

Three new species of *Diascia* (Scrophulariaceae) from the western Cape

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Keywords: breeding system, *Diascia*, new species, Scrophulariaceae

ABSTRACT

Three annual *Diascia* species are described from the western Cape. Two species, *D. maculata* K.E. Steiner and *D. humilis* K.E. Steiner have small flowers and are closely related. *D. maculata* is characterized by a slightly gibbous corolla with no spurs or sacs, erect stamens, and a distinct patch of oil-secreting trichomes in the tube at the base of each upper and lateral corolla lobe. *D. humilis* is characterized by a bisaccate corolla, forward projecting stamens and oil-secreting trichomes localized in corolla sacs. The third new species, *D. hexensis* K.E. Steiner, is most similar to *D. sacculata* Benth., but it differs from that species by its larger flowers and much longer spurs which curve downward instead of upward.

UITTREKSEL

Drie eenjarige *Diascia*-spesies van die Wes-Kaap word beskryf. Twee spesies, *D. maculata* K.E. Steiner en *D. humilis* K.E. Steiner het klein blomme en is na verwant. *D. maculata* word gekenmerk deur die effens bulterige blomkroon sonder spore of sakkies, die regop meeldrade, en 'n duidelike gebied met olie-afskedende trigome in die kroonbuis aan die basis van elke boonste en laterale blomkroonlob. *D. humilis* word gekenmerk deur die tweesakkige blomkroon, die meeldrade wat na vore gerig is, en die olie-afskedende trigome wat tot die sakkies van die blomkroon beperk is. Die derde nuwe spesies, *D. hexensis* K.E. Steiner, kom in baie opsigte met *D. sacculata* Benth. ooreen, maar verskil daarvan in die groter blomme en veel langer spore wat afwaarts in stede van opwaarts krul.

INTRODUCTION

Diascia section *Diascia* comprises approximately 41 species of annuals centred in the western Cape of South Africa. This group is currently under revision and has been found to contain many undescribed species. Three new species are described below.

***D. maculata* K.E. Steiner, sp. nov., *D. humili* K.E. Steiner proxima, sed differt corolla gibbosa (nonbisaccata), staminibus porrectis (non erectis), trichomatibus oleum secernentibus in tubo corollae basi loborum superiorum lateraliumque corollae (non in sacculis corollae).**

TYPE.—Cape, 3119 (Calvinia); 300 m north of Nieuwoudtville Caravan Park, (–AC), 740 m, 21-viii-1990, Steiner 2165 (NBG, holo.; K, MO, PRE, US).

Annual herb, glabrous, simple or branching from the base. *Stems* up to 220 mm long, erect or decumbent, tetragonal in cross section, up to 1.5 mm on a side. *Basal leaves* few to many, rosulate or clustered, simple, petiolate, spreading or ascending, lamina 4–23 mm long, ovate to elliptic, apex rounded to acute, base attenuate, margins nearly entire to irregularly lobed or divided, divisions up to ± 3 mm long, oblong-ovate to triangular, entire, acute to acuminate; petioles up to ± 21 mm; stem leaves smaller, becoming reduced upwards, alternate, opposite or verticillate. *Flowers* axillary, one or two flowers open per stem, nodding in bud, pedicels 22–41 mm long, ascending, broadened and dorsiventrally flattened specially where attached to flower, recurving in fruit. *Calyx* lobes five, ± equal, ± 2.0–2.5 × 0.8–1.0 mm, spreading, or the

lateral two slightly reflexed, lanceolate, acuminate, margins white ciliate. *Corolla* bilabiate, limb ± 7.4–10.5 × 8.6–11.0 mm; upper lobes ± 2.2–3.0 × 2.0–2.8 mm, oblong-ovate, rounded; lateral lobes ± 2.7–3.6 × 2.3–3.4 mm, ovate, rounded, bases oblique; lower lobe ± 3.0–3.9 × 2.9–5.0 mm, obovate, rounded to emarginate, upper lobes yellowish pink distally, bases purplish red with red veins or uniformly reddish purple, other lobes similar in colour but lacking veins, all lobes with dark purple-tipped glandular trichomes, especially on inner surface near the base; tube ± 1.0–2.0 mm, reddish purple with yellow spots below upper and lateral lobes, yellow patch below each upper lobe consisting of a single spot or 3 or 4 separate or partially coalesced spots, patch below each lateral lobe a single ± 1 mm long elliptical patch corresponding to a gibbous portion of the tube, yellow patches below lateral and upper lobes usually separated by a narrow strip of reddish purple tissue, but sometimes consisting of a single spot spanning the sinus between upper and lateral lobes; gibbous portion of tube with two patches of oil-secreting trichomes, a ± 1 mm long elliptical patch below each lateral lobe and a ± 0.3 mm patch at base of each upper corolla lobe near the sinus with the lateral lobe; spurs or sacs absent; central portion of tube turned outward to form a boss bearing the stamens, boss ± 1.2–1.5 mm high, connected to the upper lip by a septum. *Stamens* four, projecting forwards, anticous filaments (appearing posticous due to twisting of the bases) ± 1.5–1.7 mm long, curved and bearing a few scattered trichomes, posticous filaments (appearing anticous) ± 1.2–1.5 mm long, ± straight, widened and bilobed or simply strongly bent backward just below the anthers, anthers ± 0.2–0.5 mm, strongly cohering, yellow, attached to posticous lobes of filaments if bilobed, pollen usually orange. *Ovary* ± 1.2 × 0.7 mm, ovate in outline with purple markings on upper two thirds to one half, style ± 0.7–0.8 mm long, straight, stigma subcapitate, surrounded by anthers, ovules ± 50–55. *Capsule* ± 4.7–6.0 × 2.7–3.0 mm, falciform-

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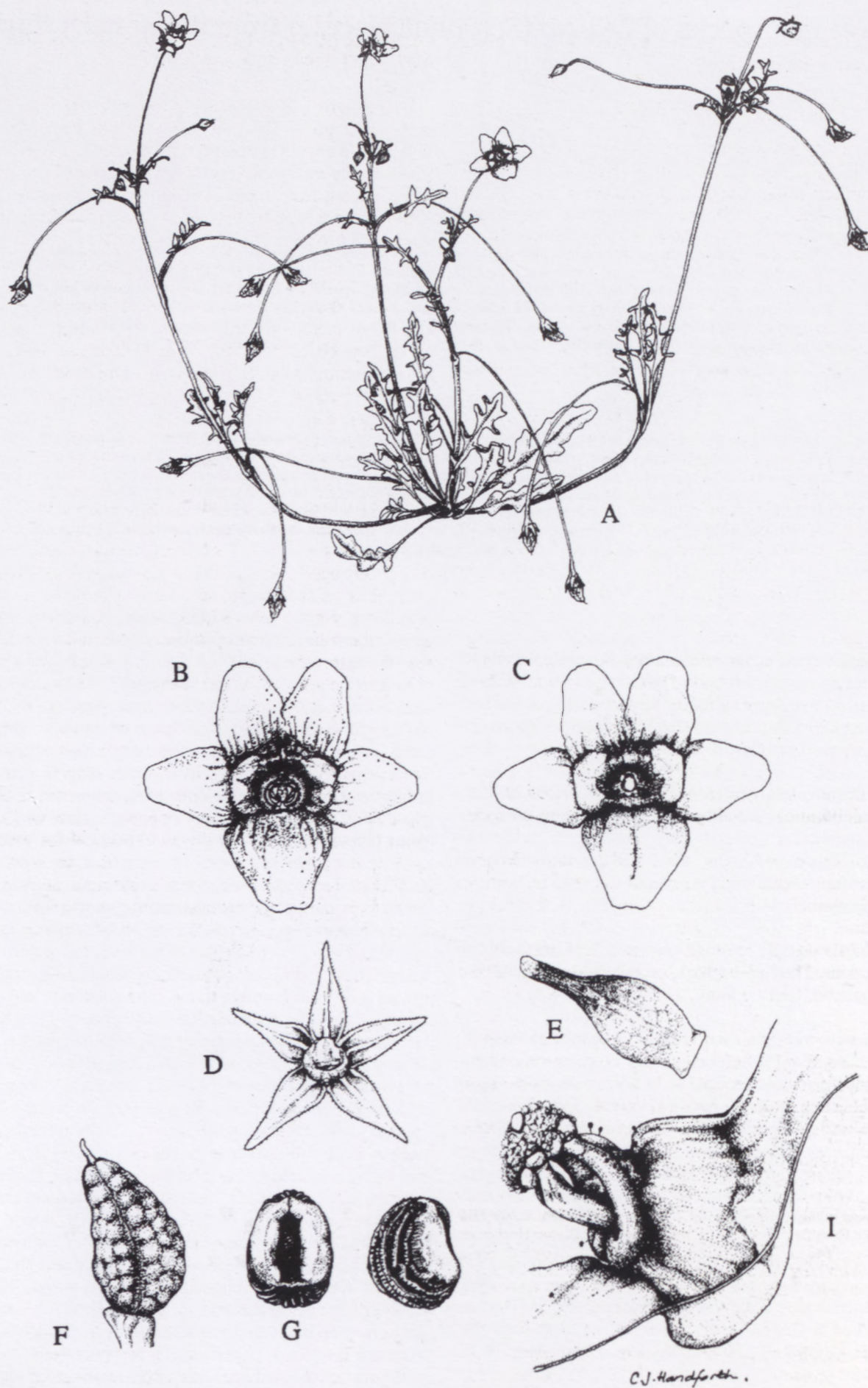


FIGURE 1.—*Diascia maculata*, Steiner 21651.4: A, habit, $\times 1$; B, flower, front view, $\times 4.2$; C, flower, rear view, $\times 4.2$; D, calyx, $\times 7.8$; E, gynoecium, $\times 16.2$; F, capsule, $\times 6$; G, seed, ventral view, $\times 25$; H, seed, side view, $\times 25$; I, androecium, $\times 16.2$.

ovate in outline, exceeding calyx at maturity; seeds \pm 0.65–0.85 mm long, dorsal surface ridged, ventral surface with seed coat extended to form a cupule with an oblong elliptical opening. Figure 1.

Flowering time: August–October.

Diagnostic features: *Diascia maculata* is characterized by a slightly gibbous corolla with no spurs or sacs, stamens that project forwards, and a distinct patch of oil-secreting trichomes (cf. Vogel 1974) in the tube at the base of each upper and lateral corolla lobe. In most populations, there is a yellow spot corresponding to the trichome patches. The pair of spots below one upper and one lateral lobe can be partially confluent or separated by a small strip of reddish purple tissue. The spotting pattern at one locality, the Matroosberg, is slightly different. There, the single elliptical yellow spot below each lobe characteristic of other populations is broken up into several smaller vertically oriented narrowly elliptic spots that are either distinct or only partially confluent. The specific epithet refers to the yellow spotting pattern of the corolla tube.

Diascia maculata is most closely related to *D. humilis* which has flowers of a similar size and colour. These two species also have very similar capsules, seeds, and pollen colour and can occur sympatrically on recently (less than one year old) burned fynbos (Farm Welkom) and renoster-veld (Farm Matroosberg). *D. maculata* is distinguished most easily from *D. humilis* by the position of the stamens in relation to the upper corolla lobes, the presence of four distinct oil-secreting trichome patches and the absence of corolla sacs or spurs. The corolla tube of *D. maculata* is very similar to that of *D. gracilis* Schltr., since both species are somewhat gibbous; however, in *D. gracilis* the stamens are erect rather than projecting forward and the long linear capsules are usually more than four times as long as wide, not falciform-ovate and only \pm twice as long as wide.

Distribution and habitat: *D. maculata* ranges from the Hex River Mountains in the southwestern Cape north to the Kamiesberg in Namaqualand (Figure 2). It ranges in elevation from 640 to 1 130 m. Despite its broad geographical range, *D. maculata* is known from relatively few collections. This may be due to overall rarity, a dependence on first year burns or small, easily overlooked, flowers.

Breeding system: *D. maculata* is autogamous; however, because it secretes floral oil, it may be visited and cross-pollinated, at least occasionally, by small short-legged oil-collecting *Rediviva* bees (Melittidae) (cf. Steiner & Whitehead 1988, 1990, 1991; Whitehead & Steiner 1985).

CAPE. — 3018 (Kamiesberg): Farm Welkom, 6.4 km south of junction with Garies–Platbakkies Road, (–AC), 1 130 m, 30-ix-1988, Steiner 1852 (NBG). 3119 (Calvinia): old Nieuwoudtville road, 3.5 km west of main road in Nieuwoudtville, (–AC), \pm 820 m, 10-ix-1986, Steiner 1359 (NBG); Farm Lokenburg, \pm 7.1 km southwest of Oorlogskloof road, (–CA), \pm 640 m, 25-ix-1986, Steiner 1393 (NBG). 3319 (Worcester): Farm Matroosberg, Hex River Pass, \pm 5 km east of turnoff to De Doorns on the National Road (N1), (–BD), \pm 710 m, 3-x-1989, Steiner 2037 (NBG).

D. humilis K.E. Steiner, sp. nov., *D. maculatae* K.E. Steiner proxima, sed differt corolla bisaccata (non gibbosa), staminibus erectis (non porrectis), trichomatibus oleum secernentibus in sacculis corollae (non in tubo corollae basi loborum superiorum lateraliumque corollae).

TYPE.—Cape, 3119 (Calvinia); Farm Koerdemoe-fontein, 5.9 km east of Oorlogskloof road on road to Clanwilliam (R364), (–CD), \pm 720 m, 15-ix-1989, Steiner 2005 (NBG, holo.; E, K, MO, PRE).

Annual herb, glabrous, simple or branching from the base. Stems up to 250 mm long, erect or decumbent, tetragonal in cross-section, up to 1.5 mm on a side. Basal leaves few to many, rosulate or crowded, simple, petiolate, spreading or ascending; lamina 4–41 mm long, ovate to elliptic, apex rounded to acute, base attenuate, margins nearly entire to irregularly lobed or divided; divisions up to \pm 3 mm long, oblong-ovate to narrowly triangular, entire, acute; petioles up to \pm 12 mm; stem leaves smaller, becoming reduced and more dissected upwards, 3-verticillate. Flowers axillary, one or two open per stem, nodding in bud, pedicels 16.0–20.5 mm long, ascending, broadened and dorsiventrally flattened especially where attached to the flower, recurving, but with the capsule turned up slightly, in fruit. Calyx lobes five, \pm equal, \pm 1.8–2.8 \times 0.7–1.0 mm, spreading, lanceolate, acuminate, margins white ciliate. Corolla bilabiate, limb 6.2–7.6 \times 7.0–8.6 mm; upper lobes \pm 1.4–2.5 \times 1.7–2.0 mm, falciform-oblong to oblong-ovate, rounded; lateral lobes \pm 2.3–3.0 \times 1.9–2.4 mm, broadly ovate, rounded, bases oblique; lower lobe 2.4–3.0 \times 2.5–3.1 mm, obovate, rounded to emarginate, upper lobes yellowish pink or reddish purple, with red veins at the base, other lobes similar in colour but lacking veins, all lobes with sessile or semi-sessile dark purple glandular trichomes, especially on inner surface near the base; tube \pm 1.0–1.5 mm, distended at base of each lateral lobe into a shallow yellow sac, \pm 1.8 mm long, sacs containing yellow oil-secreting trichomes, especially near the tips; central portion of tube turned out to form a boss bearing the stamens, boss \pm 1.2–1.5 on anticous side and 0.2–0.3 mm on posticous side, reddish purple in front and back and yellow on sides, connected to the upper lip by a septum. Stamens four, erect, anticous filaments (appearing posticous due to twisting of the base), touching the upper corolla lip, \pm 2.0 mm long, reddish purple, falciform, glabrous or with a few scattered purple clavate trichomes, posticous filaments (appearing anticous) \pm 1.5–1.6 mm, reddish purple, \pm straight, except just

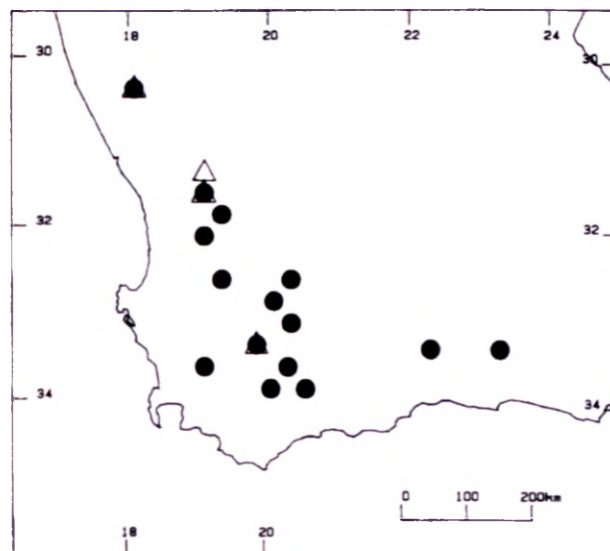


FIGURE 2. —Known geographic distribution of *Diascia maculata*, Δ ; and *D. humilis*, \bullet , in South Africa.

below the anther where there is a sharp nearly 90° bend and broadening of the filament sometimes with a sterile outgrowth in the opposite direction, bend or outgrowth with purple clavate trichomes; anthers $\pm 0.20\text{--}0.30$ mm, strongly cohering, pale pink or whitish, pollen usually orange. Ovary $\pm 1.3\text{--}1.4 \times 0.6\text{--}1.0$ mm, ovate in outline, sometimes with purple markings on upper half, style $\pm 0.70\text{--}0.75$ mm long, straight, stigma surrounded by anthers, ovules $\pm 40\text{--}60$. Capsule $\pm 5.0\text{--}6.5 \times 2.6\text{--}3.0$ mm, falciform-ovate in outline, exceeding calyx at maturity; seeds $\pm 0.65\text{--}0.90$ mm long, falciform in outline, dorsal surface ridged, ventral surface with seed coat extended to form a cupule with an oblong-elliptical opening. Figure 3.

Flowering time: August–October.

Diagnostic features: *D. humilis* is characterized by small, usually yellowish pink flowers, its erect stamens, orange to red-orange pollen and small yellow sacs. It is most similar to *D. maculata* with which it can often be

found on burned sites. It can be distinguished from that species most easily by the configuration of its stamens. In *D. maculata* the stamens project forward away from the upper corolla lip, whereas in *D. humilis*, they are erect with the anthers in a position very close to the upper corolla lip. The yellow markings on the two species also differ. The sacs and sides of the boss in *D. humilis* are yellow, but there is no discrete spotting pattern as in *D. maculata*. In *D. maculata* there are one or several yellow spots at the base of each upper corolla lobe in addition to the yellow spot(s) at the base of the lateral lobes. Associated with the yellow spots at the base of each upper lobe in *D. maculata* is a patch of oil-secreting trichomes. *D. humilis* does not have such trichomes in this position. In *D. humilis* they are contained within each yellow sac.

Distribution and habitat: *D. humilis* ranges from the Kamiesberg south to Worcester and east through the Little Karoo to Uniondale (Figure 2). It ranges in elevation from 320 to $\pm 1\ 200$ m and is most commonly found on first year renosterveld or fynbos burns, however it also occurs in short karroid shrublands.

Breeding system: *D. humilis* is autogamous; but like *D. maculata* it secretes floral oil and may therefore be visited and cross-pollinated, at least occasionally, by small, short-legged, oil-collecting *Rediviva* bees (cf. Steiner & Whitehead 1988, 1990, 1991; Whitehead & Steiner 1985).

CAPE.—3018 (Kamiesberg): Farm Welkom, 6.4 km south of junction with Garies–Platbakkies Road, (–AC), 1 130 m, 29-ix-1988, Steiner 1837 (NBG). 3119 (Calvinia): Lokenburg, (–CA), 29-viii-1941, Compton 11501 (NBG); Botterkloof Pass, (–CD), 16-viii-1983, Batten 660 (E); Farm Koerdemoefontein, 5.9 km E of Oorlogskloof road on road to Clanwilliam (R364), (–CD), ± 720 m, 15-ix-1989, Steiner 2005 (NBG). 3219 (Wuppertal): road to Wuppertal, 3.9 km south of turnoff to Doringrivier in Bidouw Valley, (–AA), 500 m, 29-viii-1990, Steiner 2204 (NBG); pass into Bidouw Valley, 6.2 miles from turnoff from Clanwilliam–Calvinia road, (–AA), ± 470 m, 24-viii-1967, Thompson 348 (STE); Krom River, S Cedarberg, (–CB), 2-x-1952, Esterhuysen 20469 (BOL). 3220 (Sutherland): Farm Driefontein, 7.2 km east of turnoff to Ouberg Pass on road to Ladismith, (–CB), 850 m, 6-viii-1990, Steiner 2119 (NBG); ± 15 m north of road 356, 86.7 km NE of road 355, Farm Thyskraal, (–CC), 840 m, 26-ix-1984, Steiner 793 (NBG). 3319 (Worcester): Farm Matroosberg, Hex River Pass, ± 5 km east of turnoff to De Doorns on N1, (–BD), ± 710 m, 3-x-1989, Steiner 2034 (NBG); *ibid.*, 18-x-1989, Steiner 2049 (NBG); Breede River flood plain behind shooting range on Worcester commonage, (–CA), 220 m, 9-ix-1985, Steiner 1010 (NBG). 3320 (Montagu): Touwsrivier, on hill ± 2 km west of Tweedside railway station, (–AB), 1 200 m, 12-viii-1988, Vlok 1990 (NBG); Farm Driefontein, 7.2 km east of turnoff to Montagu on Touwsrivier–Ladismith road, (–CB), 850 m, 6-viii-1990, Steiner 2119 (NBG); Farm Rietvlei, Montagu–Barrydale Road (R62), ± 10.5 km SE of Montagu, (–CC), ± 370 m, 18-viii-1987, Steiner 1501 (NBG); Kogmanskloof, 100 m north of tunnel on Ashton–Montagu road, (–CC), 180 m, 8-ix-1984, Steiner 740 (pressed ex hort), 2-xi-1984 (NBG); Montagu–Barrydale road, (R62), 16.5 km west of turnoff to Tradouw's Pass in Barrydale, (–DC), ± 540 m, 18-viii-1987, Steiner 1507 (NBG). 3322 (Oudtshoorn): Farm Swartberg, lower northern slopes of Swartberg Mts, (–AD), $\pm 1\ 030$ m, 12-ix-1986, Vlok 1605 (NBG). 3323 (Willowmore): Farm Misgund, at southern base of Antoniesberg, (–AD), ± 905 m, 24-viii-1990, Vlok 2383 (NBG).

D. hexensis K.E. Steiner, sp. nov., *D. sacculatae* Benth. affinis, sed differt floribus maioribus, calcaribus corollae deorsum curvis (non sursum curvis) et longioribus (9.5–11.5 mm, non < 4.0 mm).

TYPE.—Cape, 3319 (Worcester); near top of Hex River Pass, 17.3 km west of junction with road R46 to Ceres, (–BD), ± 780 m, 20-ix-1985, Steiner 1042 (NBG, holo.; MO). Figure 4.

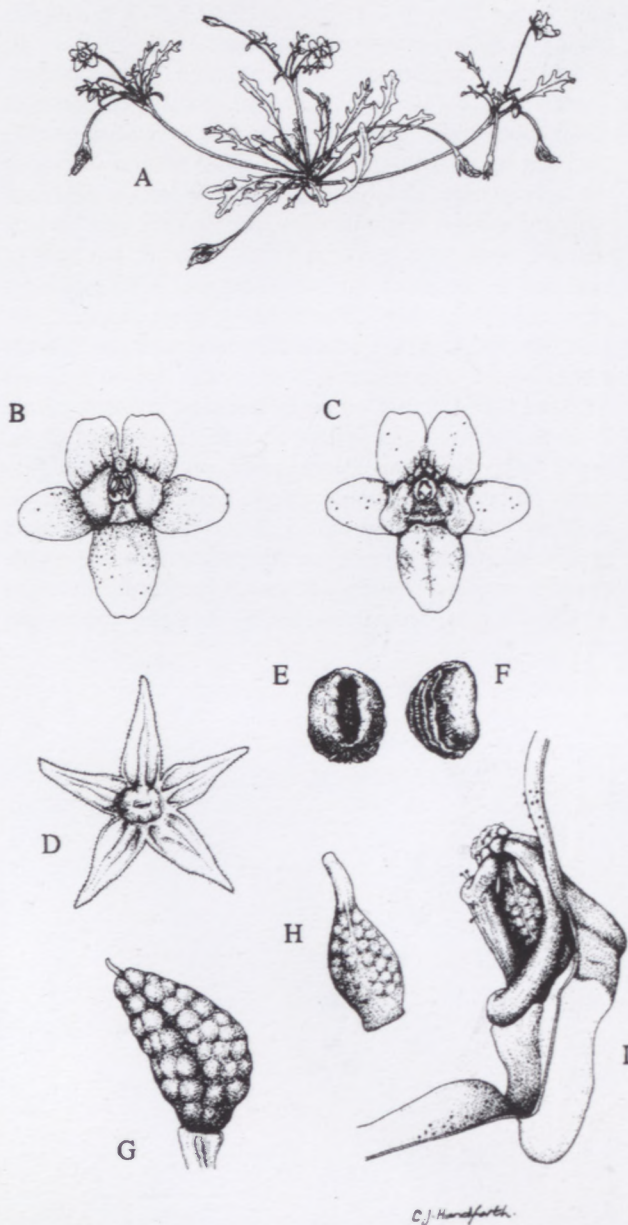


FIGURE 3.—*Diascia humilis*, Steiner 2119:4: A, habit, $\times 0.7$; B, flower, front view, $\times 3.5$; C, flower, rear view $\times 3.5$; D, calyx $\times 5.5$; E, seed, ventral view, $\times 17.5$; F, seed, side view, $\times 17.5$; G, capsule, $\times 4.2$; H, gynoecium, $\times 11.4$; I, androecium, $\times 11.4$.

Annual herb, glabrous, simple or branching from the base. *Stems* up to 220 mm long, erect or decumbent, tetragonal in cross section, up to 1.5 mm on a side. *Basal leaves* few to many, rosulate or crowded, simple, petiolate; lamina 8–34 mm long, ovate or obovate to elliptic, apex rounded to acute or apiculate, base attenuate, margins irregularly toothed or occasionally lobed or cleft, lobes or teeth narrowly to broadly triangular, acute to apiculate; petioles up to ± 20 mm long; stem leaves opposite, alternate or verticillate, becoming reduced upwards. *Flowers* axillary, one flower open per stem, unscented, nodding in bud, pedicels 25–80 mm long, ascending, broadened and dorsiventrally flattened especially where attached to the flower, $\text{\textcircled{E}}$ longating and ascending or recurved with only the apical portion ascending in fruit. *Calyx* lobes five, upper three \pm equal,

$\pm 3.1\text{--}4.0 \times 0.8\text{--}1.2$ mm, reflexed, lower two somewhat broader $\pm 3.1\text{--}4.1 \times 1.2\text{--}1.4$ mm, spreading, all lobes lanceolate, attenuate with white ciliate margins. *Corolla* bilabiate, limb $\pm 11.0\text{--}15.3 \times 12.9\text{--}17.0$ mm; upper lobes $\pm 3.6\text{--}4.7 \times 4.2\text{--}5.0$ mm, widely ovate to oblong-ovate, rounded to emarginate, bases oblique, lateral lobes $\pm 4.9\text{--}5.1 \times 3.8\text{--}4.8$ mm, oblong-ovate, rounded to emarginate, lower lobe $\pm 4.8\text{--}6.4 \times 5.8\text{--}8.3$ mm, obcordate, all lobes purple to reddish purple on front and pale purple on back, upper lobes with several darker reddish purple lines at the base, glandular pubescent especially on inside surface; tube, ± 1.0 mm deep, purple to reddish purple inside with 2 or 3 small fusiform to elliptic yellow spots at the base of each upper corolla lobe, spots on outside larger, one or two small ones and one large one or sometimes all confluent and forming a single large

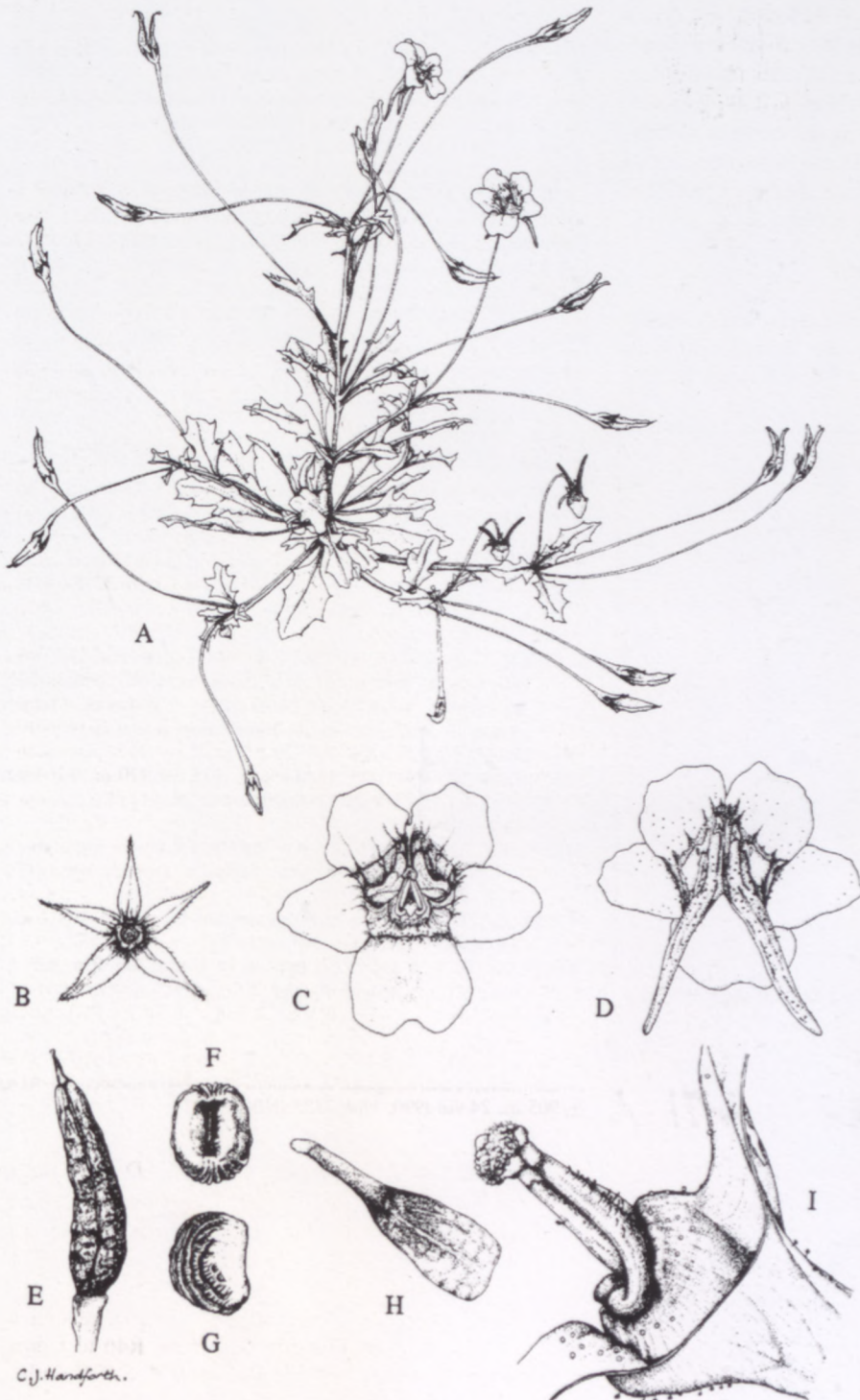


FIGURE 4.—*Diascia hexensis*, Steiner 21172: A, habit $\times 0.7$; B, calyx, $\times 2.9$; C, flower, front view, $\times 2.6$; D, flower, rear view, $\times 2.6$; E, capsule, $\times 2.9$; F, seed, ventral view, $\times 18.4$; G, seed, side view, $\times 18.4$; H, gynoecium, $\times 8.8$; I, androecium, $\times 8.8$.

spot, tube drawn out below upper lip into 2 spurs \pm 9.5–11.5 mm long (measured along the in-seam), diverging, projecting backwards and downwards, attenuate, purple to reddish purple, containing clear to light purple, spherical, multicellular, oil-secreting trichomes in the distal half, sparsely glandular pubescent outside, tube at base of lower lip turned out to form a boss bearing the stamens, boss \pm 1.0–1.3 mm high on the anticous side and 1.3–1.6 mm high posticous to the stamens, with scattered glandular hairs, connected on the posticous side to the upper lip by a septum. *Stamens* four, projecting forwards, filaments light purple, anticous filaments (appearing posticous due to twisting of the bases) \pm 3.0–3.5 mm long, curved at the base, with scattered purple clavate trichomes on the upper portion, posticous filaments (appearing anticous) \pm 2.5–2.9 mm long, \pm straight, glabrous or with a few purple clavate trichomes; anthers \pm 0.3–0.5 mm long, strongly cohering, yellow. *Ovary* \pm 1.75–2.1 \times 1.0–1.1 mm, oblong-ovate in outline, style \pm 1.5–1.8 mm long, \pm straight, stigma subcapitate, surrounded by anthers, ovules \pm 90–100. *Capsule* \pm 8.7–10.5 \times 2.2–2.6 mm, narrowly falcate, \pm twice as long as the calyx at maturity, seeds \pm 0.7–0.8 mm long, falciform in outline, dorsal surfaced ridged, ventral surface with seed coat extended to form a cupule with an oblong opening.

Flowering time: August–October.

Diagnostic features: *D. hexensis* is most easily recognized by its moderately long attenuate corolla spurs, its long narrowly falcate capsule (\pm 3.5 to 4.5 times as long

as wide) and its ovate broadly toothed leaves. Although capsule and leaf shape are similar in *D. sacculata*, the much longer spurs of *D. hexensis* clearly distinguish it from that species.

Distribution and habitat: *D. hexensis* is known only from the southern part of the Roggeveld Mountains west of Sutherland, south to the northern slopes of the Langeberg (Figure 5). It ranges in elevation from 510 m to 1 300 m and occurs in karoo shrublands on relatively moist south-facing slopes. The specific epithet refers to its occurrence next to the Hex River Pass.

Breeding system: *D. hexensis* is autogamous; but because of its long spurs containing floral oil, it is probably visited and cross-pollinated, at least occasionally, by medium-sized oil-collecting *Rediviva* bees with long forelegs.

CAPE. — 3220 (Sutherland): Ouberg Pass road, 0.7 km west of Vis River rd, 1 300 m, (–AD), 1-x-1986, *Steiner 1409* (NBG); \pm 15 m north of road 356, 86.7 km NE of R355, Farm Thyskraal, (–CC), 840 m, 26-ix-1984, *Steiner 790* (NBG); below road to Sutherland (R354), 45.1 km north of junction with National Road (N1) at Matjiesfontein, (–DC), \pm 900 m, 20-ix-1985, *Steiner 1053* (NBG). 3319 (Worcester): Farm Matroosberg, Hex River Pass, \pm 5 km east of turnoff to De Doorns on N1, (–BD), \pm 710 m, 3-x-1989, *Steiner 2032* (NBG). 3320 (Montagu): Whitehill, (–BA), 18-viii-1941, *Compton 11249* (NBG); Farm Driefontein, 7.2 km east of turnoff to Ouberg Pass on road to Ladismith, (–CB), 6-viii-1990, *Steiner 2117* (NBG); Farm Sewefontein, 32 km west of Ladismith–Laingsburg road, (–DA), 510 m, 6-viii-1990, *Steiner 2125* (NBG). 3322 (Oudtshoorn): Farm Frisgewaagd, northern slopes of the Swartberg (–AD), \pm 1 000 m, 12-ix-1986, *Vlok 1604B* (NBG).

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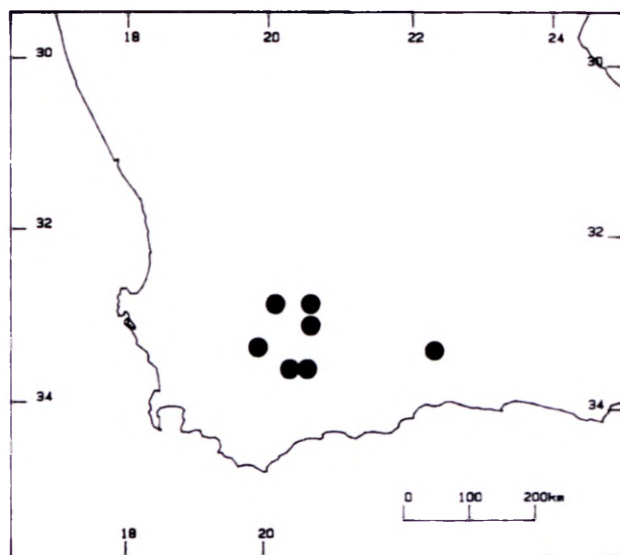


FIGURE 5. — Known distribution of *Diascia hexensis* in South Africa.