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New species in *Drosera* section *Lasiocephala* (Droseraceae) from tropical northern Australia

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Abstract

Lowrie, A. New species in *Drosera* section *Lasiocephala* (Droseraceae) from tropical northern Australia. Nuytsia 11 (1): 55-69 (1996). Five new *Drosera* species, *D. brevicornis* Lowrie, *D. broomensis* Lowrie, *D. caduca* Lowrie, *D. darwinensis* Lowrie and *D. derbyensis* Lowrie, are described and illustrated. *D. fulva* Planchon is recognized as a valid species and is described in detail as well as illustrated. All these taxa are from tropical northern Australia and belong in *Drosera* sect. *Lasiocephala*. A key is provided to all species in sect. *Lasiocephala*.

Introduction

Five new *Drosera* species are described, three from the Kimberley region of Western Australia and two from the Northern Territory, and a further species from the Northern Territory is reinstated. All belong in subgen. *Drosera*, sect. *Lasiocephala* Planchon (Marchant & George 1982). Since Marchant & George's treatment, five additional species belonging to the section have been named (Kondo 1984; Lowrie 1994, 1996). Thirteen species are now listed in this section. They are *D. brevicornis* Lowrie, *D. broomensis* Lowrie, *D. caduca* Lowrie, *D. darwinensis* Lowrie, *D. derbyensis* Lowrie, *D. dilatato-petiolaris* Kondo, *D. falconeri* Kondo & Tsang, *D. fulva* Planchon, *D. kenneallyi* Lowrie, *D. lanata* Kondo, *D. ordensis* Lowrie, *D. petiolaris* R. Br. (also recorded in Papua New Guinea by Conn 1980), and one species in New Caledonia, *D. caledonica* Vieill.

Taxonomy

Key to section *Lasiocephala*

1 Leaf lamina narrowly obovate; inflorescence (including scape) covered with short glandular hairs ..... **D. caledonica**

1 Leaf lamina orbicular, suborbicular, reniform or transversely broadly elliptic to very broadly ovate; inflorescence (including scape) glabrous or covered with non-glandular, woolly hairs 2

2 Only juvenile leaves with insect-trapping lamina ..... **D. caduca**
2 All leaves with insect-trapping lamina 3
3 Leaves at anthesis densely covered with appressed hairs; petiole hidden by the dense hairy covering 4
3 Leaves at anthesis sparsely covered with appressed hairs; petiole visible through the hairy covering 6
4 Petiole oblanceolate, 2-4 mm wide ..... **D. ordensis**
4 Petiole linear or very narrowly oblanceolate, < 2 mm wide 5
5 Petiole linear, covered with dendritic hairs ..... **D. lanata**
5 Petiole very narrowly oblanceolate, covered with non-dendritic hairs ..... **D. derbyensis**
6 Lamina reniform, 15-20 mm wide ..... **D. falconeri**
6 Lamina orbicular, suborbicular or transversely broadly elliptic to very broadly ovate, 2.5-7 mm wide 7
7 Lamina transversely broadly elliptic to very broadly ovate, 5.5-7 mm wide leaves appressed to the soil surface ..... **D. kenneallyi**
7 Lamina orbicular or suborbicular, 2.5-3.5 mm wide; leaves of the rosette more or less horizontal to the soil surface or erect to semi-erect 8
8 Leaves of the rosette more or less horizontal to the soil surface 9
8 Leaves of the rosette erect to semi-erect 10
9 Inflorescence (including scape) 5-15 cm long ..... **D. darwinensis**
9 Inflorescence (including scape) 30-40 cm long ..... **D. brevicornis**
10 Petiole oblanceolate 11
10 Petiole linear 12
11 Inflorescence (including scape) up to 18 cm long; pedicels 3-7 mm long ..... **D. dilatato-petiolaris**
11 Inflorescence (including scape) up to 45 cm long; pedicels 1-2 mm long ..... **D. fulva**
12 Inflorescence (including scape) glabrous ..... **D. broomensis**
12 Inflorescence (including scape) covered with woolly hairs ..... **D. petiolaris**

Drosera brevicornis A. Lowrie, *sp. nov.* (Figure 1)

D. fulvo Planchon affine a quo filamento staminis extenso, ultra et supra antheris curvato projecturum cornuatam formanti differt.

Typus: Whistle Duck Dreaming, Kakadu National Park, Northern Territory, Australia, 11 April 1990, *A. Lowrie* 56 (*holo:* PERTH 04223624; *iso:* CANB, DNA, MEL).

A fibrous-rooted *herb* with perennial stock and a solitary leafy rosette. *Leaves* in a flat basal rosette close to the soil; petiole oblanceolate in outline, 0.5-0.8 mm wide near base, 1.5-3 mm wide near the apex, narrowed to 0.9-2 mm at the base of the lamina, commonly 15-20 mm long at flowering, adaxial surface slightly hairy, abaxial surface densely covered with white dendritic hairs. *Lamina* orbicular, 4-5 mm diam., adaxial surface with insect-catching glands positioned around the margins and smaller glands within, abaxial surface densely covered with white dendritic hairs. *Inflorescences* 1 to 4 per

basal rosette, 30-40 cm long (including scape), forming a 25- or more-flowered raceme, densely covered with long woolly dendritic hairs; pedicels 2-3 mm long, pendulous in fruit. *Sepals* obovate, apex slightly crenate, 5-6 mm long, 2.5-3 mm wide, abaxial surface densely covered with white woolly dendritic hairs. *Petals* pink or sometimes white, obovate, with strong midvein, *c.* 10 mm long, *c.* 7 mm wide. *Stamens* *c.* 4.5 mm long, the apex of each filament extended and curved beyond the anthers to form a distinctive horn-like projection. *Ovary* obovoid, *c.* 1.5 mm long, *c.* 1.7 mm diam. at anthesis, carpels 3, broadly bilobed. *Styles* 3, *c.* 2 mm long (including stigmas), each divided into many branching segments in the upper portion with each segment terminating in a clavate stigma.

Selected specimens examined. NORTHERN TERRITORY: Sweers Island, Gulf of Carpentaria, no date, stamped Herbarium Hookerianum 1867, *Bynoe s.n.* Herb. Oldfield (K); On Cox Peninsula Road, heading to Mandorah, 3.2 km from East Charlotte River, 1 May 1995, *A. Lowrie* 1136 (DNA, PERTH); 2.2 miles [3.5 km] SE of Adelaide River, 18 Mar. 1961, *G. Chippendale* 7719 (PERTH); 39 miles [62.4 km] S of Darwin, 19 Mar. 1961, *G. Chippendale* 7788 (PERTH); 5 miles [8 km] W of Stuart Highway, Mandorah Road, 11 Jan. 1971, *J. Must* 660 (PERTH).

Distribution. On the mainland *Drosera brevicornis* is distributed from Palmerston to Batchelor south of Darwin and eastwards towards Kakadu National Park in the Northern Territory.

Habitat. Drosera brevicornis grows on gravel slopes in hilly areas or in shallow depressions in flat country in the slower moving water-shed zones where sand and loam particles can accumulate amongst the gravel pebbles.

Flowering period. March-April.

Conservation status. Drosera brevicornis is a common species in the Northern Territory and is currently not under threat.

Etymology. Drosera brevicornis is named from the Latin *brevi* - short and *cornis* - horned, in reference to the horn-like filament projection above the anthers at the apex of the stamens. (Figure 1G)

Affinities. Its closest relative is *D. fulva*, from which it is distinguished by having a flat basal rosette of leaves, larger pendulous fruit and stamen filaments extended into a curved horn-like projection above the anthers.

Drosera broomensis A. Lowrie, *sp. nov.* (Figure 2)

D. petiolari R. Br. affine sed inflorescentia (scapo incluso) glabra differt.

Typus: Lake Campion, north east of Broome, Western Australia, 21 April 1995, *A. Lowrie* 1089 (*holo:* PERTH 04223675; *iso:* CANB, DNA, MEL).

A fibrous-rooted *herb* with perennial stock and a solitary leafy rosette. *Leaves* erect to semi-erect on a short stock above the soil; petiole linear, lenticulate in section, 0.5-1 mm wide, narrowed and terete at the base of the lamina, commonly 35-40 mm long, adaxial and abaxial surface sparsely covered with white simple hairs at anthesis, later (at the beginning of the dry season) both surfaces densely covered with white simple hairs. *Lamina* suborbicular, 3-3.5 mm wide, 2-2.5 mm wide,

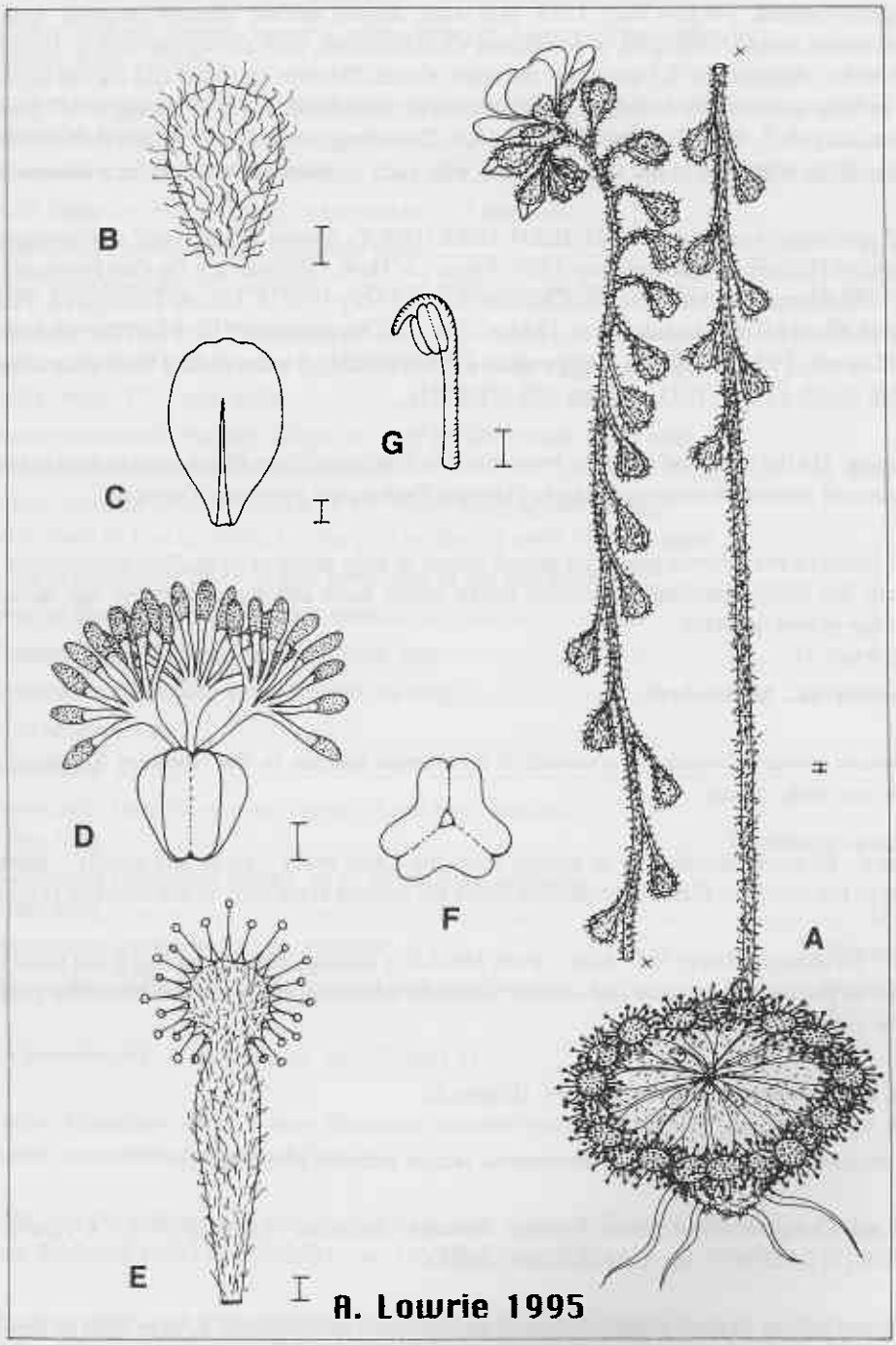

Figure 1. *Drosera brevicornis* A - habit, B - sepal, C - petal, D - gynoecium, E - leaf, F - 3-capellate ovary, base view, G - stamen. Scale bars = 1 mm.

adaxial surface with insect-catching glands positioned around the margins of the lamina and smaller glands within, abaxial surface sparsely covered with white simple hairs. *Inflorescences* 1 to 4 per basal rosette, 15-30 cm long (including scape), forming a 50- or more-flowered raceme, glabrous; pedicels 2-4 mm long, semi-erect in fruit. *Sepals* narrowly ovate, *c.* 3 mm long, *c.* 1.4 mm wide, abaxial surface glabrous. *Petals* white, obovate, with strong mid-vein, *c.* 5.5 mm long, *c.* 3.5 mm wide. *Stamens* *c.* 2.5 mm long. *Ovary* obovoid, *c.* 1 mm long, *c.* 1.4 mm diam. at anthesis, carpels 3, broadly bilobed. *Styles* 3, *c.* 0.8 mm long (including stigmas), each divided into many branching segments in the upper portion with each segment terminating in a dilated irregularly shaped stigma.

Selected specimens examined. WESTERN AUSTRALIA: Roebuck Bay, February 1891, *Tepper* 146 (PERTH); 5 km N of Point Coulomb, N of Broome, 17 Apr. 1977, *K.F. Kenneally* 5896 (PERTH); 4 km S of Cape Bertholet, N of Broome, 19 Apr. 1977, *K.F. Kenneally* 6022 (PERTH); Martin's Well, 7 km S of Lombadina Mission, N of Broome, 16° 34' S, 122° 52' E, 24 Apr. 1977, *K.F. Kenneally* 6142 (PERTH); McLarty Hills, Great Sandy Desert, 19° 30' S, 123° 30' E, 7 Aug. 1977, *A.S. George s.n.* (PERTH); Water Bore Gully, near bore #8, Koolan Island, 16° 09' S, 123° 45' E, 11 Mar. 1984, *L. Vernon s.n.* (PERTH).

Distribution and habitat. Drosera broomensis grows in sandy soils north and north east of Broome, Western Australia.

Flowering period. February-March.

Conservation status. Drosera broomensis is a common species north and north east of Broome, Western Australia and is currently not under threat.

Etymology. The epithet, *broomensis* refers to the Broome region in the Kimberley, Western Australia where this species occurs.

Affinities. This species is distinguished from its closest relative, *Drosera petiolaris,* by its completely glabrous scape and inflorescence.

Notes. I was familiar with *D. broomensis* from herbarium specimens housed in the Western Australian Herbarium well before I had the opportunity to study this species in the field at Lake Campion north east of Broome in 1995.

Drosera caduca A. Lowrie, *sp. nov.* (Figure 3)

D. dilatato-petiolari Kondo affine sed foliis adultis 6-24 cm longis, lamina per insecto-ilaqueantem carenti differt.

Typus: On the road from Beverley Springs to Pantijan, 15 km N of the Charnley River crossing (74 km N of Beverley Springs) in the Edkins Range, Kimberley, Western Australia, 16° 03' S, 125° 23' E, January 1995, *R. & M. Barrett s.n.* (*holo:* PERTH 04223640; *iso:* CANB, DNA, MEL).

A fibrous-rooted *herb* with perennial stock giving rise to one or many leafy rosettes. *Juvenile leaves* erect and semi-erect within the basal rosette; petiole oblanceolate in outline, 0.5-1 mm wide near base, 3-6 mm wide near the apex, narrowed to 1.5-2 mm at the base of the lamina, commonly 15-30 mm long when bearing juvenile inflorescences, adaxial surface glabrous, abaxial surface very

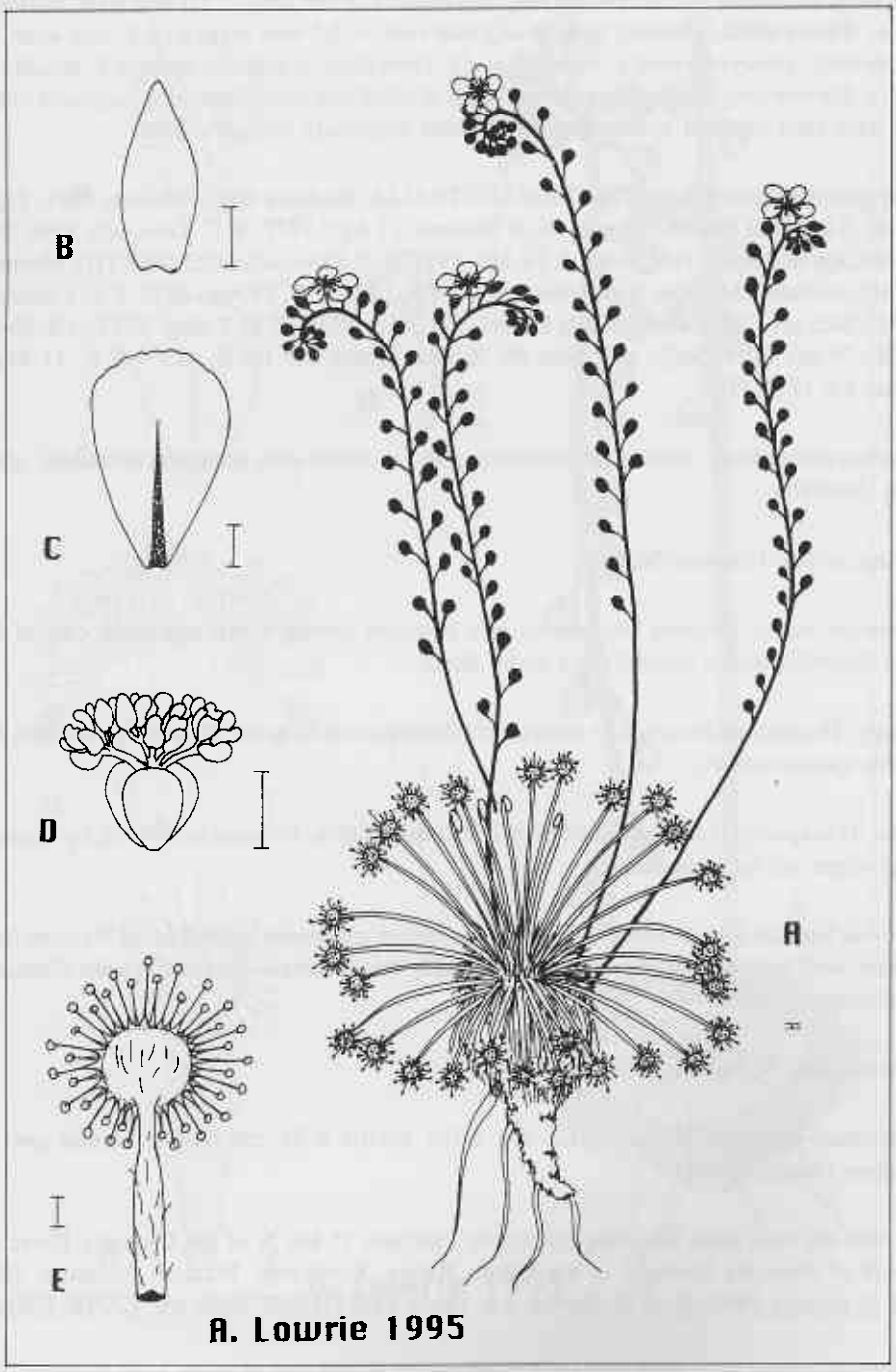

Figure 2. *Drosera broomensis* A - habit, B - sepal, C - petal, D - gynoecium, E - leaf. Scale bars = 1 mm.

sparsely covered with white simple hairs. *Lamina* orbicular, 3-4 mm diam., adaxial surface with insect-catching glands positioned around the margins of the lamina and smaller glands within, abaxial surface glabrous or with a few white simple hairs. *Adult leaves* without insect-trapping glands, V-shaped in section, widely linear in the upper portion, 4-6 mm wide, apex cuspidate, tapering to become very narrowly linear in the lower parts, 0.5-1 mm wide, erect and semi-erect within the basal rosette, commonly 6-24 cm long at anthesis, adaxial surface glabrous, abaxial surface very sparsely covered with white simple hairs. *Inflorescences* 1 or 2 per basal rosette, 30-45 cm long (including scape), forming a 25-45-flowered raceme, scape sparsely covered with woolly simple hairs, raceme with similar indumentum but denser; pedicels 3-4 mm long, semi-erect in fruit. *Sepals* elliptic, apex erose, *c.* 3 mm long, *c.* 1.3 mm wide, abaxial surface apex and upper margins glabrous, remainder covered with white simple hairs. *Petals* white, oblong, with strong mid-vein, *c.* 6.5 mm long, *c.* 3.6 mm wide. *Stamens c.* 3 mm long; ovary obovoid, *c.* 1 mm long, *c.* 0.8 mm diam. at anthesis, carpels 3, broadly bilobed. *Styles* 3, *c.* 1.5 mm long (including stigmas), each divided into many branching segments in the upper portion with each segment terminating in a clavate stigma.

Selected specimens examined. WESTERN AUSTRALIA: Augustus Island, central-northern part of Island, 15°20'S, 124° 33'E, 27 May 1993, *L.A. Craven, J.D. McStewart & C.L. Brubaker* 9205 (DNA).

Distribution. Drosera caduca is distributed throughout the Edkins Range to the southern regions of the Prince Regent River Reserve and also occurs on Augustus Island, Western Australia.

Habitat. On the mainland *Drosera caduca* grows mainly on creek margins in silty white sand soils. Recorded on Augustus Island growing on edge of basin on lower slopes of sandstone ridge with *Eucalyptus miniata* - bloodwood woodland with spinifex on stony brownish sandy soil.

Flowering period. December-July.

Conservation status. On the mainland, *Drosera caduca* is locally abundant at scattered locations over a known north-south distance of 30 km and an east-west distance of 15 km and is not under threat. The size of the Augustus Island population is not known.

Etymology. Drosera caduca is named from the Latin *caducus* - dropping off early, in reference to the insect traps being present only on the first few juvenile leaves but lacking on all subsequent and fully adult leaves.

Affinities. Drosera caduca is distinguished from all other species within the *Drosera petiolaris* complex by its extremely long trapless adult leaves at the time of anthesis.

Drosera darwinensis A. Lowrie, *sp. nov.* (Figure 4)

D. brevicornis Lowrie affine sed inflorescentia (scapo incluso) 5-15 cm longa differt.

Typus: 0.9 km south of Temple Avenue, Palmerston, Northern Territory, Australia, 8 April 1990, *A. Lowrie* 49 (*holo:* PERTH 04223659; *iso:* CANB, DNA, MEL).

A fibrous-rooted *herb* with perennial stock and a solitary leafy rosette. *Leaves* in a flat basal rosette close to the soil; petiole oblanceolate in outline, 0.7-1 mm wide near base, 1.5-3 mm wide near the

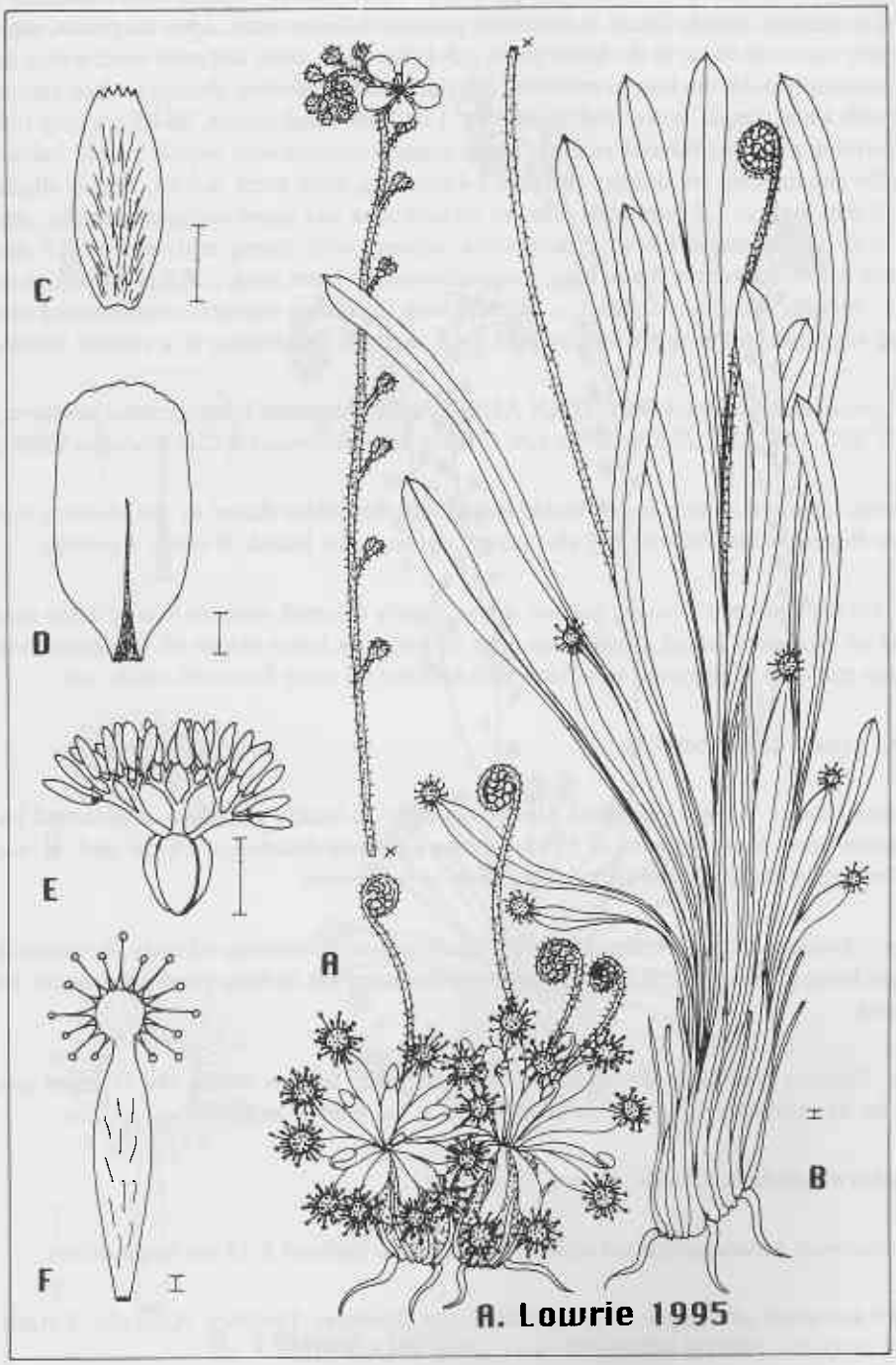

Figure 3. *Drosera caduca* A - habit of juvenile plant, B - habit of adult plant, C - sepal, D - petal, E - gynoecium, F - leaf. Scale bars = 1 mm.

apex, narrowed to 1-1.5 mm at the base of the lamina, commonly 8-10 mm long at flowering, adaxial and abaxial surface covered with mostly white simple hairs, some hairs bearing a few short spurs. *Lamina* orbicular, 3-3.5 mm diam., adaxial surface with insect-catching glands positioned around the margins of the lamina and smaller glands within, abaxial surface covered with white simple hairs. *Inflorescences* 1 or 2 per basal rosette, 5-15 cm long (including scape), forming a 12-24-flowered raceme, densely covered with woolly dendritic hairs; pedicels 0.7-1.5 mm long, pendulous in fruit. *Sepals* ovate, apex erose, 2.5-3 mm long, 1.3-1.8 mm wide, abaxial surface densely covered with white woolly dendritic hairs. *Petals* pink or white, obovate, with a strong mid-vein, *c.* 5 mm long, *c.* 3 mm wide. *Stamens* *c.* 2.5 mm long. *Ovary* obovoid, *c.* 1 mm long, *c.* 0.9 mm diam. at anthesis, carpels 3, broadly bilobed. *Styles* 3, *c.* 1.5 mm long (including stigmas), each divided into many branching segments in the upper portion with each segment terminating in a clavate stigma.

Selected specimens examined. NORTHERN TERRITORY: Chungwah Avenue, Palmerston, 16 Dec. 1990, *P. Simmons* 4 (DNA, PERTH); E of Berry Springs, 12°41'02"S, 131°01'06"E, 10 Dec. 1994, *D.E. Murfet* 2138 (DNA, PERTH).

Distribution. Drosera darwinensis is distributed from Palmerston to Berry Springs south of Darwin and eastwards to Humpty Doo in the Northern Territory.

Habitat. Drosera darwinensis grows in clayey-sand with laterite overlay.

Flowering period. December-April.

Conservation status. Drosera darwinensis is a common species in the Northern Territory and is currently not under threat.

Etymology. The epithet, *darwinensis* refers to the Darwin region in the Northern Territory where this species occurs.

Affinities. This species belongs to the *Drosera petiolaris* complex and its closest relative is *D. brevicornis*. It is distinguished from *D. brevicornis* by having an inflorescence (including scape) 5-15 cm long.

Drosera derbyensis A. Lowrie, *sp. nov.* (Figure 5)

D. lanata Kondo affine sed foliis pilis non-dendriticis dense obtectis differt.

Typus: Silent Grove camping area, Kimberley, Western Australia, 5 June 1995, *A. Lowrie* 1182, (*holo:* PERTH 04223667; *iso:* DNA, MEL).

A fibrous-rooted *herb* with perennial stock giving rise to one or more (mostly solitary) leafy rosettes. *Leaves* erect and semi-erect on a short stock above to the soil; petiole very narrowly oblanceolate in outline, 0.8-1 mm wide near base, 1.3-1.7 (mostly 1.5) mm wide near the apex, narrowed to 0.5-0.7 mm at the base of the lamina, commonly 35-45 mm long at flowering, lenticulate in section, adaxial and abaxial surface densely covered with white woolly non-dendritic hairs. *Lamina* orbicular, 2-3 mm diam., adaxial surface with insect-catching glands positioned around the margins

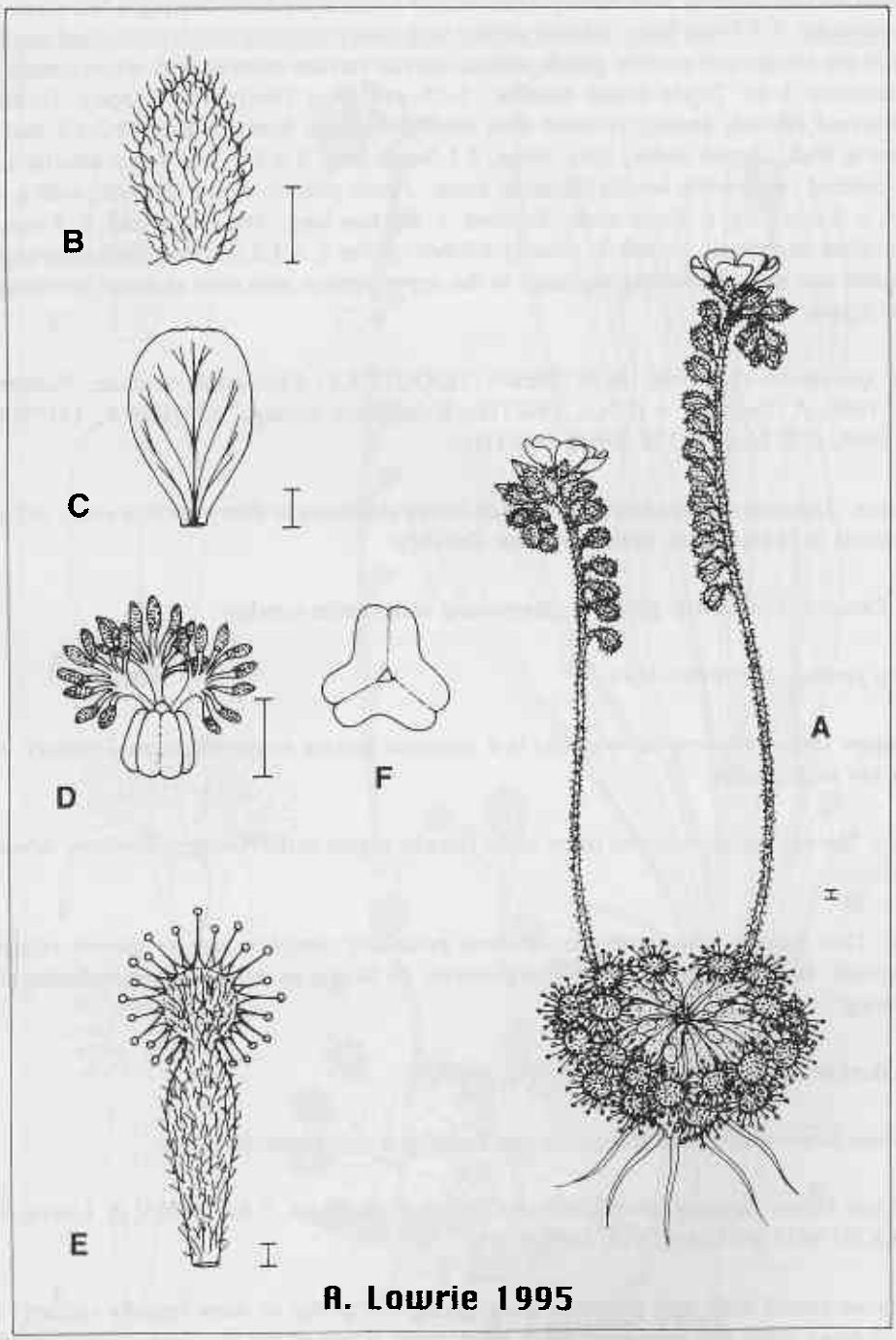

Figure 4. *Drosera darwinensis* A - habit, B - sepal, C - petal, D - gynoecium, E - leaf, F - 3-capellate ovary, base view. Scale bars = 1 mm.

of the lamina and smaller glands within, abaxial surface densely covered with white woolly non-dendritic hairs. *Inflorescences* 1 to 4 per basal rosette, 25-35 cm long (including scape), forming a 30-50-flowered raceme, pedicels 1.5-3 mm long, semi-erect in fruit, scape glabrous in the lower portion, the remainder of scape and raceme densely covered with white woolly non-dendritic hairs. *Sepals* obovate, apex slightly crenate, 1.7-2 mm long, 1-1.2 mm wide, abaxial surface densely covered with white woolly non-dendritic hairs. *Petals* white, oblong, with strong mid-vein, *c.* 4 mm long, *c.* 2 mm wide. *Stamens c.* 1.5 mm long. *Ovary* obovoid, *c.* 1 mm long, *c.* 1 mm diam. at anthesis, carpels 3, broadly bilobed. *Styles* 3, *c.* 1 mm long (including stigmas), each divided into many branching segments with each segment terminating in a dilated stigma.

Selected specimens examined. WESTERN AUSTRALIA: Boab Prison Tree, 0.6 km from Derby, 29 Mar. 1988, *A. Lowrie* 1 (PERTH); On Gibb River Road, 119 km NE of the junction with road to Derby, 17°25'09"S, 124°43'00"E, 4 June 1995, *A. Lowrie* 1161 (DNA, PERTH); 8 miles [12.8 km] E of Derby, 2 Feb. 1971, *K.M. Allen* 614 (PERTH).

Distribution. Drosera derbyensis is distributed from Derby to Beverley Springs in the Kimberley, Western Australia.

Habitat. Drosera derbyensis grows in white sand on the aprons of rock outcrops and in beige sandy soils in floodway areas.

Flowering period. March-June.

Conservation status. Drosera derbyensis is a locally common species over its growing range in the Kimberley and is currently not under threat.

Etymology. The epithet, *derbyensis* refers to the Derby region in the Kimberley, Western Australia where this species occurs.

Affinities. This species belongs to the *Drosera petiolaris* complex and its closest relative is *D. lanata.* It is distinguished from *D. lanata* by having leaves covered with non-dendritic hairs.

Notes. I first discovered *Drosera derbyensis* growing by the Boab Prison Tree near Derby in 1988. *D. derbyensis* has narrow leaves densely covered with white woolly hairs similar to *D. lanata* Kondo. The dense hairy leaf covering of *D. derbyensis* and *D. lanata* is an adaptation also employed by *D. ordensis* Lowrie to retain moisture and provide insulation against desiccation during the dry season.

Drosera fulva Planchon, Ann. Sci. Nat. (Paris) Ser. 3, 9: 289 (1848). (Figure 6)

Typus: Port Essington, Northern Territory, *Armstrong s.n.* (K).

A fibrous-rooted *herb* with perennial stock giving rise to one or more (mostly solitary) leafy rosettes. *Leaves* in a compact basal rosette of semi-erect and prostrate leaves; petiole oblanceolate in outline, 0.6-1.2 mm wide near base, 2-3 mm wide near the apex, narrowed to 0.8-1 mm at the base of the lamina, commonly 25-30 mm long at flowering, adaxial surface glabrous, abaxial surface sparsely covered with appressed white dendritic hairs, later (at the beginning of the dry season) both surfaces are covered with many appressed white dendritic hairs. *Lamina* orbicular, 2-3 mm diam.,

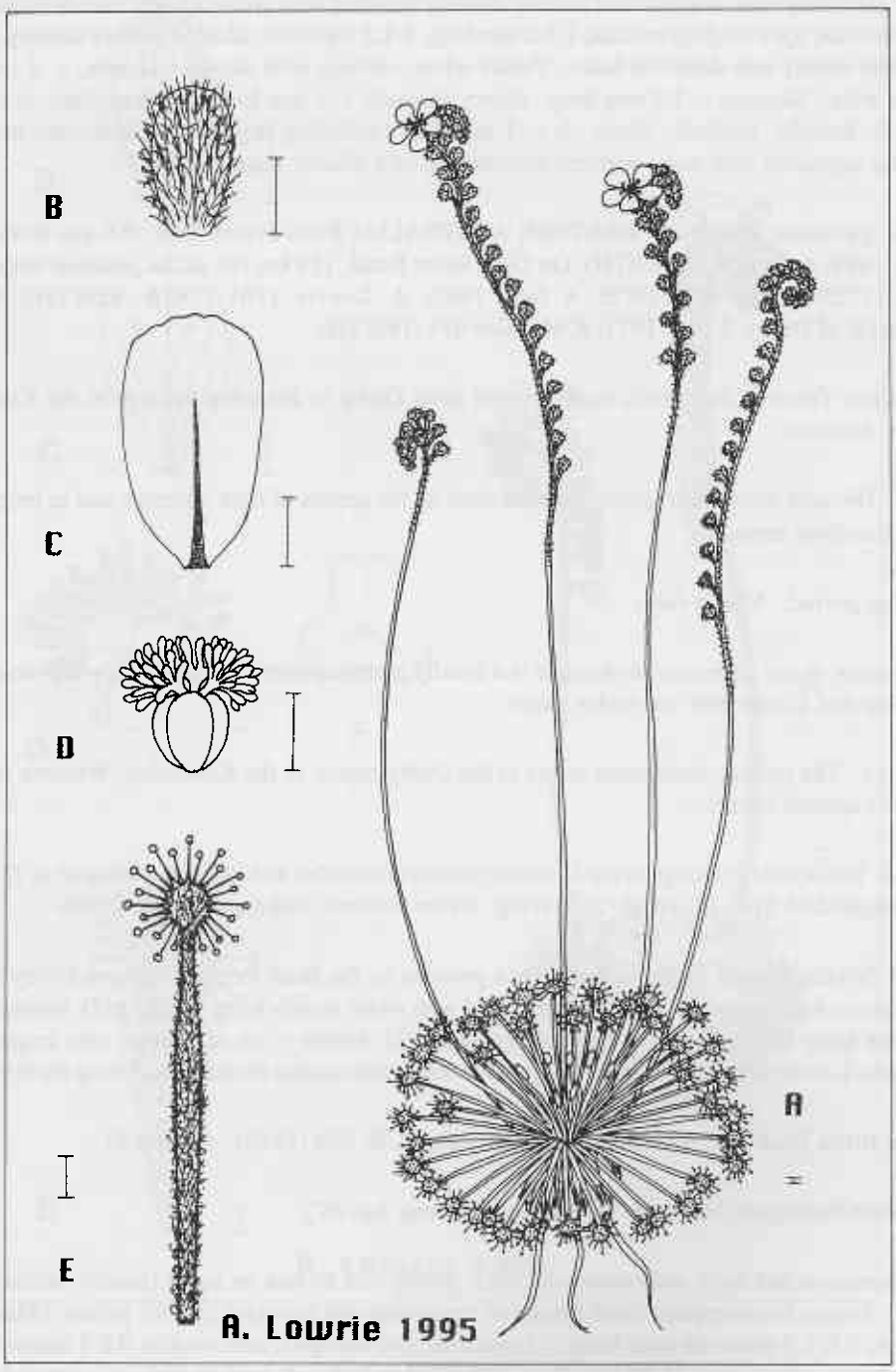

Figure 5. *Drosera derbyensis* A - habit, B - sepal, C - petal, D - gynoecium, E - leaf. Scale bars = 1 mm.

adaxial surface with insect-catching glands positioned around the margins of the lamina and smaller glands within, abaxial surface sparsely covered with appressed white dendritic hairs, later covered with many appressed white dendritic hairs. *Inflorescences* 1 or 2 per basal rosette, 25-45 cm long (including scape), forming a 50- or more-flowered raceme, densely covered with short dendritic hairs; pedicels 1-2 mm long, pendulous in fruit. *Sepals* obovate, apex erose, 3-3.5 mm long, 1.5-1.8 mm wide, abaxial surface densely covered with white dendritic hair. *Petals* white sometimes pink, obovate, with strong mid-vein, apex erose, 6.5-9 mm long, 4-6.5 mm wide. *Stamens* *c.* 3 mm long, the apex of each filament shortly pointed beyond the anthers. *Ovary* obovoid, 0.8-1 mm long, 1.2-1.5 mm diam. at anthesis, carpels 3, broadly bilobed. *Styles* 3, *c.* 2 mm long (including stigmas), each forked then divided into many branching segments, each segment terminating in a slightly dilated and papillose stigma.

Selected specimens examined. NORTHERN TERRITORY: Paddy Road, off Bridge Mary Road, Koolpinyah, 28 Apr. 1995, *A. Lowrie* 1127 (DNA, PERTH); Near Noonamah, 12°36'09"S, 131°09' 09"E, 10 Dec. 1994, *D.E. Murfet* 2139 (DNA, PERTH); Stuart Highway, 24 miles [38.4 km] S of Darwin, 6 Apr. 1965, *A.S. George* 6526 (PERTH); Noonamah pumping station, 7 Jan. 1991, *P. Simmons* 15 (DNA, PERTH).

Distribution. Drosera fulva extends from Koolpinyah to Noonamah south east of Darwin in the Northern Territory, with a single collection from Port Essington. It is expected *D. fulva* will also be found at many suitable habitats on the Cobourg Peninsula.

Habitat. Drosera fulva grows in sandy soils on damp flats, seepage areas and ephemeral wet depressions just above the wet season flood levels.

Flowering period. February-May.

Conservation status. Drosera fulva is a common species south east of Darwin and is currently not under threat.

Affinities. Closely related to *D. brevicornis* and *D. dilatato-petiolaris*. It is distinguished from *D. brevicornis* by having a basal rosette of semi-erect and prostrate leaves, smaller pendulous fruit and stamen filaments shortly pointed above the anthers. It is distinguished from *D. dilatato-petiolaris* by having an inflorescence (including the scape) 25-45 cm long, pedicels 1-2 mm long and pendulous fruit.

Notes. The type sheet of *D. fulva* consists of two separate collections. Each collection consists of two mounted specimens for each gathering. The two specimens (each bearing individual scapes) on the left side of the sheet are *D. fulva* Planchon, collected from Port Essington (when it was the settlement of Victoria, 1838-1849) by John W. Armstrong, botanist, appointed gardener to the settlement and botanical collector for the Royal Gardens at Kew.

The two specimens (each bearing two scapes) on the right side of the sheet are from Herbarium Oldfield and were collected from Sweers Island in the Gulf of Carpentaria by Benjamin Bynoe a ship's surgeon and naturalist in July 1841. Although these specimens lack complete floral details, they are, in all other respects morphologically similar to the new species *D. brevicornis*.

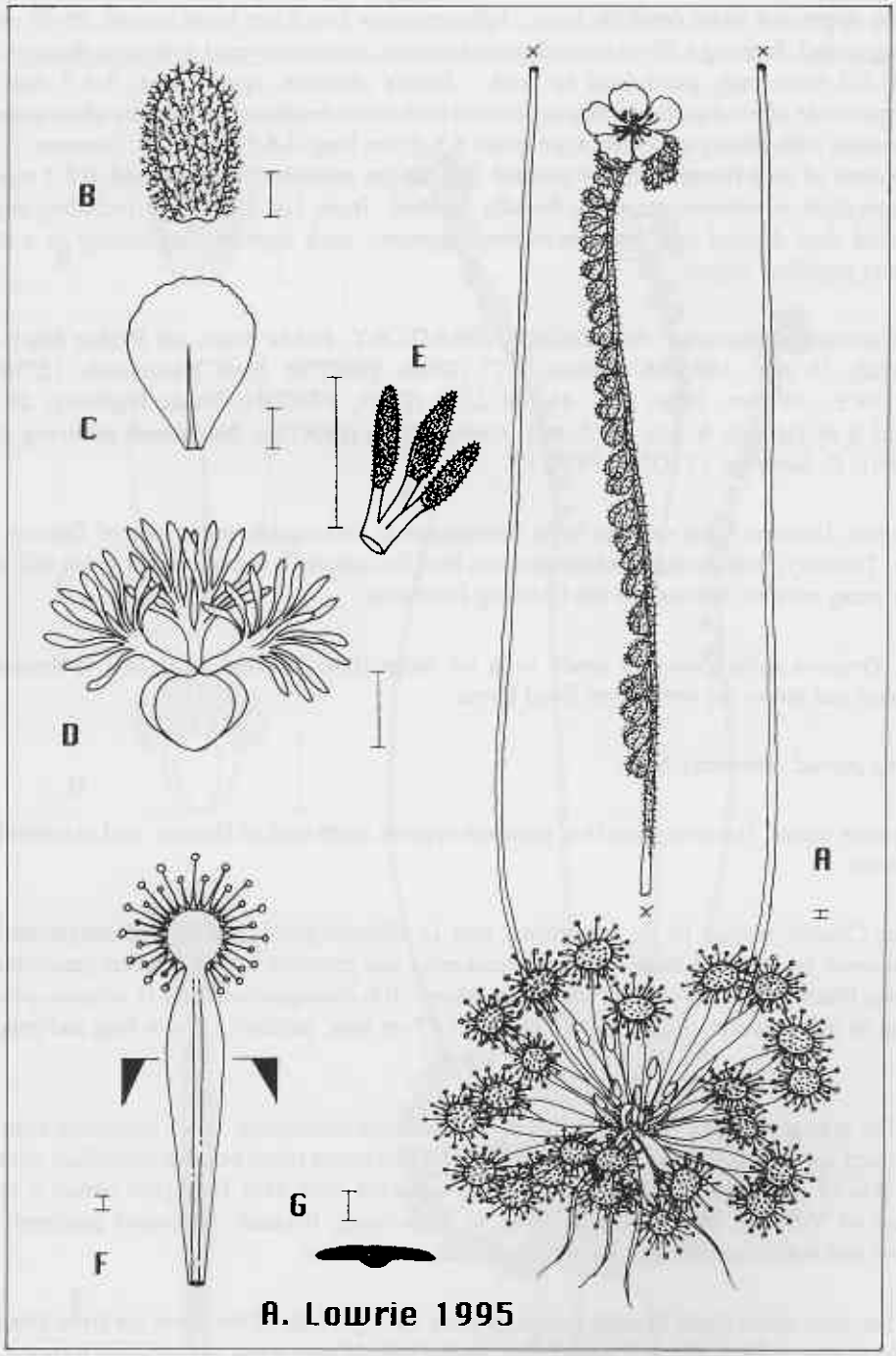

Figure 6. *Drosera fulva* A - habit, B - sepal, C - petal, D - gynoecium, E - stigmas, F - leaf, G - section of petiole. Scale bars = 1 mm.

Acknowledgements

I wish to thank Paul Simmons, Denzel Murfet, Sue Geisen, Russell Barrett and Matthew Barrett for obtaining selected material of various taxa within the *Drosera petiolaris* complex; the leaders of the 1993, 1994 and 1995 *LANDSCOPE* Expeditions for the opportunity to collect material of the *D. petiolaris* complex in remote regions of the Kimberley; the Royal Botanical Gardens at Kew, England who kindly loaned the type sheet of *D. fulva*; Paul Wilson for his assistance with the Latin diagnosis; Barbara Rye for her comments, and the staff at the Western Australian Herbarium.

References

Conn, B. J. (1980). A review of *Drosera* in Papuasia. Brunonia 3: 209-216.

Conn, B. J. (1995). Droseraceae. *In:* Conn, B. J. (ed.) "Handbooks of the Flora of Papua New Guinea." Vol. 3. pp. 49-55. (Melbourne University Press: Carlton.)

Planchon, J.E. (1848). Sur la famille des Droseracees. Ann. Sci. Nat. (Paris) Ser. 3, 9: 289.

Kondo, K. (1984). Three new species of *Drosera* L. from Australia. Bol. Soc. Brot. Ser. 2, 57: 51-60.

Lowrie, A. (1994). *Drosera ordensis* (Droseraceae), a new tropical species of carnivorous plant from northern Australia. Nuytsia 9 : 363-367.

Lowrie, A. (1996). *Drosera kenneallyi* (Droseraceae), a new tropical species of carnivorous plant from the Kimberley, northern Western Australia. Nuytsia 10: 419-423.

Marchant, N.G. & George, A.S. (1982). *Drosera. In:* George, A.S. (ed.) "Flora of Australia." Vol. 8. pp. 383-385. (Australian Government Publishing Service: Canberra.)