

SHORT COMMUNICATION

A new species of *Chamaescilla* (Asparagaceae) from the mid-west of Western Australia

Chamaescilla maculata R.W.Davis & A.P.Br., *sp. nov.*

Type: [north-west of Northampton,] Western Australia [precise locality withheld for conservation reasons], 2 August 2016, *R.W. Davis* 12624 & *A.P. Brown* (*holo*: PERTH 08785384; *iso*: CANB).

Tuberous perennial *herb*, to 7 cm high. *Tubers* oblong, 6–10 mm long, 2–3 mm diam., white. *Leaves* 5–7 per individual, spreading, forming a basal rosette, linear, 30–40 mm long, 1–2 mm wide, mostly glabrous, occasionally with a few hairs along margins. *Inflorescences* corymbose, comprising 1–3(–6) flowers. *Pedicel* 5.5–9.5 long, subtended by one or sometimes two ovate bracts; bract 1.2–2.3 mm long, reddish green; margins sometimes toothed towards the base. *Perianth segments* spreading, subequal, broadly ovate, 3.9–4.5 mm long, 2.9–3.1 mm wide, white to very pale blue with reddish to purple tips mostly on the abaxial surface of the outer perianth whorl, faintly three-nerved. *Stamens* 6, shorter than perianth segments, filaments white, flattened, 1.1–1.3 mm long, 0.19–0.20 mm wide, glabrous; anthers 0.8–0.9 mm long. *Ovary* ovoid to globular, 3-locular, 0.9–1.2 mm long, 1.1–1.3 mm wide, glabrous; ovules 5 or 6 per locule. *Style* level or slightly shorter than anthers, 1.2–1.5 mm long. *Capsule* narrowly ovoid to ellipsoid, 4.7–5.8 mm long, 3.4–4.2 mm wide. *Seed* not seen. (Figure 1B)

Diagnostic features. *Chamaescilla maculata* can be distinguished from all other taxa in *Chamaescilla* F.Muell. ex Benth. by having 5–7 leaves per plant, which form a basal rosette; perianth segments 3.9–4.5 mm long, white or sometimes very pale blue, with reddish to purple tips, mostly on the abaxial surface of the outer perianth whorl; 1–6 flowers per scape; and narrowly ovoid to ellipsoid fruit.

Other specimens examined. WESTERN AUSTRALIA: [localities withheld for conservation reasons] 17 Aug. 2016, *R. Davis* 12642 & *R. Simkin* (PERTH); 31 Sep. 1997, *M. Hislop* 928 (PERTH); 15 Sep. 2016, *R. Simkin* RS 104 (PERTH).

Phenology. Flowering from mid-winter to late winter; fruiting from late winter to early spring.

Distribution and habitat. The new species is currently recorded from two localities, one north-west of Northampton and the other north-east of Jurien Bay (although refer to the *Notes* for information on a possible third population). It occurs in low heath with herbs, in boggy, seasonally wet areas. At the Northampton locality it is associated with *Calytrix depressa*, *Verticordia chrysantha*, *Chamaescilla corymbosa* var. *corymbosa* and *Borya sphaerocephala* (Figure 1D). North-east of Jurien Bay it occurs in open woodland, associated with *Corymbia calophylla*, *Hakea lissocarpha*, *Petrophile seminuda*, *Chamaescilla corymbosa* var. *corymbosa* and *Calothamnus hirsutus*.

Conservation status. *Chamaescilla maculata* is to be listed as Priority One under Department of Parks and Wildlife Conservation Codes for Western Australian Flora (M. Smith pers. comm.). The species is currently known from just two populations, both on private property.

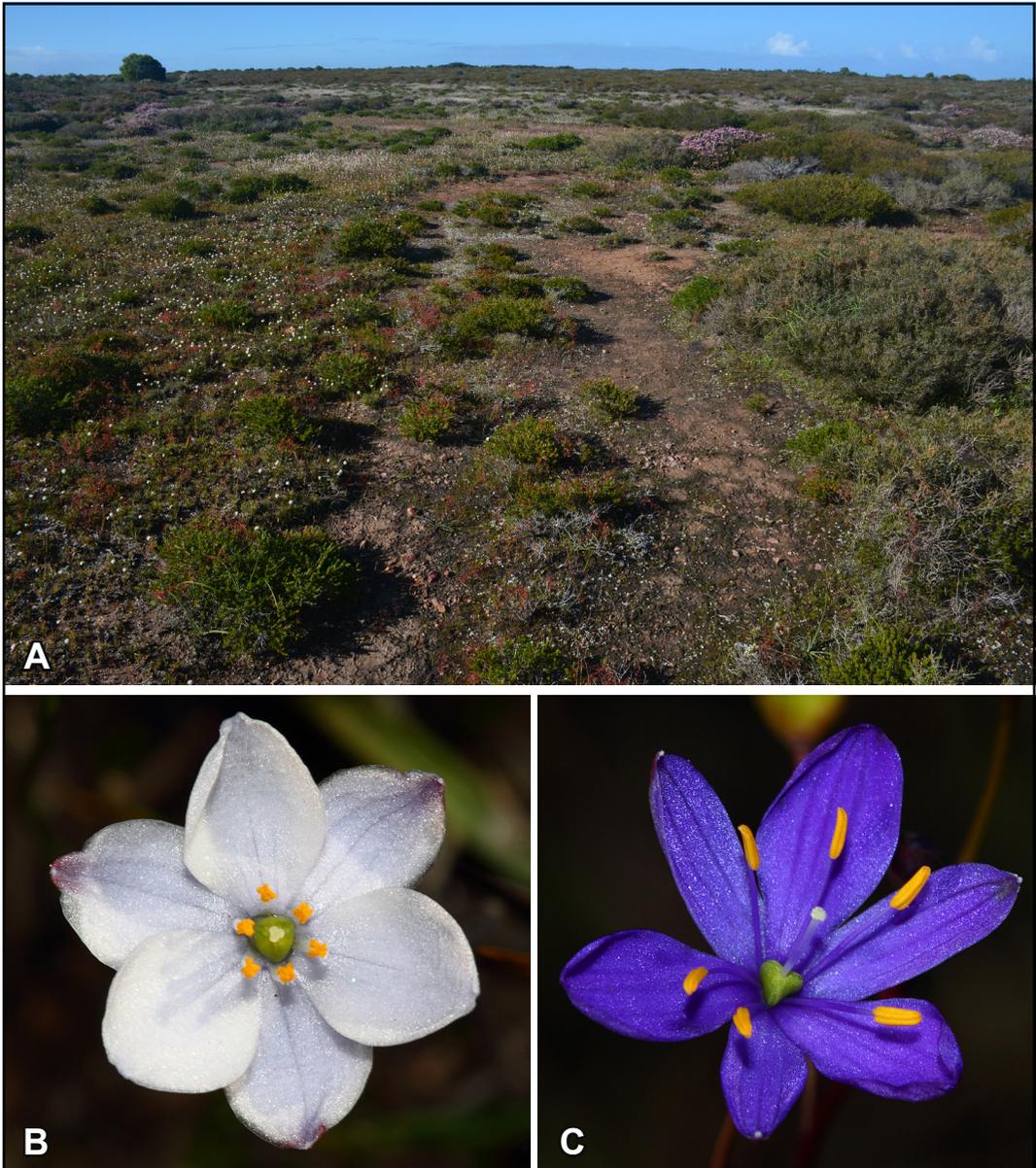


Figure 1. *Chamaescilla maculata*. A – habitat at the type locality; B – solitary flower, showing the characteristic red-purple markings on the tips of the outer perianth segments; C – flower of *C. corymbosa* var. *corymbosa*, from the same population. Images from R. Davis 12624 & A.P. Brown (B) and R. Davis 12643 (C). Photographs by R. Davis.

Etymology. The epithet is from the Latin *maculatus* (spotted) in reference to the reddish to purple markings at the ends of the perianth, mostly on the abaxial surface.

Notes. We first encountered *C. maculata* in August 2016 when conducting surveys north-west of Northampton, at which time we observed it growing sympatrically with *C. corymbosa* (R.Br.) Benth. var. *corymbosa*. Both taxa also co-occur at the second known locality (*M. Hislop* 927). *Chamaescilla maculata* differs most obviously from *C. corymbosa* and its included varieties in having a white

perianth with red markings (*cf.* a blue perianth; Figure 1C) and narrowly ovoid to ellipsoid capsules (*cf.* obcordate capsules).

The collection notes for a gathering of *Chamaescilla* sp. from a boggy area in the Moresby Range (*N. McFarland* 1326 & *N. Green*) describe a co-occurring form with a white perianth bearing small reddish markings at the tips of petals on the abaxial surface. We were unable to locate this specimen, but we are reasonably confident that these observations refer to our new species.

The vernacular name Red-Spotted Squill is suggested.

Acknowledgements

We wish to thank Robin Simkin for supplying site information regarding the new taxon, and Mike Hislop who advised us of his collection from the Jurien Bay population and provided observations.

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