

#### 4. *Chorizandra*

##### *Chorizandra australis* K.L. Wilson, sp. nov.

*C. cymbariae* affinis sed omnibus partibus robustioribus, culmis non verruculosus, inflorescentia plusminusve globosa, marginibus bractee inflorescentiae basi angustioribus non vel vix rubropunctatis, differt.

TYPE: SOUTH AUSTRALIA: South-eastern: Honans Scrub, S of Glencoe, 10.5 km N of Princes Highway, 21 km NW of junction of Glencoe–Millicent–Mount Gambier roads, A.C. Beauglehole 68255 & B.A. Mitchell, 27 April 1980; holo NSW; iso ACB, AD, BRI, CANB, CHR, K, L, MEL, MO, NY, P, US.

Tall perennial, with short, tough rhizome. Culms 90–220 cm high, 4–9 mm diam., unitubulose and hollow above (transverse septa occasionally obvious externally near apex), uni- or pluritubulose below, longitudinally striate but not verruculose, yellow-green. Inner leaf blades to 5 cm long, much shorter and more slender than culms, unitubulose; sheaths loose, pale brown to purplish, to 38 cm long. Lowest involucre bract to 20 cm long, unitubulose; margins of base hyaline to yellow-chartaceous, not or occasionally slightly red-dotted, not enlarged and not sheathing inflorescence. Inflorescence globose to hemispherical, 10–18 mm diam., with numerous pseudospikelets; core solid, globose to hemispherical. Pseudospikelets with 14–16 floral scales; scales 5.0–6.0 mm long, to 2.5 mm wide, spatulate to ligulate, mostly  $\pm$  keeled near apex, dark red-brown towards apex, glabrous; apex  $\pm$  praemorse, acute to obtuse. Stamens 8–13; anthers 2.0–3.5 mm long, excluding the apical appendage that is 0.1–0.2 mm long. Style 2–4-fid. Fruit obovoid, with 6–8 complete longitudinal ridges and fainter secondary longitudinal and transverse ridges, 3.0–4.5 mm long, 2.0–2.7 mm diam., pale red-brown to grey-brown. Figure 2a, b.

DISTRIBUTION AND ECOLOGY: Grows in Victoria, Tasmania and the South-eastern region of South Australia; in swamps and around waterholes.

DERIVATION OF EPITHET: From the Latin *australis*, southern, in reference to the species' distribution in southern Australia.

NOTES: Specimens of this species have mostly been identified as *C. cymbaria* in herbaria and by Rodway (1903: 244).

*C. australis* differs from *C. cymbaria* in being generally more robust. The culms flatten much more easily when pressed and dried than those of *C. cymbaria*. The culm surface is not verruculose, but rarely it is somewhat roughened; however, the longitudinal striations are always finer and less raised than in *C. cymbaria*. The inflorescence is globose to hemispherical in shape, never elongated as in *C. cymbaria*, and the solid core is raised and globose to hemispherical; the base of the main inflorescence bract is not or scarcely red-dotted, and is not as broad relative to the overall size of the inflorescence as in *C. cymbaria*. The nut is greyish brown, and is more attenuate at the base and less umbonate than in *C. cymbaria* (Figure 2b, c).

This genus belongs to subfamily Mapanioideae, which has a complex floral arrangement that is poorly understood. The typical basic inflorescence unit (as seen in Australian mapanioid genera such as *Exocarya* and *Lepironia*) consists of one broad, thick-textured, non-keeled, basal scale subtending two slender, thin-textured, lateral keeled scales (with ciliate keel) at each end of a  $\pm$  distichous, flattened array of two to numerous slender, thin-textured, non-keeled scales, most of which subtend a single stamen but some are empty. The pistil appears terminal. In *Chorizandra*, however, the inflorescence unit differs in having a continuum of scale-form from the broader, mostly keeled (but not ciliate) lowest 1–3 scales to the narrow upper scales. Also,



**Figure 2.** *Chorizandra australis*. a, Holotype; b, nut (from Beauglehole 68256). *Chorizandra cymbaria*. c, Nut (from Wilson 3093).

the scales are all spirally arranged, producing a terete unit. This inflorescence unit is here termed a *pseudospikelet* since it may not be homologous with spikelets in the rest of the family; similarly, all floral scales in this unit are here called scales since they may not be homologous with bracts and glumes. In the three genera mentioned, the pseudospikelets are clustered variously to form a head-like (*Chorizandra*) or spikelet-like (*Lepironia*) inflorescence or in spikelet-like units further clustered in compound anthelate inflorescences (*Exocarya*).

SELECTED SPECIMENS SEEN: VICTORIA: East Gippsland: Lake Baracoota, *Albrecht 3634 & Walsh*, 6 Sep 1988 (NSW ex MEL). Gippsland Plain: Nooramunga Marine-Wildlife Reserve, *Beaulehole 75867, Ross & Allen*, 10 Dec 1983 (NSW ex MEL). Wilsons Promontory: Wilsons Promontory National Park, *Beaulehole 75242 & Eichler*, 7 Nov 1983 (NSW ex MEL). Midlands: Stony Creek Reservoirs, c. 12 km NE of Meredith, *Wilson 6830 & Hill*, 11 Mar 1986 (NSW). Volcanic Plain: Walook Swamp, 3.25 km NNW of Portland Post Office, *Beaulehole 68697*, 19 Apr 1981 (MEL, HO, NSW). Grampians: Big Swamp, 5 km due NE of Woohpooer, *Albrecht 3153*, 9 Mar 1987 (NSW ex MEL). Wannon: Surrey River Swamp, Kentbruck Heath, Lower Glenelg National Park, *Beaulehole 68256*, 11 May 1980 (NSW, AD, BRI, C, CANB, DNA, GENT, H, HO, MEL, MICH, NOU).

TASMANIA: Hibbs Lagoon, *Buchanan 2770*, 24 Jan 1984 (HO); Apsley River, *Fitzgerald*, Jan 1893 (NSW 123713); Blowhole Valley, c. 2 km from Cockle Creek settlement, *Orchard 5290*, 26 Jan 1981 (HO, MEL, NSW).

SOUTH AUSTRALIA: South-eastern: Middle Swamp, Hanans [Honans] Scrub, Glencoe, *Bates 4022*, 30 Oct 1977 (AD, MEL, NSW).

## 5. *Cyperus*

*Cyperus eglobosus* K.L. Wilson, sp. nov.

Aff. *C. enervis* sed stylobasi non tumida, stylo ad basin divisio, differt.

TYPE: NEW SOUTH WALES: North Coast: c. 1 km N of North Head towards Ocean Shores, *K.L. Wilson 5765*, 23 December 1983; holo NSW; iso BRI, K.

Small, tufted perennial, occasionally proliferating from the inflorescence. Culms trigonous to terete, smooth, to 50 cm high, c. 1 mm diam. Leaves not septate-nodulose, shorter than culms, with blades to 1.5 mm wide. Inflorescence a digitate cluster to 2 cm diam. of 4–25 spikelets, without branches, or rarely a solitary spikelet; involucre bracts leaf-like, 2 or 3 much longer than inflorescence. Spikelets flattened, 5–16 mm long, c. 2 mm wide in side view, 6–28-flowered; rachilla narrowly winged, persistent. Glumes acute, with sides 2–3-nerved, whitish to pale brown, 1.5–1.7 mm long. Stamens 3. Style 3-fid. Nut trigonous, ellipsoid to broad-ellipsoid, smooth, dark yellow-brown, not much shorter than glume, c. 1 mm long, c. 0.8 mm diam. Figure 3a, b.

DISTRIBUTION AND ECOLOGY: Usually close to the sea, in littoral forest and woodland behind coastal dunes and headlands, on sandy soil; south from near Sarina (South Kennedy district of Queensland) to Jervis Bay (South Coast, New South Wales).

DERIVATION OF EPITHET: From the Latin *e, ex*, without, lacking, and *globosus*, globose or spherical. This refers to the most obvious difference between this species and the closely allied *C. enervis* R. Br., namely the lack of a small but distinct, more or less globose swelling at the persistent base of the style.

NOTES: *Cyperus eglobosus* belongs in the mainly Australian section *Tenelli*, which is in subgenus *Anosporum*. This species is of somewhat coarser habit than the closely allied *C. enervis*, differing most obviously from that species in having an ellipsoid to broad-ellipsoid nut (Figure 3b) without a persistent enlarged style-base (broad-obpyriform to obovoid in *C. enervis*, with the persistent style-base with a small but distinct, more