoff Silveira & Longhi-Wagner (2012: 387).

DISTRIBUTION. North-eastern Southern Cone (from S Bolivia, Paraguay, and southern Brazil to northern Argentina; Govaerts *et al.* 2018, continuously updated). Previously known from Cochabamba, here first cited for the Bolivian department of Chuquisaca.

SPECIMENS EXAMINED. BOLIVIA: Chuquisaca Department, Boeto, Nuevo Mundo, NE of Villa Serrano, 2,400 m, 19°00'S 65°15'W, 23 Nov. 1995, *J. R. I. Wood* 10175 (K-001319230 di!).

Carex fuscula d'Urv., *Fl. Iles Malouin.*: 28 (Dumont d'Urville 1825). Lectotype (designated by Jiménez-Mejías *et al.* 2016b): Falkland Islands: "Malouines, I. [island] Soledad" *Dumont d'Urville* s.n. (P-00305080, photo!). Epitype (designated by Jiménez-Mejías *et al.* 2016b): Argentina, Tierra del Fuego, Tolhuin, estancia Rivadavia, cerca del lago Chepelmut, 75 m, 54°21.6'S 67°39.0'W, 12 Jan. 2010, *Martín-Bravo et al.* 31SMB10 (UPOS 4262!, SI!).

ILLUSTRATIONS. Barros (1969): 94.

DISTRIBUTION. Patagonia and southern Andes north to central Bolivia, Falkland Islands (Govaerts *et al.* 2018, continuously updated; Jiménez-Mejías *et al.* 2016b). Previously known from Cochabamba, here first cited for the Bolivian department of Chuquisaca, the second record for the country.

SPECIMENS EXAMINED. BOLIVIA: Chuquisaca Department, Yamparaez, c. 3 km from Tarabuco on road to

Candelaria, 3,200 m, 13 March 1999, *J. R. I. Wood & M. Serrano* 14645 (K-001319215 di!).

Carex giovanniana *Jim. Mejías, sp. nov. Type: Argentina. Salta Prov., Rosario de Lerma Department, Campo Quijano, Corralito, 1,750 – 1,850 m, 24°58'54"S 65°43'40"W, 3 Feb. 2015, *Rodríguez-Palacios et al.* 21GERP15 (holotype SI, isotypes at MCNS, UPOS).*

<http://www.ipni.org/urn:lsid:ipni.org:names:77206328-1>

Plant caespitose, rhizomes with short internodes, rarely some internodes slightly elongated. *Fertile culms* 15 – 100 cm, usually exceeding leaves, trigonous, smooth or antrorsely scabrid towards the apex, 0.5 – 1 mm wide at its middle length; basal sheaths brown, early decomposing into fibres. *Leaves* 1 – 3 mm wide, flat to plicate, glabrous, margins and nerves smooth for most of their length, becoming antrorsely scabrid distally; ligule truncate, not protruding into the blade or doing so <1 mm, the free portion hyaline to brownish. *Inflorescences* (1) 1.4 – 3 cm long, 4 – 10 mm wide, oblong to ovate, the spikes aggregated or the 1 (2) lowermost separated by an internode shorter than to equal to the spike length; lowermost bract leaf-like, (4) 6 – 15 (20) cm long, 0.3 – 1 mm wide, long exceeding the inflorescence, the immediately upper one often also surpassing the inflorescence. *Spikes* c. 3 – 11, androgynous, with c. 5 – 15 spreading utricles, the upper ones the smallest, crowded and almost undistinguishable, the lower ones larger and more conspicuous, sometimes the lowermost spike composed and bearing 1 – 2 secondary spikes. *Female glumes* 2 – 2.7 × 1 – 1.4 mm, shorter than the utricles, broadly elliptic to ovate-elliptic or lanceolate, acute, entirely whitish-hyaline to brown, often whitish at base, with a white-hyaline margin and the middle nerve green; male glumes 2 – 2.6 × 1 – 1.2 elliptic, acute to acuminate, rarely the lowermost ones of each spike mucronate, whitish-hyaline to brown, often whitish at base, with a narrow white-hyaline margin, the middle nerve stramineous to greenish. *Utricles* 3.2 – 4 mm long, 1.2 – 1.5 (1.6) mm wide, plano-convex, the body elliptical, with the widest part at middle, more or less constricted into a 0.5 – 1 mm shallowly bidentate beak, giving the upper part of the utricle a bottle-like outline, the margins smooth or shallowly and sparsely scabrid towards the apex, the sides smooth and nerveless, or with 3 – 9 faint nerves on the adaxial side at base, greenish or reddish-brownish tinged towards the centre, the beak often more conspicuously red than the rest of the utricle, the base without a corky bulge, sometimes the nerved area scarcely inflated. *Nutlets* narrowly biconvex, oblong to broadly ovate, yellowish to brownish, 1.7 – 1.8 mm long, 1.2 – 1.5 mm wide, closely enveloped by the utricle, the base some-

times constricted to form a substipitate base, the flattened remains of the style base present at the top of the nutlet.

ILLUSTRATION. Fig. 1B, b.

RECOGNITION. The new species is similar to *Carex subdivulsa* (Kük.) G.A.Wheeler and *C. uruguensis* Boeckeler. *Carex giovanniana* is distinguished from *C. subdivulsa* by its narrower leaves, paler glumes with a hyaline margin, and smaller utricles. The new species differs from *C. uruguensis* in having an elliptical utricule body, without a corky base or with the base scarcely inflated, whereas in *C. uruguensis*, the utricule body is oblong-ovate to lanceolate, with a corky base forming an inflated bulge (Fig. 1).

DISTRIBUTION. North-western Argentina (Tucumán and Salta, probably also in Jujuy) and southern Bolivia.

SPECIMEN EXAMINED(PARATYPES). **ARGENTINA:** Salta Prov.: Chicoana Department, Road “Cuesta del Obispo”, 2,380 m, 25°11'17.69”S 65°48'6.93”W, 4 Feb. 2015, *Rodríguez-Palacios & Jiménez-Mejías* 29GERP15 (MCNS!, SI!); Santa Victoria Department, road from Santa Victoria to Abra de Lizoite, 2,649 m, 22°14'21.9”S 65°00'30.2”W, 7 Feb. 2015, *Rodríguez-Palacios et al.* 33GERP15 (MCNS!, SI!). Tucumán Prov.: Tafí del Valle Department, Tafí del Valle, above Cristo Redentor, 2,509 m, 26°49'33.78”S 65°42'20.98”W, 29 Jan. 2015, *Rodríguez-Palacios & Jiménez-Mejías* 69GERP15 (LIL!, SI!). **BOLIVIA:** Chuquisaca Department: Padilla-Monteagudo, 1 km S of Lampacillos, 2,400 m, 20 Nov. 1994, *Wood* 8877 (LPB di!). Tarija Department: O'Connor Prov., Entre Ríos, río Narváez, 21°24'51”S, 64°17'16”W, 1,934 m, 15 Jan. 2008, *Portal et al.* 388 (MO-6390239!); Arce, on S side of pass between Padcaya and La Mamora, 1,800 m, 14 Jan. 2001, *Wood & Goyder* 16760 (LPB di!).

ETYMOLOGY. Commemorating Giovanni E. Rodríguez Palacios, amateur caricologist and collector of the holotype, also my (P.J.-M.) life-partner, who has supported and encouraged my work as a cyperologist from the first moment in our journey together.

NOTES. Previously confused with *Carex subdivulsa* (Jiménez-Mejías *et al.* 2016b) and *C. uruguensis* (on the herbarium label). *Carex giovanniana* can be easily distinguished from these two species by the characters mentioned above. The three species also seem to be entirely allopatric, with *C. uruguensis* present in the lowlands associated with the Río de la Plata basin, *C. subdivulsa* restricted to the Pampean sierras in La Rioja and Tucumán, and *C. giovanniana* spreading in NW Argentina and S Bolivia in high yunga forest and lower puna (P.J.-M., pers. obs.). Unpublished molecular results point to a sister relationship of *C. giovanniana* and *C. subdivulsa*, whereas *C. uruguensis* is more closely related to other South American *Carex* species (P.J.-M., pers. obs.).

ADDITIONAL REFERENCES. Jiménez-Mejías *et al.* (2016b) (in Tucumán and Salta, as *C. subdivulsa*).

Carex jamesonii Boott, *Proc. Linn. Soc. London* 1: 258 (1845). Lectotype (here designated): Colombia. Colombia, 13,000 ft., *Jameson*, from *Herb. Hooker* (K-001096936 di!).

ILLUSTRATION. Boott (1860: tab. 337)

DISTRIBUTION. Northern Andes, south to Bolivia (see notes).

SPECIMEN EXAMINED. **BOLIVIA:** Cochabamba Department. Ayopaya, Independencia, 29 km from Independencia along road to La Mina and Sailapata, 16°57.28'S 66°50.25'W, 3,287 m, 18 Dec. 2002, *J. R. I. Wood et al.* 18696 (K-001319244 di!).

NOTES. Here, we delimit *Carex jamesonii* in its strict sense according to the characters displayed by the type. In a broad sense, the name *C. jamesonii* has also been used to refer generically to *C. chordalis* Liebm. and *C. lapazensis* C.B.Clarke (= *C. jamesonii* var. *subfulva* Kük.). The use of the name *C. jamesonii* as a wastebasket taxon that includes these allied taxa makes the reports confusing. The only records under the name *C. jamesonii* for Bolivia belong to var. *subfulva*, which does not refer to the rare *C. lapazensis* (obs. pers.). Here, we report what seems to be the southernmost record of *C. jamesonii* s.s. on the South American continent, which is in turn the first citation of the species in Bolivia (as conceived in its narrowest sense).

Carex pachamamae Jim.Mejías & Reznicek, *Phytotaxa* 340: 56 (Jiménez-Mejías & Reznicek 2018). Holotype: Bolivia. Sorata, 19 April 1920, *E. W. D. Holway & M. M. Holway* 548 (US 1178380!).

ILLUSTRATION. Jimenez-Mejías & Reznicek (2018: 58 – 59).

DISTRIBUTION. Previously known only from the La Paz and Cochabamba departments. Here, we make a first report for Chuquisaca and Santa Cruz.

SPECIMEN EXAMINED. **BOLIVIA:** Cochabamba Department: Ayopaya, 1 km above Independencia, 2,500 m, 11 March 2000, *J. R. I. Wood* 15990 (K-001319246!); Independencia, zona de Pajchanti, unos 4 km arriba de Independencia, 17°04.02'S 66°50.50'W, 2,046 m, 19 Dec. 2002, *J. R. I. Wood et al.* 18737 (K-001319242!). Chuquisaca Department: Boeto, Nuevo Mundo, 18°59'S 64°17'W, 2,200 m, 3 Jan. 1996, *J. R. I. Wood* 10344 (K-001319236!); Boeto, Nuevo Mundo, 18°59'40”S 64°17'03”W, 2,400 m, 11 Jan. 1996, *M. Serrano* 1470 (LPB di!). Santa Cruz Dpt: 1 km from Empalme on road to San Antonio, Camarapa-Siberia road, 2,000 m, 25 May 1998, *J. R. I. Wood* 13628 (K-001319219!, NY!).

NOTES. The specimen *Serrano* 1470 (LPB) from Chuquisaca province was reported by Wheeler & Guaglianone (2006) as the northernmost record of the closely related *Carex subandrogyna* G.A.Wheeler & Guagl. After careful examination of a digital image

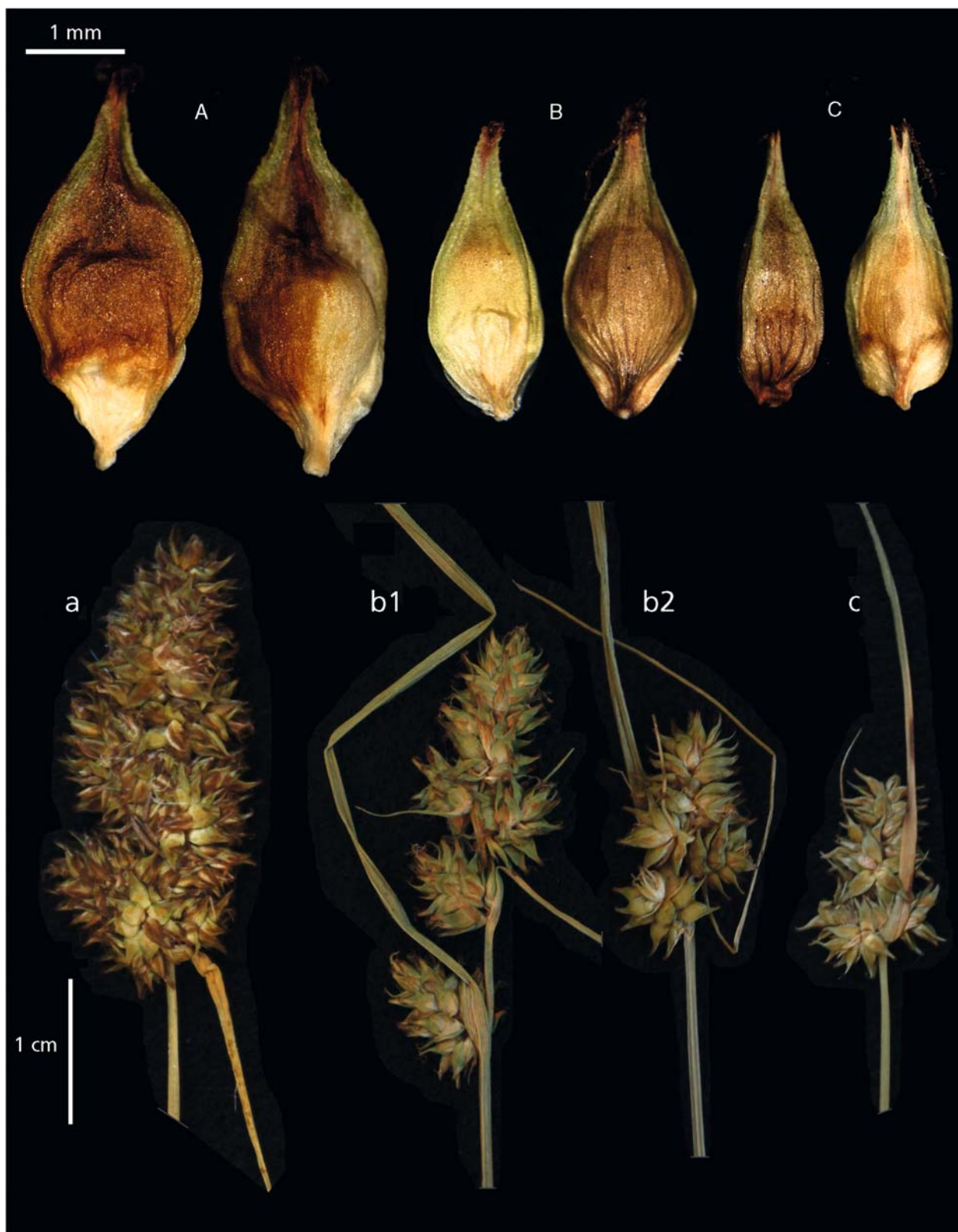


Fig. 1. Representative utricles (A–C) and inflorescences (a–c) from *Carex subdivulsa* (A, a), *C. giovanniana* (B, b1, b2) and *C. uruguensis* (C, c). Note the inflorescence variation within a single population of *C. giovanniana* (b1, b2). Vouchers: *C. giovanniana*, Argentina, Salta, Rosario de Lerma, Campo Quijano, *Rodríguez-Palacios et al.* 21GERP15 (isotype, UPOS); *C. subdivulsa*, Argentina, La Rioja, Chilecito, Sierra Famatina, *Martín-Bravo et al.* 107SMB15 (UPOS); *C. uruguensis*, Argentina, Entre Ríos, Paraná, *Rodríguez-Palacios et al.* 102GERP15 (UPOS).

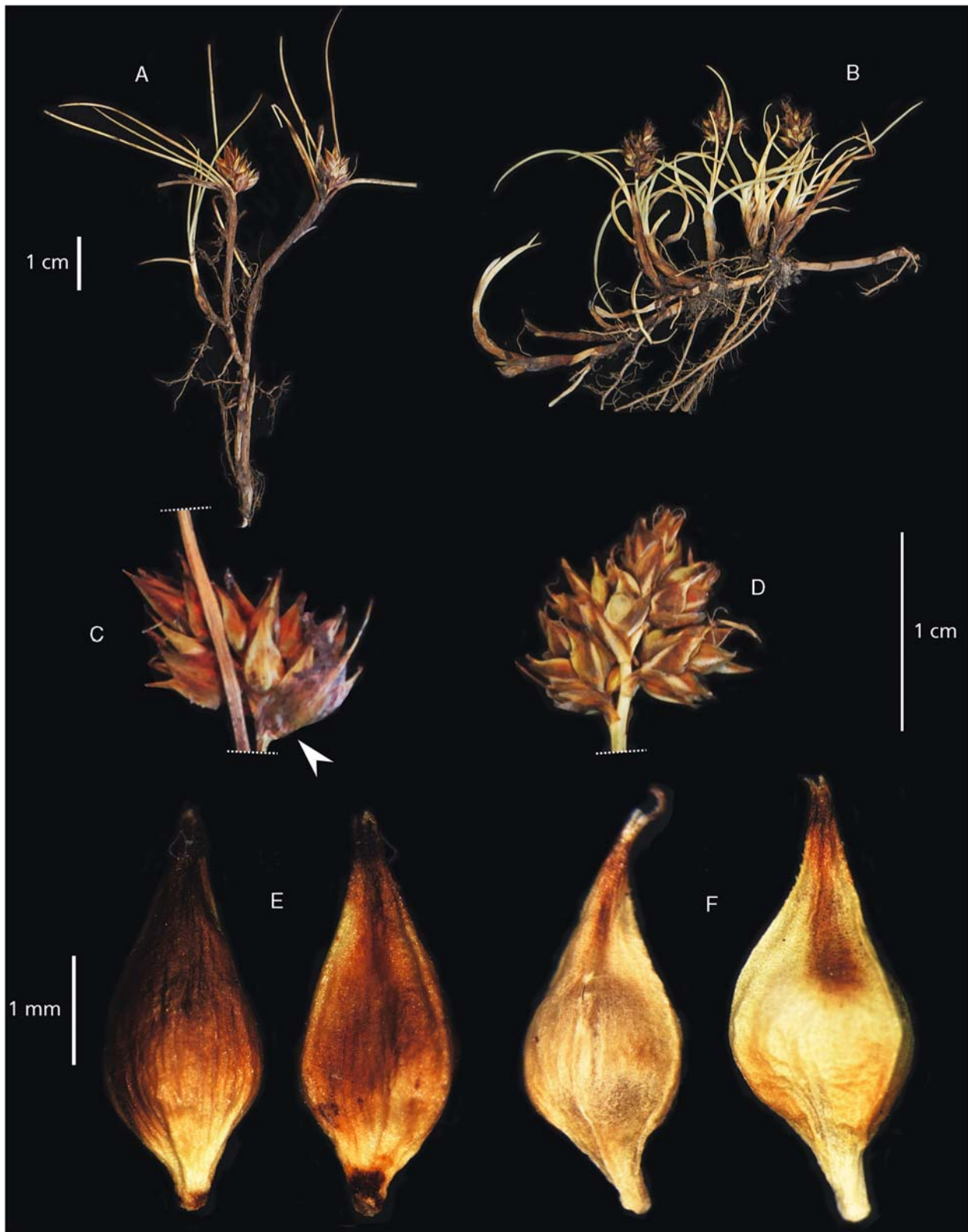


Fig. 2. Comparison of *Carex ruthsatziae* (A, C, E) with a South American specimen of *C. maritima* (B, D, F). Whole plant (A, B), entire inflorescence (C, D), and utricles (E, F). The arrow depicts the lowermost bract of the inflorescence of *C. ruthsatziae* (C), which is absent in *C. maritima* (D). Vouchers: *C. ruthsatziae*, Argentina, Salta, Santa Victoria, road to Abra de Lizoite, *Rodríguez-Palacios et al.* 46GERP15 (UPOS); *C. maritima*, Argentina, San Juan, entre Las Flores y el paso de Aguas Negras, *Martin-Bravo et al.* 94SMB15 (UPOS).

and confirmation of critical characters by LPB staff, we confirm that this plant is indeed *C. pachamamae*. Accordingly, *C. subandrogyna* should be regarded as being present in Bolivia only in the southern department of Tarija.

Carex pseudomacloviana G.A.Wheeler, *Hickenia* 2: 193 (1996). Holotype: Argentina. Salta Prov., Santa Victoria Department, de Abra de Lizoite a Santa Victoria, 22 March 1982, Kiesling *et al.* 3980 (SI-000230!).

ILLUSTRATION. Wheeler (1996: 195).

DISTRIBUTION. Previously known only from NW Argentina (Salta and Tucumán provinces). Here first reported for central Bolivia.

SPECIMEN EXAMINED. BOLIVIA: Cochabamba Department. Quillacollo, near road from Quillacollo crossing Cerro Tunari, 4,300 m, 27 Jan. 1996, J. R. I. Wood 10464 (K-001319231 di!).

Carex ruthsatziae G.A.Wheeler, *Darwiniana* 40: 191 (2002). Holotype: Bolivia. Oruro Department, Prov. Sajama, Payachatas, 4,420 m, 27 Jan. 1999, Ruthsatz & Budde 10216 (MIN, not seen; isotype LPB-0000244 di!).

ILLUSTRATION. Wheeler (2002: 194).

DISTRIBUTION. Central Peru (Jiménez-Mejías *et al.* 2020) to central Bolivia. Here reported for the first time in NW Argentina (Salta).

SPECIMEN EXAMINED. ARGENTINA: Salta, Santa Victoria, road to Abra de Lizoite, 4,480 m, 22°13'67.3"S 65°10'19.8"W, G. Rodríguez-Palacios *et al.* 46GERP15 (SI! MCNS!). **BOLIVIA:** La Paz Department. Prov. Murillo, 15 km hacia el norte de la Paz, 4,800 m, 26 Dec. 1982, S. G. Beck 7789 (NY-02861888!).

NOTES. *Carex ruthsatziae* belongs to section *Abditispicae* G.A.Wheeler, a group of dwarf sedges endemic to Andean and Patagonian South America. The species was originally known only from two localities in the Bolivian departments of Oruro (Sajama Province) and La Paz (Los Andes Province). It is known also from Peru (P.J.-M., pers. obs.). Here, we report the first record for Argentina and an additional record of this rare plant in Bolivia in La Paz Department, Murillo Province.

Jørgensen *et al.* (2014) synonymised *Carex ruthsatziae* in *C. maritima* for the Bolivia checklist. This decision was presumably based on the examination of the type collections of *C. ruthsatziae* (B. Ruthsatz, pers. comm.). *Carex ruthsatziae* indeed displays a striking resemblance to *C. maritima*, despite belonging to different subgenera (*Carex* and *Vignea* (P.Beauv. ex T.Lestib.) Heer, respectively). Subtle differences allow the distinction between the two species (Fig. 2). The most conspicuous difference is the presence of a setaceous

lowermost bract at the base of the entire inflorescence in *C. ruthsatziae*, whereas the inflorescence of *C. maritima* is bractless (do not mistake the proximal glumes of the lowermost spike for the lowermost bract of the entire inflorescence). Additional differences may be observed in the utricle: it is more conspicuously nerved and long attenuated (not constricted) into the beak in *C. ruthsatziae*, contrasting with the almost nerveless body and slightly constricted utricle beak of *C. maritima*. The independence of the two taxa has been further confirmed by molecular data, as the Argentinian sample of *C. ruthsatziae* reported here has been recovered in phylogenies among other members of *Carex* sect. *Abditispicae* and not close to *C. maritima* (Martín-Bravo *et al.* 2019).

Carex ruthsatziae was originally published as "*ruthsatzae*", but according to ICB art. 60.8(d), the name must be corrected to "*ruthsatziae*", as already recorded by Govaerts *et al.* (2018, continuously updated).

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