

**14: *Drosera barbiger* Planch.**

*Annales des Sciences Naturelles; Botanique. Series 2–10 ser. 3, 9: 287 (1848) [May 1848].*

*Type:* WESTERN AUSTRALIA. Swan River [Colony], Western Australia, *J. Drummond s.n.* [3 specimens top of sheet] (*syntype:* K, *fide* A. Culham, 1988).

*Drosera drummondii* Lehm. *Plantae Preissianae* 2(2–3): 235 (1848) [2–5 Aug 1848]. *Type:* WESTERNAUSTRALIA. *Ad flumen Cygnorum legit Drummond* [Swan River Colony], Western Australia, *J. Drummond* [3<sup>rd</sup> collection] 34. *Lectotype:* K, *fide* Diels, *Südwest-Australien: o.n.O.* (Drummond coll. III. n. 34 ...) (Diels, 1906: 71, 72). [sheet labelled “presented by Hugh Low Esq.”]; *isolecto:* K, *fide* Marchant *et al.* (Marchant & George, 1982: 60) [sheet stamped *Herbarium Benthamianum*, 1854]; *isolecto:* P 00749103, W. Australia, *Drummond* (1<sup>st</sup>? collection) *No. 34*, 1843 ex BM (*isolecto:* P, sheet No. 00749103, *fide* A. Lowrie).

A fibrous rooted **perennial herb**, plants with youngest leaves semi-erect and older leaves more or less horizontal, arranged in an open rosette, 2–4 cm in diameter, older specimens always positioned above the soil surface. **Stem** erect, 2–8 cm long, covered with remains of previous seasons' growth and supported on stilt-like roots 1–2 mm long. **Active leaves** 15–30 per rosette; **petiole** green, linear, 7–12 mm long, 0.8–1 mm wide at the base, tapering to 0.4–0.5 mm at the lamina, semi-terete in section, *ca.* 0.5 mm thick, abaxial surface and margin covered with short, terete stalked glands, otherwise glabrous. **Lamina** red, narrowly elliptic, 1.8–3.5 mm long, 0.4–1 mm wide, adaxial surface with reddish insect-catching glands positioned around margins and smaller glands within, abaxial surface with a few scattered glands. **Stipular bud** ovoid, fimbriate, 5–8 mm long, 4–5 mm in diameter at base; **stipules** 5–6 mm long, 4–5 mm wide, 1–1.5 mm wide at base, 3-lobed; **central lobe** divided into 3 segments, lateral segments serrate on outer margin, each divided into 3–4 laciniae at the apex; **lateral lobes** serrate on outer margin, apex and inner margin divided into 4 laciniae, the innermost lacinia almost equalling the longest laciniae of the central lobe. **Inflorescence** 1–2 per basal rosette, 4.5–13 cm tall including peduncle, forming a 3–9-flowered helicoid cyme; **peduncle** curved at base, covered with long, reddish, curly, wool-like, terete stalked glands and scattered short glands, or sparsely glandular in the lower parts, the upper parts of peduncle, inflorescence major axis and pedicels covered with long, reddish, curly, wool-like, terete stalked glands and scattered short glands; **pedicels** 0.8–1 mm long, semi erect in fruit; **bracteoles** opposite pedicels, linear or lanceolate with a terete basal stem, 3–4.5 mm long, margins and abaxial surface covered with long, curly, wool-like, terete stalked glands. **Sepals** golden green, ovate, 3–5 mm long, 1.3–2 mm wide, margins and apex irregularly serrate, with reddish, curly, wool-like, terete stalked glands *ca.* 1.5 mm long arising from apex of each serrate segment, upper margins and apex segments longer and fringed with additional glands, surface densely covered with reddish, curly, wool-like, terete stalked glands *ca.* 1.5 mm. **Petals** adaxial surface red or metallic orange, with black at base, abaxial surface pinkish orange, broadly obovate, apex entire, 8–10 mm long, 8–10 mm wide. **Stamens** 5, *ca.* 2 mm long; **filaments** black; **anthers** white with red spots; **pollen** white. **Ovary** basal portions green, remainder black, broadly obovoid, *ca.* 0.6 mm long, *ca.* 0.9 mm in diameter at anthesis, papillose. **Style-stigmas** 3, black, terete, gently tapering towards an obtuse apex, 3–3.5 mm long, *ca.* 0.1 mm in diameter at base, joined to a distinctive, papillose, knob-like projection at apex of ovary, styles at first horizontally positioned, but curved upwards in upper third, with stigmatic papillae covering all but the basal adaxial surface for *ca.* 0.5 mm, and basal abaxial surface for *ca.* 1 mm. **Gemmae** ovate, *ca.* 2 mm long, *ca.* 1.7 mm wide, *ca.* 1 mm thick. **Seeds** black, sub-globose, 0.4–0.5 mm long, 0.35–0.4 mm in diameter, with a little indentation at the apical pole, basal pole funicle *ca.* 0.05 mm long, *ca.* 0.05 mm in diameter, surface sculpture reticulate, longitudinal ridges and transverse ridges forming the cell walls, very shallow. **Chromosome number**  $2n = 10$  *fide* Kondo & Lavarack (1984);  $n = 4 + 1B$ , S.H. James, voucher A. Lowrie 656,  $n = 6$ , S.H. James, (unpubl. data), voucher Jurien Bay East Rd, 3 September 1992, A. Lowrie 624 (*Herbarium Lowrianum*). Figure 1.14.

**Distribution.** W.A. – distributed across two regions, Eneabba to York, and Dumblebung, Lake Grace, Jilakin Rocks area. **Habitat.** Grows only on the summits of laterite hills in white silica sand and laterite gravel soils.

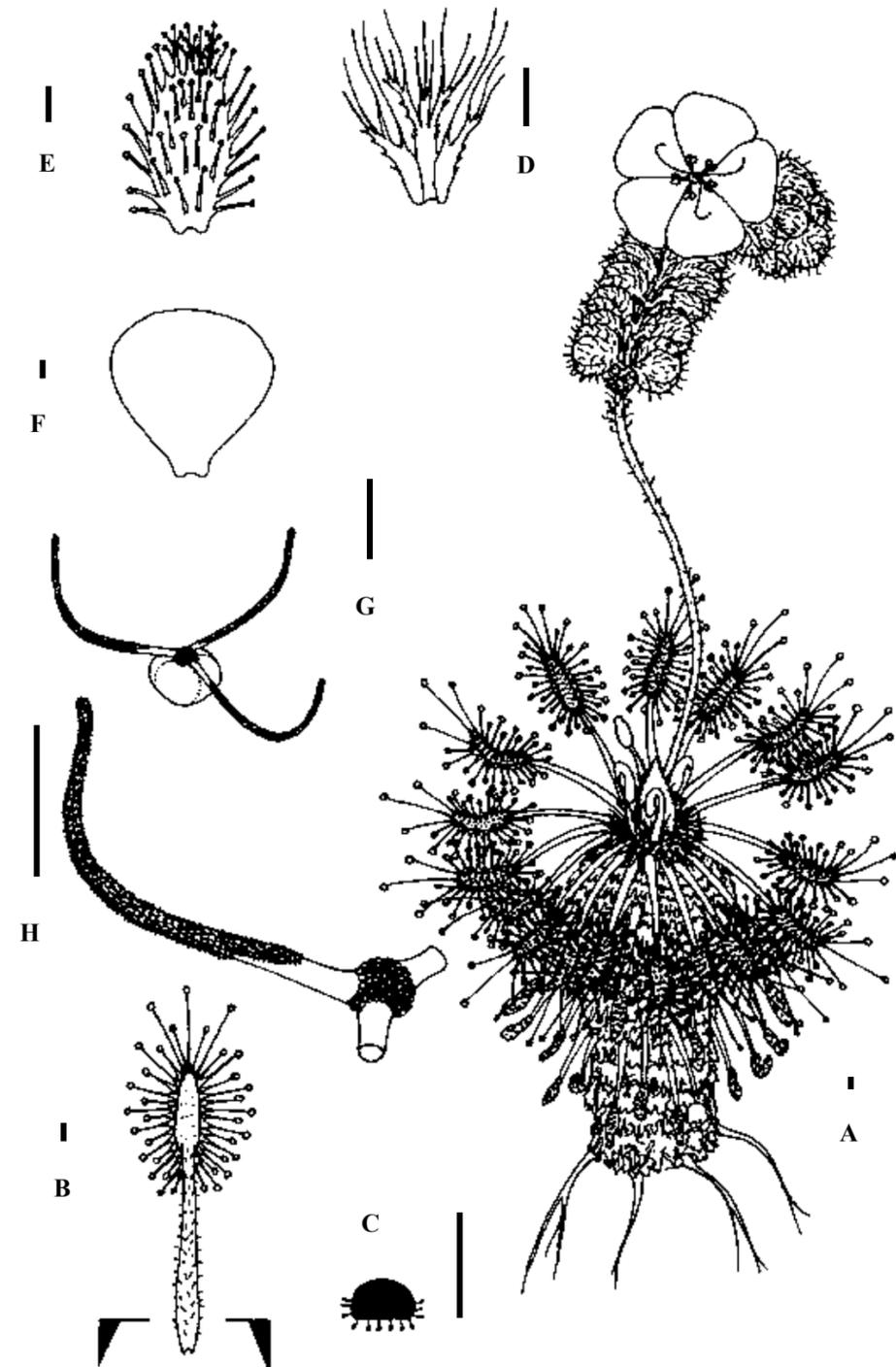
**Flowering.** September–October. Dormancy dry, rarely forming a dormant stipular bud except in times of drought.

**Etymology.** *Drosera barbiger* is named from the Latin *barbiger* (bearded), in reference to the beard-like, curly, woolly, terete stalked glandular indumentum that covers the peduncle, inflorescence, pedicels and sepals.

**Affinities.** *Drosera barbiger* is distinguished from all other stilt-rooted pygmy sundews by its upper peduncle, rachis, bracteoles, pedicels and sepals, which are covered with long, reddish, curly, wool-like, terete stalked glands and scattered short glands; red or metallic orange petals with black at the base; and its black style-stigmas.

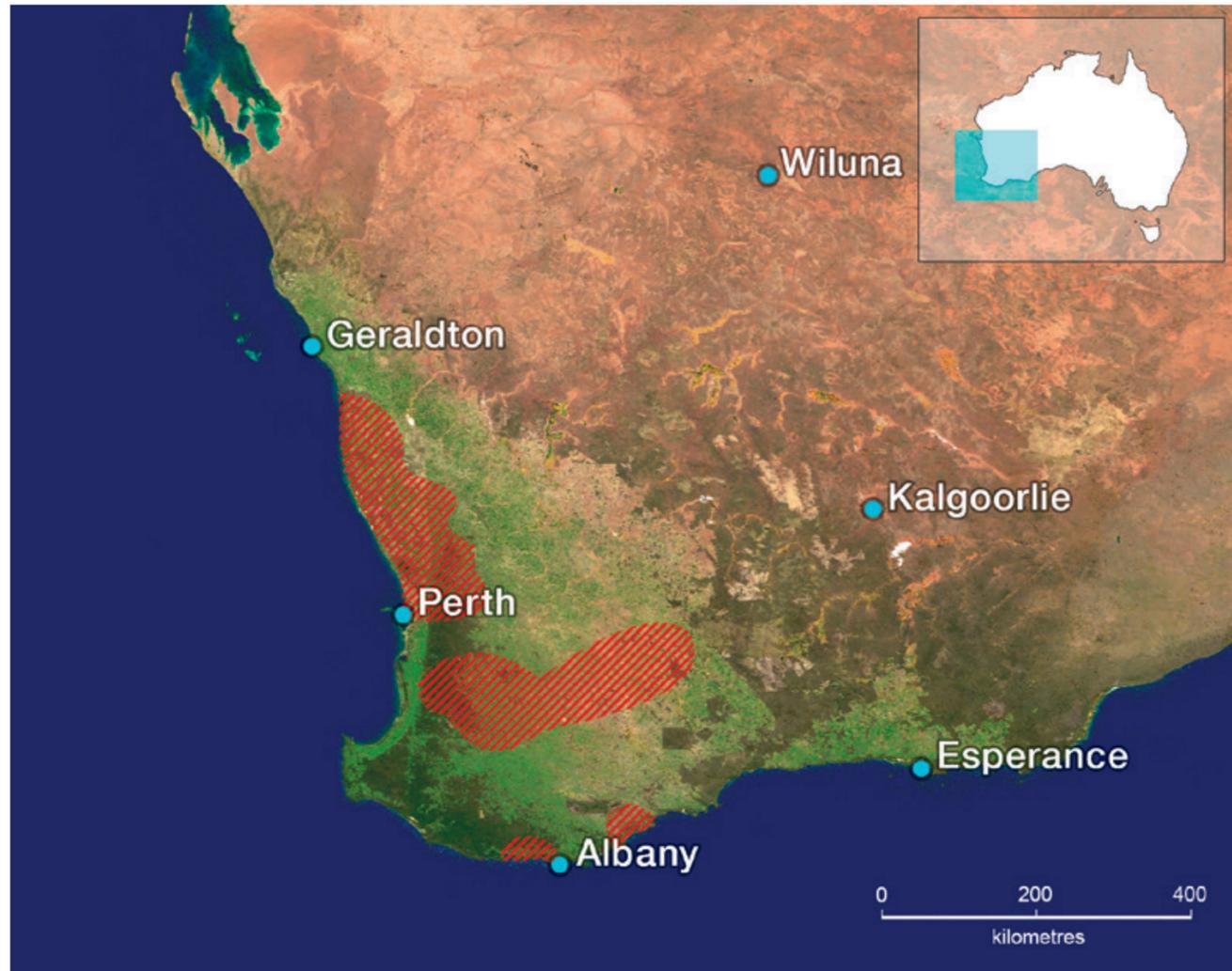
**Notes.** Planchon's *Drosera barbiger* (published May, 1848) a pygmy *Drosera* collected by James Drummond, takes precedent over Lehmann's *D. drummondii* (published August, 1848), which is also a Drummond collection. Additionally, *D. drummondii* Lehmann is an invalid name for this taxon because the name *D. drummondii* Planchon (published May, 1848) was used for a tuberous *Drosera*.

There are two forms of *Drosera barbiger*. A large rosetted form, with tall flowering peduncles (as described above) from the region north of Perth, and a much smaller rosetted form with short flowering peduncles. The latter occurs due east of Perth and southwards. Further studies may demonstrate that specific status is warranted for each of these closely-related taxa.



*Drosera barbiger*

**Figure 1.14** A – plant; B – lamina; C – petiole section; D – stipule; E – sepal; F – petal; G – ovary-styles; H – style-stigma. Scale bars for all parts = 1 mm. Drawn from live material taken from Jurien Rd, near Brand Highway, by A. Lowrie (1985).



A map demonstrating the known geographical range of *Drosera barbiger* in Western Australia.

### Key to the images of *Drosera barbiger* (facing page)

**A.** *Drosera barbiger* has some of the largest flowers in the pygmy *Drosera* complex. In any given population, the flowers of this species often vary a little in overall size (Photo: Allen Lowrie).

**B.** Plan view of a *Drosera barbiger* plant in gemmae (Photo: Allen Lowrie).

**C.** On sunny days, plants in close proximity to each other regularly produce spectacular visual displays with their groups of fine flowers (Photo: Allen Lowrie).

**D.** A plant of *Drosera barbiger* between its gemmae and flowering stages, growing in a typical substrate of lateritic pebbles (Photo: Allen Lowrie).

**E.** The red, woolly hairs that cover all parts of the inflorescence are one of the principal morphological characteristics of this species (Photo: Allen Lowrie).

Photograph A was taken west of Lake King, Western Australia. Photographs B to E were taken west of Wannamal, Western Australia.

