Reinstatement and revision of the genus *Chaetospora* (Cyperaceae: Schoeneae)

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Abstract

Three species are recognised within the reinstated and recircumscribed genus *Chaetospora* R.Br. *Chaetospora* is lectotypified on *C. curvifolia* R.Br. A new combination, *Chaetospora subbulbosa* (Benth.) K.L.Wilson & R.L.Barrett, is made for *Schoenus subbulbosus* Benth. Lectotypes are selected for *Chaetospora aurata* Nees, *Chaetospora curvifolia* R.Br., *Chaetospora turbinata* R.Br., *Elynanthus capitatus* Nees, *Schoenus subbulbosus* Benth., *Schoenus* subg. *Pseudomesomelaena* Kük. and *Schoenus* sect. *Sphaerocephali* Benth. Two species are endemic to south-western Australia, while the third is endemic to south-eastern Australia. Full descriptions, illustrations and a key to species are provided. All species have anatomy indicative of C₃ photosynthesis.

Introduction

*Chaetospora* R.Br. is here reinstated as a segregate from *Schoenus* L., with a novel circumscription. *Schoenus* is a nearly globally-distributed genus exhibiting a significant range of morphological variation (Rye et al. 1987; Sharpe 1989; Wilson 1993, 1994a,b; Bruhl 1995; Goetghebeur 1998; Wheeler and Graham 2002; Wilson et al. 2012; Elliott and Musasya 2017, 2018, 2019; Elliott et al. 2019). A significant amount of work has gone into reconstructing a detailed phylogeny for *Schoenus* and allied genera over the past decade, including some re-circumscriptions (Bruhl et al. 2008a, 2008b; Viljoen et al. 2013; Musasya 2016; Musili et al. 2016; Barrett et al. 2017, 2019; Larridon et al. 2018a, 2018b; A. Gibbs et al., unpubl. data). These phylogenetic studies have repeatedly found that *Schoenus curvifolius* (R.Br.) Poir. and two allied species are not related to *Schoenus s. str.*, rather they are more closely allied to *Tricostularia* Nees ex Lehmb.

Two of the three species treated here were published originally in *Chaetospora* (C. *curvifolia* R.Br. and *C. turbinata* R.Br.; Brown 1810). A third species was described in *Elynanthus* P.Beauv. ex T.Lestib. by Nees (1841). These species were grouped, along with a few species now known to be unrelated, as *Schoenus* sect. *Sphaerocephali* Benth. (Bentham 1878) or *Schoenus* subg. *Pseudomesomelaena* Kük. (Kükenthal 1938). Steudel (1855) established a new genus *Ptilanthelium* Steud. for *Chaetospora turbinata*, a combination which was for many years confused with the taxon now known as *Ptilothrix deusta* (R.Br.) K.L.Wilson, which is more closely allied to *Mesomelaena* Nees (see Wilson 1994a). Wilson (1994a) pointed out that the genus *Ptilanthelium* was
actually based on the taxon known as *Schoenus turbinatus* (R.Br.) Poir., but there was, at that stage, insufficient evidence for excluding it from *Schoenus s. lat.*

Brown (1810) diagnosed the genus *Chaetospora* on the basis of distichous spikelets; few flowers; empty lower glumes; the presence of short hypogynous bristles (perianth segments); and deciduous styles. Two of the 15 species included by Brown in *Chaetospora* he considered doubtful members. He recognised four informal groups in the genus. Species of group I are now placed in *Anthelepis* R.L.Bruhl, K.L.Wilson & J.J.Bruhl, *Chaetospora* and *Schoenus*; the single group II species is now included in *Schoenus*; the two species of group III were transferred to *Gymnoschoenus* Nees; and the two doubtfully included species of group IV are now in *Mesomelaena*.

*Chaetospora* was accepted by numerous authors until sunk within *Schoenus* by Bentham (Brown 1810; Kunth 1816; Schrader 1821, 1832; Chamisso and Schlechtendal 1831; Deitrich 1833; Nees 1835, 1840, 1848; Lehmann 1844; Hooker 1846, 1853, 1859; Steudel 1855; Mueller 1869, 1875; Boeckeler 1874, 1878, 1882; Franchet and Savatier 1878; Bentham 1878), for a wide variety of taxa that differ morphologically in various respects from the core species placed in the genus *Schoenus*. Most such species are now excluded from *Schoenus*, and placed in other genera including *Cyathochaeta* Nees, *Gymnoschoenus*, *Mesomelaena* and *Rhynchospora* Vahl (Appendix 1). Bentham (1878) pointed out that the generic concepts were not satisfactory, and included *Chaetospora* within *Schoenus*, a position that was subsequently almost universally accepted. Since Bentham (1878), most treatments have included the majority of species named in *Chaetospora* by Brown (1810) in *Schoenus*. As there is a surprisingly large number of taxa with names in *Chaetospora*, a full bibliographic synopsis is not presented, but a list of names and their current application is provided in Appendix 1.

A close relationship between *Chaetospora* and *Tricostularia* has been confirmed by molecular data (Zhang et al. 2004; Musili et al. 2016; Larridon et al. unpublished data). Published evidence for this relationship includes the sub-stomatal cavities in the culms lined with distinctly thickened cells in *Chaetospora curvifolia* (Kaphahn 1905). This character is shared with *Tricostularia* and *Schoenus*. The genus *Chaetospora* includes the sub-stomatal cavities in the culms lined with distinctly thickened cells in *Chaetospora curvifolia* (R.Br.) Poir. (= *Schoenus curvifolius* L.)

The genus *Chaetospora* is reinstated here for three species traditionally included in *Schoenus*, all endemic to southern Australia, one of which requires a new combination. A morphological characterisation of *Chaetospora* is provided here in preparation for a new global classification of Cyperaceae (Larridon et al. in prep.).

**Methods**

Morphological descriptions were prepared primarily based on material held at CANB, MEL and NSW, with additional examination of type specimens at BM, CGE, K and P. Collections at AD, BRI, CGE, HO, K, NE and PERTH were also seen. Type specimens seen directly are indicated by ‘!’ and those seen through additional examination of type specimens at BM, CGE, K and P. Collections at AD, BRI, CGE, HO, K, NE and PERTH were also seen. Type specimens seen directly are indicated by ‘!’ and those seen through additional examination of type specimens at BM, CGE, K and P.

**Taxonomy**

*Chaetospora* R.Br., *Prodr.* 232 (1810), *non* C.Agardh (1824), *non* Faurel & Schotter (1965); *Schoenus* sect. *Chaetospora* (R.Br.) Kuntze in Post & Kuntze, *Lex. Gen. Phan.* 507 (1903).

Lectotype species: *Chaetospora curvifolia* R.Br., here designated.

= *Ptianthelium* Steud., *Syn. Pl. Glumac.* 2(8–9): 166 (1855).

Type species: *Ptianthelium chauvinii* Steud. (= *Chaetospora turbinata* R.Br.).

= *Schoenus* subg. *Mesomelaena* Kük., *Repert. Spec. Nov. Regni Veg.* 44: 180 (1938).

Lectotype species: *Schoenus curvifolius* (R.Br.) Poir. (= *Chaetospora curvifolia* R.Br.), here designated.

= *Schoenus* sect. *Sphaerocephali* Benth., *Fl. Austral.* 7: 358 (1878) (= *Sphaerocephalae*).

Lectotype species: *Schoenus curvifolius* (R.Br.) Poir. (= *Chaetospora curvifolia* R.Br.), here designated.
Erect perennials, forming dense tussocks, with short, woody, branched, pseudobulbous rhizomes. Culms not nodded, slender, rigid, usually sulcate when dried, smooth. Leaves all basal and spirally arranged, with well-developed blade, pseudopetiole obscure or absent; blade dorsiventral, flat to channelled above, scaberulous on the margins; ligule absent. Lowest inflorescence bract spreading to sub-erect, similar to the leaves, much longer than the inflorescence, upper bracts gradually decreasing in length and often mostly hidden among the spikelets, lamina linear. Inflorescence condensed-compound, with several short internodes, consisting of 3–6 close fascicles of branches in the bract axils, but dense and appearing head-like; branches 1 at each node, slightly unequal, not exserted from the sheath, rigid, not flexuous, not compressed, glabrous on the margins. Spikelets subsessile, in clusters of 1–3, usually 1- or 3-flowered, the rachis straight, not elongated or flexuous. Glumes (floral bracts) 5–9, acute or attenuate, spiro-distichous, puberulent or glabrous, scaberulous, ciliate or denticulate on the margins and midrib; basal 4 or more glumes sterile; upper glume with a bisexual flower. Perianth segments 6, ± linear, flat to terete, margins with dense to scattered, white, short, antrorse, ciliate or ciliate-plumose hairs, persistent on the nutlet. Stamens 3; filaments glabrous; anthers twisted when dry. Style 3-fid, slender, of similar thickness throughout, mostly deciduous, a remnant often remaining on the nutlet. Nutlet obovoid, obpyriform or turbinated, with 3 whitish ribs, irregularly reticulate to rugulose or tuberculate at 40× magnification, shortly hirsipodial to scabrous or tuberculate at the apex, otherwise glabrous; embryo Schoenus-type. Photosynthetic pathway inferred from anatomy to be C₃.

Diagnostic characters: This genus is characterised by the combination of: pseudobulbous bases (fig. 1), leaves with a well-developed blade; a capitate or turbinate inflorescence subtended by several involucral bracts that greatly exceed the spikelets; the inflorescence branches supporting 1–3 spikelets each, the branches very short and hidden below the spikelets; a non-flexuous, straight rachilla with very short internodes; and flattened to terete, hairy perianth segments and a Schoenus-type embryo. Chaetospora differs from Schoenus and Tricostularia as detailed in Table 1.

Table 1. Diagnostic morphological characters between Chaetospora, Schoenus and Tricostularia.

|                  | Chaetospora                                      | Schoenus                                      | Tricostularia                                 |
|------------------|--------------------------------------------------|-----------------------------------------------|-----------------------------------------------|
| Leaves and bracts| usually with very elongated blades; ligule absent| variously with long blades or reduced to sheaths with a tiny residual blade; ligule present or occasionally absent | usually reduced to the sheath and a tiny residual blade or occasionally with short blade; ligule absent |
| Inflorescence    | compact, branched but appearing head-shaped (capitate to turbinate) | panicle, often loosely arranged, spiciform, a solitary spikelet, or sometimes head-like | narrow panicle or panicle                        |
| Rachilla         | non-flexuous, straight rachilla with very short internodes | zigzag rachilla with often elongated internodes | non-flexuous, straight rachilla                |
| Anther apiculum  | glabrous                                         | indumented or minutely papillose or glabrous  | glabrous                                      |
| Perianth segments| present, whitish, flattened to terete, hairy, not thickened | present or absent, whitish to brown, smooth, barbed, ciliate or plumed, terete, flattened or thickened | present, whitish, flattened and scale-like, hairy, not thickened |
| Embryo           | Schoenus-type                                    | Schoenus-type                                 | Helothrix-type                                 |

Distribution: A small genus of three species endemic to southern Australia.

Habitat: Primarily grows in sandy woodlands and seasonal damplands, also in sand over sandstone, granite, laterite and limestone.

Conservation status: All species are widespread and not considered threatened.

Etymology: Brown (1810) did not give the derivation of his generic name but it can be inferred to be a combination of the Greek words chaete (bristle) and spora (a seed), referring to the nutlet surrounded by bristles.

Typification: Chaetospora has not previously been lectotypified, and Chaetospora curvifolia is here designated as the lectotype to allow use of the generic name for the first two species included in the genus by Brown (1810); the other 13 species are not closely related and have been moved to other genera as outlined above. The lectotype is chosen on the basis that C. curvifolia is relatively representative of Brown’s generic description.

The lectotype of Schoenus subg. Pseudomesomelaena Kük. is chosen on the basis that Kükenthal (1938) discussed the (superficial) similarity between these species and Mesomelaena under Schoenus curvifolius.

The lectotype of Schoenus sect. Sphaerocephali Benth. is chosen on the basis that it fits the series description well (Bentham 1878). The series includes the same three species as subgenus Pseudomesomelaena Kük., as
as well as *S. submicrostachyus* Kük. (named there as *S. drummondii* Benth.) and *Ficinia filiformis* (Lam.) Schrad. (named there as *S. setifolius* Benth.).

**Notes:** Bruhl and Wilson (2008; listed under *Schoenus*) confirmed that all three species have C₃ anatomy, as first recognized for *C. curvifolia* by Takeda et al. (1985).

The pseudobulbous bases appear externally as if the base of the culm is swollen; however longitudinal sectioning of these bases shows that the culms are ± uniform in diameter throughout their length or slightly tapering at the very base. The apparent swelling is due to the overlapping leaf sheath bases over the small but woody rhizome, which give a somewhat bulbous appearance (Fig. 1). These persistent leaf sheaths are likely to offer a degree of insulation to the rhizome and associated axillary buds, increasing the ability of each of these species to resprout following fire.

It is possible that the congested inflorescences present a mass floral display that attracts insects that supplement wind pollination, as occurs in a few other sedge species, e.g. in *Cyperus* (Keighery 1984; Wragg and Johnson 2011) and *Rhynchospora* (Costa and Machado 2012).

Each taxon can be distinguished by multiple morphological characteristics as detailed in Table 2 and the key to species.

One previously un-noted difference is in the presence (in *C. curvifolia*) or absence (in the other two species) of sand-binding roots. This root type is defined as being non-mycorrhizal roots whose short or long root hairs bind sand particles, usually forming a strong rhizosheath around the root (e.g. as in *Lyginia barbata* R.Br., Restionaceae; Shane et al. 2011). It is one of the nutrient-acquisition features found in herbaceous species growing in dry, nutrient-poor habitats, including various sedges such as *Ficinia nodosa* (Rottb.). Goetgh., Muasya & D.A.Simpson and some species of *Lepidosperma* (Barrett 2013), as well as various species of Poaceae, Restionaceae, Dasypongonaceae and Haemodoraceae (Lamont 1982; Pate and Dixon 1996; Barrett and Dixon 2001; Brundrett 2009; Shane et al. 2011; Smith et al. 2011; Zemunik et al. 2015). The occurrence of this root-type in Cyperaceae remains poorly documented. Its function is similarly poorly understood, but it is known that the presence of root hairs is negatively correlated with mycorrhizal associations and is generally positively correlated with increased nutrient uptake, particularly in dry, low-nutrient situations (Miller et al. 1999; Gilroy and Jones 2000; Dolan and Costa 2001; Jungk 2001; Datta et al. 2011; Shane et al. 2011).

The dense, fine root hairs in *C. curvifolia* appear to be eventually sloughed off with the outer epidermis of the root, leaving a smooth brown surface on the remaining core of the root. However, we have found at least part of the roots covered in persistent root hairs in all specimens examined. Such root hairs have not been observed in the other two species, though they are known in other related taxa in southern Australia; *Schoenus grandiflorus* (Nees ex Lehm.) F .Muell., *Tetraria australiensis* C.B.Clarke, *Tetraria microcarpa* S.T.Blake, *Tetrariopsis octandra* (Nees) C.B.Clarke, *Tricostularia exsul* (C.B.Clarke) K.L.Wilson & R.L.Barrett and *Tricostularia pauciflora* (F .Muell.) Benth. (R.L.Barrett, pers. obs.).

Cluster (dauciform) roots, another distinctive root formation found in sedges in nutrient-poor soils (Lamont 1974), are known in a wide range of members of the tribe Schoeneae (Barrett 2013) but are yet to be observed in *Chaetospora*.

**Table 2. Diagnostic morphological characters in *Chaetospora*.**

|                  | *C. curvifolia* | *C. subbulbosa* | *C. turbinata* |
|------------------|-----------------|-----------------|---------------|
| Roots            | sand-binding    | not sand-binding| not sand-binding |
| Culm diam. (mm)  | 0.4–1.6         | 1.0–2.5         | 0.6–1.7       |
| Leaf sheath      | 2–4 cm long; apex scabrous to ciliolate | 2–4 cm long; apex scabrous | 4–7 cm long; apex scabrous to ciliolate |
| Inflorescence    | globose to depressed globose; dark brown or black | globose to depressed globose; pale brown | obovoid; brown |
| Spikelets        | 1-flowered      | 3-flowered      | 1-flowered    |
| Perianth segments| 1.5–2.0 mm long, flat, margins ciliate; longer than nutlet | 0.2–0.4 mm long, compressed to terete, glabrous or ciliate; shorter than the nutlet | 1.2–2.0 mm long, compressed to bristle-like, plumose; longer than nutlet |
| Anther length (mm)| 2.0–2.5        | 2.3–3.1         | 1.8–2.5       |
| Nutlets          | faces irregularly reticulate | faces irregularly tuberculate | faces irregularly faintly reticulate to rugulose |
Fig. 1. Pseudobulbous bases of plants and roots. A, D (sectioned longitudinally to show rounded woody rhizome). *Chaetospora curvifolia* bases. B, E (sectioned). *C. subbulbosa* bases. C, F (sectioned). *C. turbinata* bases. G. *C. curvifolia* sand-binding roots. H. *C. subbulbosa* non sand-binding roots. Vouchers: A, D: R.L. Barrett 5370 (NE); B, E: K.L. Wilson 2959 (NE); C, F: A.K. Gibbs 49 et al. (NE); G: K.L. Wilson 2692 (NSW); H: R. Cranfield & B. Ward WFM 289 (PERTH). White arrows = culms; black arrows = rhizomes. Scale bars: A–F = 1 cm; G, H = 5 mm. Photos A–E by J.J. Bruhl; G, H by R.L. Barrett.
**Key to species of Chaetospora**

1. Inflorescence ± ovoid; leaf sheath 4–7 cm long (SE Australia)................................. *C. turbinata*
1: Inflorescence ± globose to depressed globose; leaf sheath 2–4 cm long (SW Australia) .......... 2

2. Flower head usually black (sometimes dark brown); spikelets 1-flowered; perianth segments flat, ciliate, 1.5–2 mm long (about as long as the nutlet) ...................... *C. curvifolia*
2: Flower head rather pale brown; spikelets 3-flowered; perianth segments compressed to terete, 0.2–0.4 mm long (much shorter than the nutlet) ...................... *C. subbulbosa*

*Chaetospora curvifolia* R.Br., *Prodr.* 232 (1810); *Schoenus curvifolius* (R.Br.) Poir., *Encycl. Meth. Suppl.* 2: 251 (1811).

Type citation: ‘*(M.) v.v.*’

Lectotype, here designated: Western Australia: King George Sound, Dec. 1802, R. Brown [Bennett No. 6005] (BM 000990995! [plants with pencil annotation ‘B’ only]. Isolectotype: BM 000990996! [plants with pencil annotation ‘B’ only]).

=*Chaetospora aurata* Nees, *Ann. Nat. Hist.* ser. 1, 6: 49 (1841).

Type citation: ‘ad Flumen Cygnorum lectae, [Drummond].’

Lectotype, here designated: Western Australia: Swan River, 1839, *J. Drummond 1st coll.* (CGE!).

Possible residual syntypes: Western Australia: *J. Drummond 899* [original label looks like 899?] (syn: MEL 2201991!).

Illustrations: Kaphahan (1905; fig. 12); Clarke (1908; tab. LXXVIII, fig. 3); Dell and Bennett (1986; 103, fig. 65); Bennett and Dundas (1988: 154, fig. 357); Wheeler and Graham (2002; 292, fig.); Keeble (2017; 74, pl.).

Perennial graminoid *herb*, 13–50 cm high, roots fine, to 10 cm long, sand-binding. *Culms* erect, rigid, arising from a compact, bulb-like underground base or cluster of bases, nodeless, terete or compressed, 0.4–1.6 mm diam., ribbed, glabrous, much longer than leaves. *Leaves* basal, much shorter than the culms, flexuose; *sheath* 2–4 cm long, reddish brown with broad hyaline margins, striate, dull, base becoming fibrous with age, distally scabrous to ciliolate, becoming worn and glabrescent with age, margins glabrous; *lamina* 5–20 cm long, 0.3–0.9 mm wide, flat to canaliculate, tapering to a fine point, usually markedly curved, margins very finely ciliolate; *ligule* absent.

*Basal involucral bracts* 3–6(–8), leaf-like, margins very finely ciliolate, 2.5–7 cm long, surrounding and exceeding inflorescence, the base broadly ovate, centre green to black, margins white to translucent. *Inflorescence* an erect, terminal, subglobular head, 7–15 mm across, 5–12 mm long, dark brown or black, with numerous sessile spikelets. *Spikelets* narrow-ovate, acute, 4.7–6.9 mm long, dark brown to black, 1 or 2-flowered. *Glumes* 5–8, lowest 4–7 empty, narrowly ovate, acute or attenuate, dark brown to black (or green around keel), dull, 4.2–5.9 mm long, puberulent or glabrous, outer glumes weakly keeled, scabrous, ciliate or denticulate on the margins and keel. *Perianth segments* 6, 1.5–2 mm long, flat, white, margins ciliate. *Style* 3-branched, base 2.5–3.1 mm long, branches 1.3–2.5 mm long. *Stamens* 3; filaments 2.6–4.5 mm long, anthers 2.0–2.5 mm long with an apical appendage 0.5–0.7 mm long, *Nutlets* 1.4–1.7 mm long, 1.0–1.1 mm diam., dark brown, obovoid, attenuate at base, 3-ribbed (trigonous), faces irregularly reticulate, apex shortly hairy. Anatomy = *C*. (Figure 2)

**Diagnostic characters:** Similar to *Chaetospora subbulbosa* but differing in its sand-binding roots; leaf sheaths with scabrous to ciliolate apex; dark brown to black spikelets that are usually 1-flowered; perianth segments 1.5–2 mm long, longer than nutlet; anthers 2.0–2.5 mm long; and faces of nutlets irregularly reticulate.

**Distribution:** Widespread in the south-west of Western Australia, from Northampton and Geraldton to east of Esperance.

**Habitat:** Occurs in sand, sometimes over laterite or limestone, often in *Banksia* and jarrah woodland, in heath, or sometimes in winter-wet depressions. Recorded in association with *Anarthria scabra*, *Banksia attenuata*, *B. grandis*, *B. prionotes*, *Caustis dioica*, *Chaetospora subbulbosa*, *Cyathochaeta equitans*, *Eremaea pauciflora*, *Eucalyptus marginata*, *Grevillea preissii*, *Hakea sp., Hibbertia hypericoides*, *Isopogon sp.*, *Lambertia sp.*, *Lepidosperma calcicola*, *L. gladiatum*, *Mesomelaena graciliceps*, *M. pseudostygia*, *Mesopogon stygia, M. tetragona*, *Schoenus brachyphyllus*, *S. aff. breviculmis*, *S. cygnus*, *S. caespititius*, *S. graniflorus*, *S. fusescens*, *S. insolitus*, *S. nitens*, *S. subbarbatus*, *S. sublateralis*, *S. submicrostachyus*, *S. sp. A3 Ciliate Sheaths* (K.R. Newbey 9402), *Tetratriopsis octandra*, *Tricostularia aphylla*, *T. neesii* and *Xanthorrhoea preissii*.

**Phenology:** Flowers mainly July–September.
Fig. 2. *Chaetospora curvifolia*. A. Habit. B. Inflorescence at anthesis. C, F. Staminate inflorescences. D, E. Stylar inflorescence. Near Perth, Swan Coastal Plain, WA, not vouchered. Photos by R.L. Barrett.

**Selected specimens examined:** WESTERN AUSTRALIA: 5.2 km NE on Mt Ragged track from Fisheries Road, E of Esperance, 12 Sept. 2007, R.L. Barrett & A. Faber RLB 4147 (NE, NSW, PERTH); South Coast Highway towards Wellstead, 29 Oct. 2008, R.L. Barrett & K.L. Wilson RLB 5370 (NE, NSW, PERTH); Boundary Road, Wattle Grove, 6 Sept. 1976, R. Cowen 8067 (NSW, P, PERTH); Hayman Road, Bentley, 4 Sept. 1986, R.S. Cowan A 183 (BRI, MEL, NSW, NY, PERTH, US); Redgum Pass, Stirling Range, 6 Sept. 1971, Hj. Eichler 20989 (AD, NSW, PERTH); Bellevue, Apr. 1901, W.V. Fitzgerald s.n. (NSW 74030); E of Albany, 25.7 km E of Manypeaks along South Coast Highway, 8 Oct. 2003, J. Hodgson 806 & J.J. Bruhl (BOL, K, MO, NE, NSW, PERTH); Lowden, Preston River, July 1914, M. Koch 2575 (MEL, PERTH); Chittering Plot 1, c. 150 m from Chittering Road and 100 m from Smith Road, Bullsbrook, 7 Sept. 2006, M. Morley & M. Batista CHITT 01 (AD, NSW, PERTH); near Pointwater [Point Walter], Perth, July 1839, L. Preiss [Pl. Preissiana 1773] (LD, MEL, NY); 1 km W of Brand Highway along Green Head Road, 2 Oct. 1979, K.L. Wilson 2692 (NSW).

**Conservation status:** The species is widespread and locally common with populations of many individuals, the species is considered to be of ‘Least Concern’ (IUCN 2016). Conserved in many National Parks, including Lesueur, Stirling Range and Cape Arid National Parks.

**Etymology:** It is thought that Brown chose the Latin epithet *curvi-* (curved) and -*folius* (leaved), in reference to the distinctly curly involucral bracts below the head-like inflorescence, though the leaves are also somewhat curly, so either feature may have been recognised in this way.

**Typification:** The material is mixed on both Brown sheets [Bennett No. 6005] in BM, so lectotypification is required to fix the application of the name. One complete tuft with inflorescence (labelled by KLW with the letter ‘B’) on BM 00990995 belongs to *Chaetospora curvifolia*; while the majority of the material, three pieces labelled ‘A’ by KLW, belongs to *C. subbulbosa*. The sheet labelled as ‘for the public collection’ is also a mixture of these two species: one culm and inflorescence of *C. curvifolia* and one complete tuft with one
inflorescence of *C. subbulbosa*. Brown's description of his *C. curvifolia* could apply to either taxon. To conserve traditional usage of the name, the material labelled 'B' on the *Bennett* 6005 sheet is selected as lectotype.

We also choose a lectotype for *Chaetospora aurata* Nees as there are ambiguities in Drummond numbers and duplicate sheets that make it difficult to determine whether there are indeed duplicates of the type collection (Barrett and Wilson 2012).

**Notes:** This species and *C. subbulbosa* are commonly noticed due to the prominent inflorescence bracts spreading from the inflorescence, a feature otherwise rare in south-western Australian sedges.

*Chaetospora subbulbosa* (Benth.) K.L.Wilson & R.L.Barrett, *comb. nov.*

Basionym: *Schoenus subbulbosus* Benth., *Fl. Austral.* 7: 358 (1878).

Type citation: 'W. Australia. Kalgan River, *F. Mueller*; Forest Hill, *Muir*; Swan River, *Drummond, 1st coll*.; Busselton, *Pries*.'

Lectotype, here designated: Western Australia: Swan River, [1839], *J. Drummond* 1st coll. (K 000883761!).

Isolectotypes: (BM 001122254!, CGE 05648!, E 00688503*, E 00688504*).

Residual syntypes: Western Australia: Kalgan River, 1867, *F. Mueller* s.n. (syn: MEL 2204160!); Forest Hill, *J.R. Muir* s.n. (syn: K 000883762!, MEL 2204161!); Busselton, *A. & E. Pries* s.n. (syn: K 000883763!, MEL 2204162!).

=*Elynanthus capitatus* Nees, *Ann. Nat. Hist.* ser. 1, 4: 48 (1841), *non* *Chaetospora capitata* Kunth (1816); *Schoenus capitatus* (Nees) *F. Muell.*, *Fragm.* 9: 58 (1875), *nom. illeg.* *non* *Crantz* (1766), *non* *Pers.* (1805), *non* (Kunth) *Poir.* (1817), *non* Dubois (1833).

Type citation: 'ad Flumen Cygnorum lectae, [Drummond]'.

Lectotype, here designated: Western Australia: Swan River, 1839, *J. Drummond* 1st Coll. (CGE 05648!).

Isolectotypes: (B! (fragm. ex CGE), BM 001122254!, E 00688503*, E 00688504*, K 000883761!).

=*Schoenus subbulbosus* Benth. var. *junceus* Benth., *Fl. Austral.* 7: 358 (1878).

Type citation: 'W. Australia. *Drummond, 1st coll*.'

Type: Western Australia: Swan River, 1839, *J. Drummond* 1st Coll. (holo: K 000883765!; iso: K 000883764!).

*Chaetospora brevisetis* auct non *R.Br.*: *Mueller* (1875: 37).

Illustration: Wheeler and Graham (2002; 292, fig.).

Perennial graminoid herb, 15–55 cm high, roots fine, to 9 cm long, not sand-binding. *Culms* erect, rigid, arising from a compact, bulb-like underground base or cluster of bases, nodeless, terete or compressed, 1.0–2.5 mm diam., ribbed, glabrous, much longer than leaves. *Leaves* basal, much shorter than the culms, flexuose; sheath 2–4 cm long, reddish brown with broad hyaline margins, striate, dull, base becoming fibrous with age, distally scabrous; lamina 4–15 cm long, 0.3–0.7 mm wide, flat to canaliculate, to slightly involute and appearing terete towards the apex, tapering to a fine point, spiralled or curly distally, margins very finely ciliolate; ligule absent. *Basal involucral bracts* 3–4, leaf-like, margins very finely ciliolate, curly, 2–5.5 cm long, surrounding and exceeding inflorescence, the base broadly ovate, strongly ribbed, centre green to brown, glabrous, margins white to translucent, ciliate. *Inflorescence* an erect, terminal, subglobular head, 9–16 mm across, 6–13 mm long, pale to reddish brown, with numerous sessile spikelets. *Spikelets* narrow-ovate, acute, 5–8 mm long, pale brown, usually 3-flowered. *Glumes* 6–8, lowest 5 or more empty, narrowly ovate, acute or acuminate, pale brown, dull, 4.3–6.0 mm long, sparsely puberulent, keeled, keel often scaberulous, ciliate on the margins. *Perianth segments* 6, 0.2–0.4 mm long, compressed to terete, white, glabrous or with scattered cilia. *Style* 3-branched, base 1.4–2.7 mm long, branches 2.1–2.9 mm long. *Stamens* 3; filaments 2.0–3.5 mm long, anthers 2.3–3.1 mm long with an apical appendage 0.6–0.8 mm long. *Nutlets* 1.4–1.6 mm long, 1.0–1.2 mm diam., brown, obovoid, somewhat attenuate at base, trigonous, 3-ribbed, faces irregularly tuberculate, apex shortly hairy with a persistent style base to 0.15 mm long. Anatomy = *C*₃. (Figure 3)

**Diagnostic characters:** Differs from *Chaetospora curvifolia* in its non sand-binding roots; leaf sheaths with scabrous apex; pale brown spikelets that are 3-flowered; perianth segments 0.2–0.4 mm long, shorter than nutlet; anthers 2.3–3.1 mm long; and faces of nutlets irregularly tuberculate.

**Distribution:** Widespread in the south-west of Western Australia, from Perth southwards within 100 km of the coast, to just east of Albany.
Fig. 3. Chaetospora subbulbosa. A–C. Habit. D. Inflorescence with long subtending bracts. E. Young inflorescence. F. Stylar inflorescence. Near Perth, Swan Coastal Plain, WA, not vouchered. Photos by R.L. Barrett.

Habitat: Occurs in sandy, swampy heath or open woodlands, generally in winter-wet depressions or around the margins of granite outcrops. Recorded in association with Allocasuarina humilis, Andersononia simplex, Aphelia brizula, Baxteria australis, Centrolepis strigosa, Chaetospora curvifolia, Corymbia calophylla, Eucalyptus marginata, Evandra aristata, Lepidosperma drummondii, L. cf. pubisquameum, Phyllangium paradoxum, Restionaceae, Schoenus acuminatus, S. caespititius, S. discifer, S. lanatus, S. obtusifolius, S. racemosus, S. rodwayanus, S. sublateralis, S. sp. Grey Rhizome (K.L. Wilson 2922), Tricostularia compressa and Xanthorrhoea sp.

Phenology: Flowers recorded for March, April, May, November, probably mainly in autumn. Fruit recorded for August–September.

Selected specimens examined: WESTERN AUSTRALIA: c. 300 m down sand track from Albany Speedway, on S side of Albany Highway at northern outskirts of town, 28 Oct. 2008, R.L. Barrett & K.L. Wilson RLB 5347 (NE, NSW, PERTH); Cannington, near Perth, 27 Aug. 1947, S.T. Blake 17987 (BRI, CANB, NSW); 76 km from Albany along road to Walpole, Rocky Gully turnoff, between Kent River and Bow Bridge, 20 Jan. 1979, M.D. Crisp 5310 (CBG, NSW); Cannington Swamp, near Perth, 27 Aug. 1959, Hj. Eichler 15746 (AD); Midland Junction, Sept. 1901, W.V. Fitzgerald s.n. (NSW 74041); W of Denmark, 200 m S of junction of Kent Road and South Coast Highway, 7 Oct. 2003, J. Hodgson 802, J.J. Bruhl & D.M. Hodgson (BOL, NE, NSW, PERTH); 4 miles [6.4 km] S of Mount Barker, 226 miles [362 km] S of Perth, C. Milton’s property, 11 Dec 1973, K.F. Kenneally 1128 (PERTH); Capel, 24 Sept. 1948, R.D. Royce 2680 (PERTH); 12.5 km N of Albany on Chester Pass Road, 18 Oct. 1979, K.L. Wilson 2959 (NSW, PERTH); 3 km E of Blackwood River on Brockman Highway, E of Alexandra Bridge, 21 Oct. 1979, K.L. Wilson 3047 (NSW); 5 km N of Windy Harbour on road to Northcliffe, D’Entrecasteaux National Park, 22 Nov. 1994, K.L. Wilson 9023 & K. Frank (NSW, PERTH).

Conservation status: The species is widespread and locally common with populations of many individuals, the species is considered to be of ‘Least Concern’ (IUCN 2016). Conserved in many National Parks, including Stirling Range and Cape Arid National Parks.

Etymology: The epithet is from the Latin sub (below) and bulbosus (bulb), presumably in reference to the swollen bases that are enlarged and bulb-like.

Typification: Nees (1841) named Elynanthus capitatus from Drummond material collected at the Swan River Colony (South-west Western Australia). Several collections have been located; however, the timing
of publication dictates that only Drummond’s first collection series would have been available to Nees. Two Drummond collections of this taxon were made in his first series, each with duplicates, so a lectotype is required and we have chosen the material examined by Nees at CGE as he probably did not see any other material.

Bentham (1878) named *Schoenus subbulbosus* but it is somewhat ambiguous as to whether this should be considered a replacement name for *Elynanthus capitatus* (*non* *Chaetospora capitata* Kunth), or a new name with a new type. Bentham included *E. capitatus* in synonymy with a question mark, and stated that this was based only on the description, in other words he had not seen the original specimen. We consider this to be sufficient to assume that he was supplying a completely new name. This is also contrasted against *Schoenus drummondii* Bentham., from the same publication, where he makes it clear that it is a replacement name for *Chaetospora microstachya* Nees ex Lehm.

We have selected a sheet at K (K 000883761) as the lectotype, noting that this is part of the same collection as the type of *Elynanthus capitatus*, so it is also an isolectotype of that name. Bentham made it clear that he did not see the CGE specimen, so it would be inappropriate to designate a single sheet as the lectotype of both names.

**Notes:** Bentham distinguished his var. *junceus* Benth. from typical *S. subbulbosus* on the basis of it having taller, often flattened culms, more rigid leaves with scarcely any scarios margin (but still with old sheaths disintegrating into fibres), and glumes minutely ciliate and sometimes pubescent, with the inner glumes being more obtuse than in the typical form. These differences are not consistent when a broader range of material is examined, so the variety is not considered worthy of recognition.

*Chaetospora turbinata* R.Br., *Prodr.* 232 (1810); *Schoenus turbinatus* (R.Br.) Poir., *Encycl. Meth. Suppl.* 2: 251 (1811).

Type citation: ‘(J.) v.v.’

Lectotype, here designated: New South Wales: sandstone near Port Jackson, Sydney, 1804–5, *R. Brown* [Bennett No. 6006] (BM 000884724!). Isolectotypes: (BM 000884724!; DBN!, E 00373556*; E 00373557*; K 000883760!; [1802–5, s.n.] MEL 2295075!, P 00585293!).

Residual syntype: Botany Bay, 1770, *J. Banks & D. Solander* s.n. (syn: BM!, NSW 133721!).

=*Ptilanthelium chaunvisi* Steud., *Syn. Pl. Glumac.* 2(8–9): 167 (1855).

Type citation: ‘Ex Hrbo Urville commun. Chauvin. Port Jacks[on].’

Lectotype, designated by K.L. Wilson, *Telopea* 5(4): 613 (1994): New South Wales: Port Jackson, ex Herb. *D. D’Urville* 67-319, comm. *Chauvin* (lecto: P 00585291!; isolecto: P 00585292!; possible isolecto: G (2 sheets)!)

Illustrations: Goetghhebeur (1986; fig. 8.12.7 D–L); Wilson (1993; 306, fig.); Wilson (1994b; 248, fig. 53p); Fairley and Moore (2002; 341, pl. 1245); Robinson, (2003; 297, fig.); Klaphake (2004; 56, fig.).

Perennial graminoid *herb*, 14–40 cm high, roots fine, to 7 cm long, not sand-binding. *Culms* erect, rigid, arising from a compact, bulb-like underground base or cluster of bases, nodeless, terete to compressed, 0.6–1.7 mm diam., often grooved or striate, glabrous, much longer than leaves. *Leaves* basal, much shorter than the culms, flexuose; sheath 4–7 cm long, straw-coloured with broad hyaline margins, striate, shining, base becoming fibrous with age, distally scabrous to ciliate, margins with scattered cilia; lamina 6–21 cm long, 0.3–0.7 mm wide, canaliculate to involute and appearing terete, tapering to a fine point, slightly curly, margins serrulate, especially in lower half, very finely ciliate; ligule absent. *Basal involucral bracts* 2–6, leaf-like, margins very finely ciliate, 2–10 cm long, surrounding and exceeding inflorescence, the base broadly ovate, pale brown, margins pale brown to translucent. *Inflorescence* an erect, terminal, elongate head, becoming turbinated, 6–10 mm across, 6–17 mm long, brown, with 3–5 fascicles of 2–3 sessile or subsessile spikelets. *Spikelets* narrow-ovate to oblong-ovate, acute, 5.5–8.0 mm long, chestnut brown, 1-flowered. *Glumes* 5–9, lowest 3–5 empty, lanceolate or narrowly ovate to ovate, long narrow-acute, pale red-brown, dull, puberulent, keeled, keel often scaberulous, ciliate to glabrous on the margins, fertile glumes 4.5–6.0 mm long. *Perianth segments* 6, 1.2–2.0 mm long, compressed to bristle-like, plumose, white to red-brown. *Style* 3-branched, base 2.7–3.5 mm long, branches 1.3–1.5 mm long. *Stamens* 3; filaments 4.4–6.2 mm long, anthers 1.8–2.5 mm long with a dark red apical appendage 0.5–0.6 mm long. *Nutlets* 1.3–2.3 mm long, 1.0–1.4 mm diam., dull, grey to red-brown, obpyriform to turbinate or obovoid, attenuate at base, 3-ribbed (trigonous), faces irregularly faintly reticulate to rugulose, apex minutely scabrous and tuberculare. *Anatomy* = *C*₂₇ (Figure 4)
Diagnostic characters: Differs from *Chaetospora subbulbosa* by more slender culms, 0.6–1.7 mm wide; leaf sheaths 38–68 mm long; brown spikelets that are 1-flowered; perianth segments 1.2–2.0 mm long, longer than nutlet; anthers 1.8–2.5 mm long; and faces of nutlets irregularly faintly reticulate to rugulose.

Distribution: Widespread in the south-east of Australia, from the Bundaberg district in south-east Queensland to the NSW-Victorian border; extending inland to Gibraltar Range and the Blue Mountains (NSW); localized around the Grampians, Anglesea, Cape Liptrap and Howe Range in Victoria; and widespread in Tasmania, including the Furneaux Islands.

Habitat: Occurs in sandy heath or open low woodland over sandstone, gravel or granite, usually in coastal areas. Recorded in association with *Acacia paradoxa*, *A. suaveolens*, *Allocasuarina littoralis*, *A. pusilla*, *A. rigida*, *Amperea xiphoclada*, *Aotus ericoides*, *Banksia ericifolia*, *B. marginata*, *Calyptrix tetragona*, *Cassitha glabella*, *Caustis flexuosa*, *C. pentandra*, *Corymbia gummifera*, *Dillwynia sericea*, *Eucalyptus obliqua*, *E. pilularis*, *E. williamsiana*, *Eurychorda complanata*, *Hakea deccurrens*, *Isopogon ceratophyllus*, *Lepidosperma concavum*, *L. filiforme*, *Leptospermum glaucescens*, *L. myrsinoides*, *L. trinervium*, *Lomatia tinctoria*, *Persoonia sp.*, *Platylobium obtusangulum*, *Restionaceae*, *Schoenus brevifolius*, *S. tenuissimus*, *Tetraria capillaris* and *Xanthorrhoea sp.*

Phenology: Flowers mainly August–January. Fruiting recorded for August–February.

Selected specimens examined: QUEENSLAND: Cooloola near Kings Bore Road, c. 0.4 km E of Teewah Creek, near Noosa, 24 May 1972, A.G. Harrold 234 (BRI); Woodgate National Park, near Bundaberg, [?Sept. 1978], C. Sandercoe C110 (BRI); Cooloola National Park near Rainbow Beach Road, 20 Feb. 1984, C. Sandercoe C334 (BRI). NEW SOUTH WALES: Gibraltar Range National Park, 5.5 km W of Park visitor centre along Gwydir Highway, 200 m S of highway, 3 July 2005, J.J. Bruhl 2355 (BOL, EIU, GENT, MO, NSW); Morton National Park, off track to Tianjarra Falls carpark, N of Nerriga (Turpentine) Rd, 31 Dec. 2008, J.J. Bruhl 2703 (BOL, BRI, CANB, EIU, GENT, K, MEL, MO, NE, NSW, PRE); 6.4 km (4 miles) SE of Nabiac at old landing site, 16 Feb. 1965, R. Coveny, P. Hind, R. Hancock RC 7556 (MEL, NSW, PERTH); near Old Aerodrome Road, 10.8 km ESE from turn-off (of Glen Ora Road) on Pacific Highway SE of Nabiac, 21 May 2012, K.L. Wilson 10781 (NSW). VICTORIA: Cape Liptrap – Walkerville South, 19 Mar. 1975, D.C. Cheal 193 (MEL); Anglesea Heath, Alcoa Boundary Road, 27 Dec. 2008, A.K. Gibbs 80 (BOL, BRI, CANB, GENT, K, MEL, MELU, MO, NE, NSW); Grampians National Park, Beside Jimmys Creek Road about 2.3 km from the Halls Gap–Dunkeld...
Road, 10 Jan. 2011, J.A. Jeanes 2519 (CANB, MEL). TASMANIA: 3 km SE of Nye Bay, 1 Feb. 1986, A. Moscal 12045 (HO, NSW); Flinders Island, Mount Killiecrankie, c. 380 m at 6 degrees N of E of the summit, 23 Sept. 1978, J.S. Whinray 2424 (MEL); c. 2 km NW of Coles Bay on Bicheno road, 21 Feb. 1986, K.L. Wilson 6514 (HO, NSW).

Conservation status: The species is widespread and locally common with populations of many individuals, the species is considered to be of 'Least Concern' (IUCN 2016). Conserved in many National Parks, including Kamay, Royal and Blue Mountains National Parks.

Etymology: It is probable that Brown chose the Latin epithet turbinatus (turbinate) in reference to the shape of the inflorescence.

Typification: There are three specimens of C. turbinata in BM that would have been available to Brown: two collected by him, and a collection made by Banks and Solander in 1770 around Botany Bay. Brown's own collection (the sheet labelled Bennett 6006 (BM 000884723) bears his own field labels 'Port Jackson 1804–5' and is selected as lectotype. Brown's other collection is the material selected by him for the public collection (BM 000884724); it bears a typed and printed label and a handwritten label in the script of Dryander but no notes in Brown's script. There is a piece from the Banks and Solander specimen mounted on a sheet with Brown's manuscript notes. This is labelled as being part of the study-set that Brown took with him on the voyage to Australia.

Notes: This species has sometimes been confused with Ptilothrix deusta because of the shape of the inflorescence which is subtended by long bracts.

Acknowledgements

Staff at the following herbaria are thanked for supporting our visits and access to collections: AD, B, BM, BRI, CANB, CGE, DBN, G, HO, K, L, LD, MEL, NE, NSW, P, PERTH. We would like to thank the relevant departments in New South Wales, Tasmania, Victoria and Western Australia for collection permits and assisting with access to reserves. Adele Gibbs is particularly thanked for assessment of molecular relationships within Schoenus s. lat. We are grateful to David Mabberley for advice on typification of Robert Brown's names.

Declaration of Funding

This research was indirectly supported by several grants from the Australian Biological Resources Study and Bush Blitz to J.J. Bruhl, K.L. Wilson & R.L. Barrett, including ATC210-14.

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Manuscript received 13 April 2020, accepted 19 May 2020
### Appendix 1.

Taxa named in *Chaetospora* (including illegitimate names) and their current names. Bibliographic details can be found in the Australian Plant Names Index (https://biodiversity.org.au/nsl/services/APNI) and Kew Checklist of Selected Plant Families (http://www.ipni.org and http://apps.kew.org/wcsp/) for plants; AlgaeBase (http://www.algaebase.org) for algae; and MycoBank (http://www.mycobank.org) for fungi.

| Name published in *Chaetospora* R.Br. | Current name |
|--------------------------------------|--------------|
| *Chaetospora albescens* Franch. & Sav. | *Schoenus apogon* Roem. & Schult. |
| *Chaetospora alpina* (R.Br.) F.Muell. | *Carpha alpina* R.Br. |
| *Chaetospora anceps* R.Br. | *Gymnoschoenus anceps* (R.Br.) C.B.Clarke |
| *Chaetospora antarctica* Hook.f. | *Schoenus antarcticus* (Hook.f.) Dusén |
| *Chaetospora aurata* Nees | |
| *Chaetospora aurea* Cham. & Schldl., nom. illeg. | *Rhynchospora corymbosa* (L.) Britton |
| *Chaetospora aurea* Cham. & Schltdl. | *Rhynchospora aristata* Boeckeler |
| *Chaetospora avenacea* (R.Br.) F.Muell. | *Carpha alpina* R.Br. |
| *Chaetospora brevisetis* R.Br. | *Gymnoschoenus anceps* (R.Br.) C.B.Clarke |
| *Chaetospora burmanni* (Vahl) Schrad. | *Tetraria burmanni* (Vahl) C.B.Clarke |
| *Chaetospora calostachya* R.Br. | *Schoenus calostachys* (R.Br.) Poir. |
| *Chaetospora clandestina* (R.Br.) F.Muell. | *Schoenus calostachys* (R.Br.) Poir. |
| *Chaetospora compressa* (L.) Gray | *Blysmus compressus* (L.) Poir. ex Link |
| *Chaetospora concina* Hook.f. | *Schoenus nitens var. concinnus* (Hook.f.) Cheeseman |
| *Chaetospora curvifolia* R.Br. | *Schoenus cruciatus* (Nees) Benth. |
| *Chaetospora distans* F.Muell. | *Rhynchospora corymbosa* (L.) Britton |
| *Chaetospora elongata* Nees | *Rhynchospora corymbosa* (L.) Britton |
| *Chaetospora ferruginea* Kunth | |
| *Chaetospora flexuosa* (Thunb.) Schrad. | *Blysmus compressus* (L.) Poir. ex Link |
| *Chaetospora globosa* Kunth | |
| *Chaetospora hexandra* Boeckeler | |
| *Chaetospora imberbis* R.Br. | |
| *Chaetospora × intermedia* (Brügger) Beck, nom. illeg., in syn. | *Schoenus apogon* Roem. & Schult. |
| *Chaetospora japonica* Franch. & Sav. | *Schoenus apogon* Roem. & Schult. |
| Name published in Chaetospora R.Br. | Current name |
|-------------------------------------|--------------|
| Chaetospora laeta Kunze ex Steud.   | Rhodoscirpus asper (J.Presl & C.Presl) Lév.-Bourret, Donadio & J.R.Starr |
| Chaetospora lanata (Labill.) R.Br.   | Schoenus lanatus Labill. |
| Chaetospora laxa Hook.f.             | Schoenus rhychnosporoides (Steud.) Kük. |
| Chaetospora lepidosperma F.Muell.    | Schoenus lepidosperma (F.Muell.) K.L.Wilson |
| Chaetospora lucens Poir.             | Schoenus nitens (R.Br.) Poir. |
| Chaetospora madagascariensis Steud.  | Rhynchospora rubra subsp. africana J.Raynal |
| Chaetospora maunii Steud.            | Rhynchospora brownii Roem. & Schult. |
| Chaetospora microstachya Nees ex Lehms. | Schoenus submicrostachyus Kük. |
| Chaetospora nana Nees ex Lehms.      | Schoenus nanus (Nees ex Lehms.) Benth. |
| Chaetospora natans F.Muell.          | Schoenus natans (F.Muell.) Benth. |
| Chaetospora neesii (Lehm.) Boeckeler | Tricostularia neesii Lehms. |
| Chaetospora nigricans (L.) Kunth     | Schoenus nigricans L. |
| Chaetospora nitens R.Br.             | Schoenus nitens (R.Br.) Poir. |
| Chaetospora paludosa R.Br.           | Schoenus nigricans L. |
| Chaetospora pedicellata R.Br.        | Schoenus bifidus (Nees) Boeckeler |
| Chaetospora paniculata Steud.        | Anthelopsis paludosa (R.Br.) R.L.Barrett, K.L.Wilson & J.J.Bruhl |
| Chaetospora paniculata Hook.f.       | Schoenus pedicellatus (R.Br.) Poir. |
| Chaetospora pterocarpa Kunth         | =Asterochaete nitens Kunth |
| Chaetospora pterosperma Kunth        | Rhynchospora barbata (Vahl) Kunth |
| Chaetospora pterosperma Neew. nom. illeg. | Rhynchospora barbata (Vahl) Kunth |
| Chaetospora punctonia (Vahl) A.Dietr. | Rhynchospora barbata (Vahl) Kunth |
| Chaetospora rhychnospermoideas F.Phil. | Neesenbeckia punctoria (Vahl) Lyevns |
| Chaetospora rhychnosporoides Steud.  | Schoenus rhychnosporoides (Steud.) Kük. |
| Chaetospora robusta Kunth            | Schoenus rhychnosporoides (Steud.) Kük. |
| Chaetospora rufa (Huds.) Gray        | Tetraria robusta (Kunth) C.B.Clarke |
| Chaetospora sphaerocephala R.Br.     | Blysmus rufus (Huds.) Link |
| Chaetospora spicata Boeckeler        | Gymnoschoenus sphaerocephalus (R.Br.) Hook.f. |
| Chaetospora striata (Thunb.) A.Dietr. | Tricostularia compressa Nees ex Lehms. |
| Chaetospora stygia R.Br.             | Ficina indica (Lam.) H.Pfeiff. |
| Chaetospora subbulbosa (Benth.) K.L.Wilson & R.L.Barrett | Mesomelaena stygia (R.Br.) Nees |
| Chaetospora tenax Hook.f.            | Chaetospora subbulbosa (Benth.) K.L.Wilson & R.L.Barrett |
| Chaetospora tendo Hook.f.            | Schoenus brevifolius R.Br. |
| Chaetospora tenella Rupr.            | Schoenus tendo (Hook.f.) Hook.f. |
| Chaetospora tenera (Spreng.) A.Dietr. | Carex parva Nees |
| Chaetospora tenuissima Steud.        | Schoenus tener Spreng. |
| Chaetospora tenuissima Hook.f., nom. illeg. | Schoenus apogon Roem. & Schult. |
| Chaetospora tricops Cham. & Schldtl. | Schoenus lepidosperma (F.Muell.) K.L.Wilson |
| Chaetospora tricots Chal. Schldtl.    | Mesomelaena tetragona (R.Br.) Benth. |
| Chaetospora turbinata R.Br.          | Rhynchospora exaltata Kunth |
| Chaetospora umbellulifera Boeckeler   | Chaetospora turbinata R.Br. |
| Chaetospora vicozensis Schrad. ex Roem. & Schult. | Schoenus apogon Roem. & Schult. |
| Chaetospora villosa (R.Br.) Nees      | Rhynchospora brownii Roem. & Schult. |

Name published in Chaetospora C.Agardh, nom. illeg. [Algae] |

| Name published in Chaetospora Faurel & Schotter, nom. illeg. [Fungi] | Current name |
|---------------------------------------------------------------------|--------------|
| Chaetospora quezeli Faurel & Schotter                                | Neochaetospora quezeli (Faurel & Schotter) B.Sutton & Sankaran |