

***Diastella* Salisb. ex Knight 1809**  
**Silkeypuffs**

Anything specific to go in here?

Regarded by Robert Brown (1810) as a subgroup of *Mimetes* – a view which was retained until 1912.

*Diastella myrtifolia* (Thunb.) Salisb. ex Knight 1718, 1809  
**Tulbagh Silkypuff**

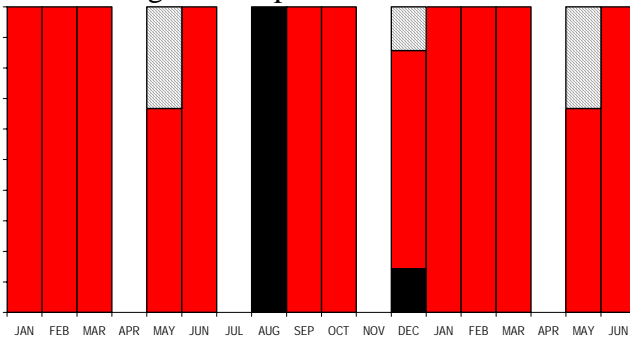
**Other Common Names:** Myrtle-leaf Diastella.  
**Other Scientific Names:** *dichotoma* (Lam.) 1792.

**32 Records**

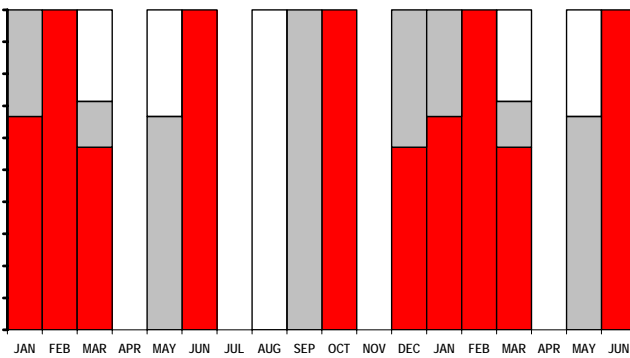
**Population** (32 records): 31% Common, 63% Frequent, 6% Rare.

**Dispersion** (32 records): 91% clumped, 9% variable.

**Flowering** (32 records with: Jan 6, Feb 1, Mar 7, Apr 0, May 3, Jun 2, Jul 0, Aug 1, Sep 4, Oct 1, Nov 0, Dec 7): Buds not recorded from Aug; Over from May; Fruit and Nothing not recorded. Data inadequate for peak levels. Historically recorded as flowering from Sep to Jan.



**Growth** (32 records with: Jan 6, Feb 1, Mar 7, Apr 0, May 3, Jun 2, Jul 0, Aug 1, Sep 4, Oct 1, Nov 0, Dec 7): Data inadequate; trends suggest growth peaking in Feb with a late winter (Aug) low. Data inadequate for peak levels.



**Seedlings** (13 records): All without any seedlings present.

**Fire Survival** (4 records): 100% survived by seedlings only.

**Age to first flowering:** Some 3 records of 100% flowering at 8 years.



**Height** (32 records): 3% 0-0.2 m tall, 72% 0.2-1 m tall, 25% 1-2 m tall.

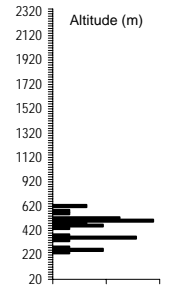
**Pollinators** (1 record): 100% beetles.

**Detailed Pollinators:** No additional data.

**Habitat:**

**Distance to Ocean** (32 records): 100% inland - further than 2 km from coast.

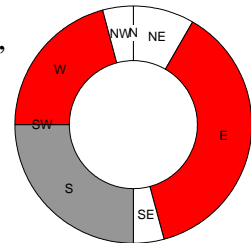
**Altitude** (32 records): 220 - 620 m; 340<sub>lq</sub> - 380<sub>med</sub> - 500<sub>uq</sub>m.



**Landform** (32 records): 84% deep soil, 13% shallow soil, 3% riverine.

**Slope** (32 records): 56% gentle incline, 28% platform, 13% valley bottom, 3% steep incline.

**Aspect** (24 records): 44% East, 27% South, 23% West, 6% North.



**Soil Type** (32 records): 94% sandy, 3% loamy, 3% gravelly.

**Soil Colour** (30 records): 67% grey, 27% white, 3% brown, 3% yellow.

**Geology** (32 records): 100% sandstone.

**Vegetation** (32 records): 100% shrubland.

**Conservation Status and Threat:**

**Red Data List Status:** Critically Endangered B1a(i)b(i,ii,iii,iv,v)c(iv)+2a(i)b(i,ii,iii,iv,v)c(i,v).

**Occurrence** (Fynbos): 29 km<sup>2</sup> with 40% conserved and 21% lost; **Occupancy:** 20 km<sup>2</sup> with 68% conserved and 8% lost. **Fragmentation index:** 69%.

**Nature Reserves** (32 records): 91% in nature reserves - well conserved.

**Habitat destruction** (32 records): 100% extensive natural habitat.

**Alien Invasive Species** (31 records): 39% none, 32% *Pinus*, 16% *Hakea*, 13% Fabaceae (chiefly alien *Acacia*).

**Alien Density** (31 records): 39% alien-free, 52% sparse, 6% abundant, 3% dense.

**Cultivation & Utilization:**

**Picking** (20 records): 100% no sign of picking.  
**Cultivation Status:** No noted cultivation.

**Atlasers Notes:**

- Protracted flowering period (GEH93051101).
- On sandy banks above and on edges of streams (ASP93061304); Along stream bank and scattered clumps in sea of restios (GEH94010812).

**Confusing Species:** None.

**Variation and Taxonomy:** No variation noted.

**Distribution:** Add.

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***Diastella parilis* Salisb ex Knight 1809**  
**Worcester Silky-puff**

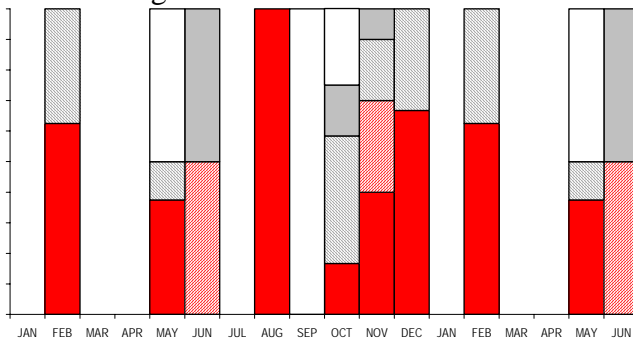
**Other Common Names:** Matched Diastella.  
**Other Scientific Names:** *None*.

**46 Records**

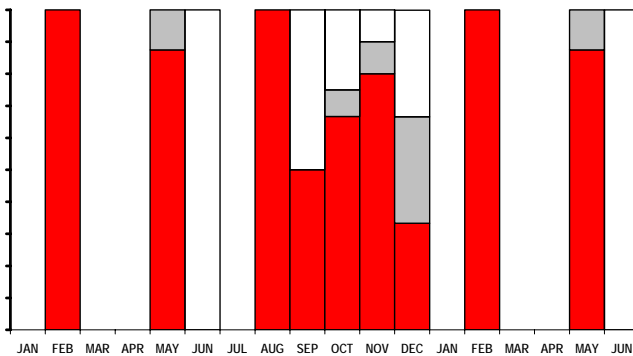
**Population** (46 records): 2% Abundant, 46% Common, 46% Frequent, 7% Rare.

**Dispersion** (46 records): 59% variable, 33% clumped, 9% widespread.

**Flowering** (46 records with: Jan 0, Feb 8, Mar 0, Apr 0, May 8, Jun 2, Jul 0, Aug 1, Sep 2, Oct 12, Nov 10, Dec 3): Buds from Jun and Nov; Flowering apparently all year round; Peak Flowering not recorded; Over from Oct to May; Fruit from Jun; Nothing from May to Oct 25. Data inadequate for estimating peak levels. Historically recorded as flowering from Jul to Jan.



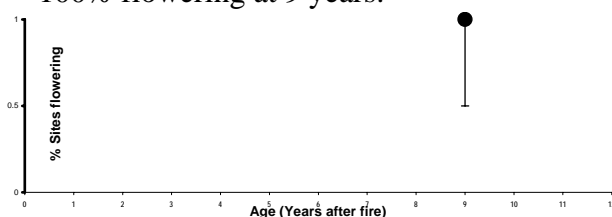
**Growth** (46 records with: Jan 0, Feb 8, Mar 0, Apr 0, May 8, Jun 2, Jul 0, Aug 1, Sep 2, Oct 12, Nov 10, Dec 3): Much from Aug to May; Rare from Nov to Dec; None from Oct to Dec. Data inadequate for estimating peak levels.



**Seedlings** (23 records): All without any seedlings present.

**Fire Survival** (1 records): 100% survived by seedlings only.

**Age to first flowering:** Some 4 records of 100% flowering at 9 years.



**Height** (46 records): 4% 0-0.2 m tall, 96% 0.2-1 m tall.

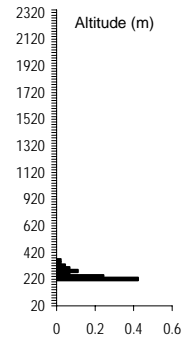
**Pollinators** (10 records): 60% beetles, 20% butterflies or moths, 10% bees or wasps, 10% flies.

**Detailed Pollinators** (6 records): Monkey Beetle (5), Wasp (unspecified).

**Habitat:**

**Distance to Ocean** (45 records): 100% inland - further than 2 km from coast.

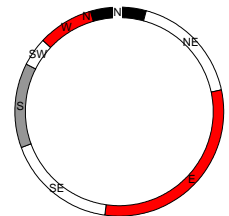
**Altitude** (45 records): 200 - 360 m; 200<sub>lq</sub> - 220<sub>med</sub> - 220<sub>uq</sub> m.



**Landform** (45 records): 93% deep soil, 7% swamp.

**Slope** (45 records): 36% gentle incline, 33% platform, 31% valley bottom.

**Aspect** (23 records): 48% East, 24% South, 17% North, 11% West.



**Soil Type** (45 records): 89% sandy, 7% loamy, 2% peaty, 2% gravelly.

**Soil Colour** (45 records): 56% grey, 22% brown, 16% white, 7% black.

**Geology** (37 records): 76% sandstone, 22% Tertiary sands, 3% conglomerate.

**Vegetation** (45 records): 98% shrubland, 2% agricultural lands.

**Conservation Status and Threat:**

**Red Data List Status:** Endangered A2c+4c.

**Occurrence (Fynbos):** 53 km<sup>2</sup> with 0% conserved and 48% lost; **Occupancy:** 31 km<sup>2</sup> with 0% conserved and 60% lost.

**Fragmentation index:** 58%.

**Nature Reserves** (45 records): 0% in nature reserves - unconserved.

**Habitat destruction** (44 records): 77% extensive natural habitat, 20% islands, 2% road verges.

**Alien Invasive Species** (44 records): 61% *Hakea*, 18% Fabaceae (chiefly alien *Acacia*), 11% *Pinus*, 5% none, 2% Myrtaceae, 2% other aliens.

**Alien Density** (43 records): 5% alien-free, 65% sparse, 26% abundant, 2% dense, 2% impenetrable.

**Cultivation & Utilization:**

**Picking** (35 records): 100% no sign of picking.  
**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

- Occurs in mat form at this locality (SHR95061601);
- Many plants have died (GEH95051702); Just more than 10 plants - almost as many dead (SMRY2061307).
- Grows in patches on edge of *Erica bergiana* patches in most soil (WIJ99110303);

**Confusing Species:** None.  
Records of identification queries = 2

**Variation and Taxonomy:** None noted, apart  
from the single mat form at **SHR95061601**.

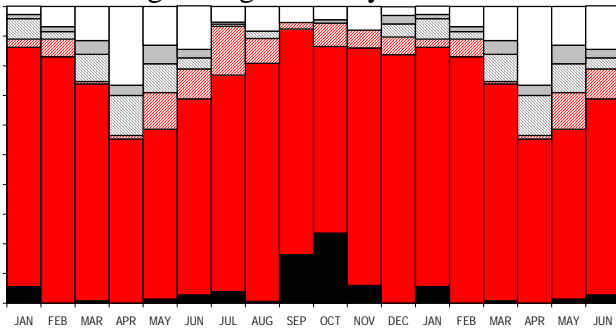
**Distribution:** Add.  
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*Diastella divaricata* ssp. *divaricata* (Bergius) Rourke 1766, 1976  
**Peninsula Silky-puff**

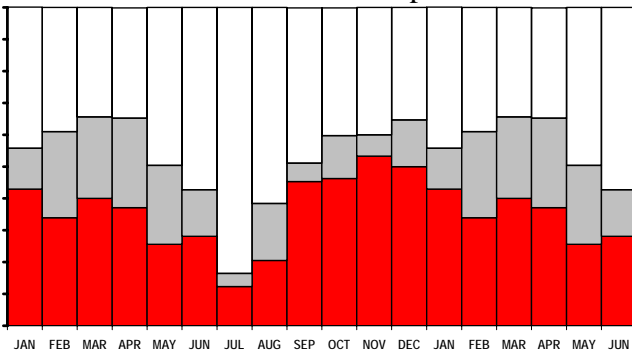
**Other Common Names:** Serpyllum-leaf Diastella, Vaccinium-leaf Diastella.  
**Other Scientific Names:** *intermedia* (Buek. ex Meisn.) 1856, *parviflora* (Klotzsch ex Krauss) 1845, *serpyllifolia* Salisb. ex Knight 1809, *vaccinifolia* Salisb. ex Knight 1809.

**1368 Records**

**Population** (1364 records): 0.6% Abundant, 35% Common, 53% Frequent, 11% Rare, 0.1% Extinct.  
**Dispersion** (1291 records): 74% variable, 14% clumped, 10% widespread, 2% evenly distributed.  
**Flowering** (1352 records with: Jan 72, Feb 118, Mar 130, Apr 170, May 145, Jun 109, Jul 152, Aug 157, Sep 92, Oct 89, Nov 50, Dec 68): Buds from May to Jul; Flowering from throughout the year, but with an Apr to Jun low (at about 50-60%); Peak Flowering from Sep to Oct; Over from Apr to May; Fruit rare; Nothing from Mar to Jun. Peak levels at 96% in Jan. Historically recorded as flowering throughout the year.



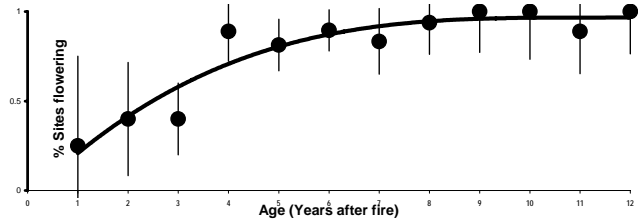
**Growth** (1275 records with: Jan 70, Feb 118, Mar 125, Apr 167, May 121, Jun 96, Jul 146, Aug 151, Sep 86, Oct 82, Nov 45, Dec 68): Much from Aug to Jun; Rare from Dec to Aug and Oct; None from all year round. Peak levels at 65% in Mar-Apr.



**Seedlings** (363 records): Absent in 74%: fewer seedlings than prefire adults in 41 cases, and more in 6 cases. Seedlings found in Feb (14), Mar (4), Apr (2), May (4), Jun, Jul (3), Aug (16), Sep, Oct, and Nov.  
**Fire Survival** (66 records): 67% survived by seedlings only, 18% resprouted from underground boles, 14% escaped fires in fire-safe areas, 2% eliminated from the area

by fires. The resprouting recorded is probably due to plants that only burned on the periphery – allowing the inner branches to survive.

**Age to first flowering:** First flowers recorded at 1 years, 50% estimated at 3-4 years, and 100% recorded at 9 years.



**Height** (1361 records): 50% 0-0.2 m tall, 50% 0.2-1 m tall, 0.1% 1-2 m tall.

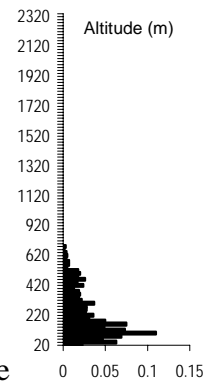
**Pollinators** (10 records): 70% beetles, 20% bees or wasps, 10% flies.

**Detailed Pollinators:** No additional data.

**Habitat:**

**Distance to Ocean** (1337 records): 62% coastal - less than 2 km from coast.

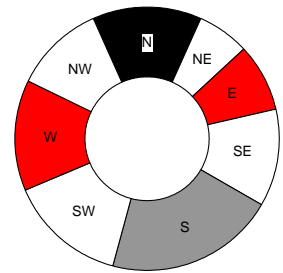
**Altitude** (1340 records): 20 - 680 m; 80<sub>lq</sub> - 140<sub>med</sub> - 220<sub>uq</sub> m.



**Landform** (1333 records): 76% deep soil, 14% shallow soil, 7% rocky outcrops, 2% swamp, 0.2% riverine, 0.1% lake edge.

**Slope** (1320 records): 55% gentle incline, 23% platform, 11% steep incline, 8% hill top, 4% valley bottom, 0.2% dunes, 0.1% cliff.

**Aspect** (977 records): 34% South, 27% West, 23% North, 17% East.



**Soil Type** (1337 records): 91% sandy, 6% loamy, 1% peaty, 1% gravelly, 0.7% rocky.

**Soil Colour** (1337 records): 72% grey, 16% white, 8% brown, 3% black, 0.4% yellow, 0.1% orange.

**Geology** (1318 records): 98% sandstone, 1% Tertiary sands, 0.7% silcrete or ferricrete, 0.3% shale.

**Vegetation** (1338 records): 99% shrubland, 0.6% grassland, 0.1% thicket, 0.1% wooded grassland.

**Conservation Status and Threat:**

**Red Data List Status:** Least Concern.  
**Occurrence (Fynbos):** 207 km<sup>2</sup> with 71% conserved and 20% lost; **Occupancy:**

210 km<sup>2</sup> with 70% conserved and 13% lost.  
Fragmentation index: 77%.

**Nature Reserves** (1340 records): 88% in nature reserves - well conserved.

**Habitat destruction** (1311 records):  
97% extensive natural habitat, 2% naturally linear habitats, 0.5% islands, 0.2% naturally fragmented habitats, 0.1% patches.

**Alien Invasive Species** (1257 records):  
69% none, 24% Fabaceae (chiefly alien *Acacia*), 6% *Pinus*, 0.7% Myrtaceae, 0.5% *Hakea*, 0.1% other aliens.

**Alien Density** (1254 records): 69% alien-free, 28% sparse, 2% abundant, 0.3% dense, 0.1% impenetrable.

**Cultivation & Utilization:**

**Picking** (800 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

- Only pure white flowers plant seen (AGR99101012, CRS95021502).

- Survived fire by forming dense mats which only burn at their edges (AGR92101302); One resprouter seen at this site: only seedlings seen at other times (AKS94072003).
- The recent fire seems to have killed it off - could find no trace (PVR95070501); No sign of the plants previously seen at this site (PVR95072302); Only on unburnt area (AKS92081203).

**Confusing Species:** None, probably because it is the only *Diastella* on the Peninsula..  
Records of identification queries = 3

**Variation and Taxonomy:** None noted.

**Distribution:** Add.

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*Diastella divaricata* ssp. *montana* Rourke 1976  
**Mountain Silky-puff**

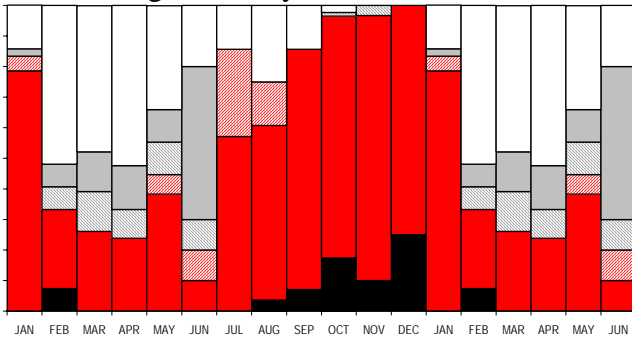
**Other Common Names:** None known.  
**Other Scientific Names:** *None*.

**381 Records**

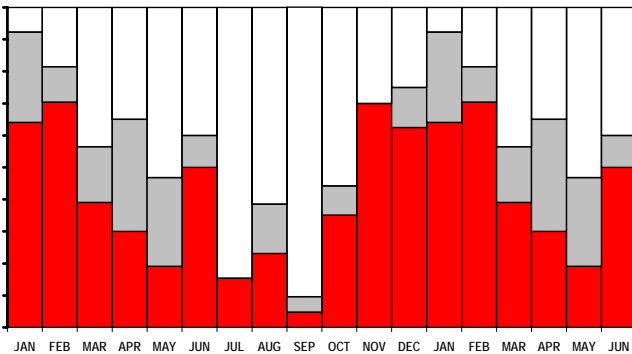
**Population** (374 records): 0.3% Abundant, 25% Common, 59% Frequent, 16% Rare.

**Dispersion** (342 records): 67% variable, 30% clumped, 2% widespread, 1% evenly distributed.

**Flowering** (378 records with: Jan 42, Feb 27, Mar 23, Apr 21, May 47, Jun 10, Jul 14, Aug 28, Sep 42, Oct 86, Nov 30, Dec 8): Buds from Jun to Aug; Flowering from all year round; Peak Flowering from Oct to Dec; Over from Mar to Jun; Fruit from Mar to Jun; Nothing from Jan to Sep. Peak levels at 100% in Nov-Dec. Historically recorded as flowering from all year round.



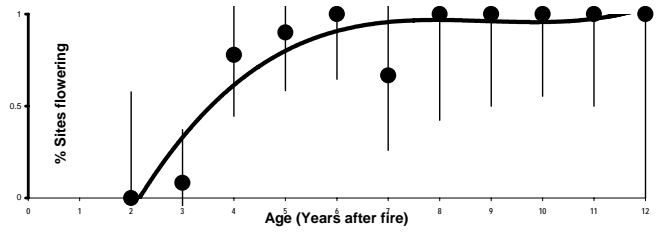
**Growth** (362 records with: Jan 39, Feb 27, Mar 23, Apr 20, May 47, Jun 10, Jul 13, Aug 26, Sep 42, Oct 77, Nov 30, Dec 8): Much from Oct to Aug; Rare from Dec to May and Aug; None from Feb to Dec. Peak levels at 92% in Jan.



**Seedlings** (163 records): Absent in 96%: fewer seedlings than prefire adults in 1 cases, and more in 2 cases. Seedlings found in Apr (2) and Jun.

**Fire Survival** (11 records): 100% survived by seedlings only.

**Age to first flowering:** y2 25% (4 – check is zero on graph). First flowers recorded at 2 years, 50% estimated at 3-4 years, and 100% recorded at 6 years.

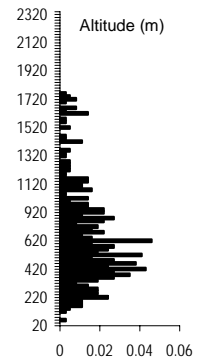


**Height** (377 records): 41% 0-0.2 m tall, 59% 0.2-1 m tall, 0.3% 1-2 m tall.

**Pollinators** (1 record): 100% bees or wasps.  
**Detailed Pollinators:** No additional data.

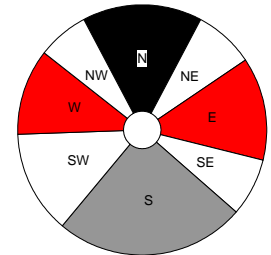
**Habitat:**

**Distance to Ocean** (368 records): 100% inland - further than 2 km from coast.  
**Altitude** (368 records): 40 - 1660 m; 380<sub>lq</sub> - 560<sub>med</sub> - 780<sub>uq</sub>m.



**Landform** (365 records): 79% deep soil, 17% shallow soil, 3% rocky outcrops, 0.5% swamp, 0.3% riverine.  
**Slope** (367 records): 57% gentle incline, 29% steep incline, 9% hill top, 4% platform, 1% cliff, 0.8% valley bottom.

**Aspect** (329 records): 36% South, 22% North, 21% East, 21% West.



**Soil Type** (368 records): 67% sandy, 17% loamy, 6% peaty, 6% gravelly, 4% rocky, 1% clayey.

**Soil Colour** (367 records): 66% grey, 18% brown, 10% black, 5% white, 1% orange, 0.8% yellow.

**Geology** (364 records): 90% sandstone, 9% shale, 0.8% conglomerate, 0.3% silcrete or ferricrete, 0.3% Tertiary sands.

**Vegetation** (366 records): 97% shrubland, 2% plantations, 1% grassland.

**Conservation Status and Threat:**

**Red Data List Status:** Vulnerable A2c.  
**Occurrence** (Fynbos): 1 408 km<sup>2</sup> with 32% conserved and 30% lost; **Occupancy:** 295 km<sup>2</sup> with 51% conserved and 16% lost. **Fragmentation index:** 14%.

**Nature Reserves** (368 records): 68% in nature reserves - well conserved.

**Habitat destruction** (360 records): 95% extensive natural habitat, 4% islands, 0.8% naturally linear habitats, 0.3% patches, 0.3% naturally fragmented habitats.

**Alien Invasive Species** (360 records): 61% *Pinus*, 23% none, 9% Fabaceae (chiefly alien *Acacia*), 7% *Hakea*, 0.3% Myrtaceae.

**Alien Density** (359 records): 23% alien-free, 69% sparse, 6% abundant, 2% dense.



**Cultivation & Utilization:**

**Picking** (244 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

- Is Intermediate Population with *D. fraterna* - most data suggest *D. divaricata* (AGRY1012802); Atlassed as *D. fraterna* - is intermediate population with *D. divaricata* (NAH98081201 - herbarium specimen, PMR96031801).

**Confusing Species:** *Diastella fraterna* – especially at High Noon in the Highlands State Forest where intermediates occur.

Rarely with *D. thymeleoides thymeleoides*, which is erect.

Records of identification queries = 15

Records of corrected identification queries = 4 = 0.0%.

**Variation and Taxonomy:** None known – although approaches *D. fraterna* at High Noon.

**Distribution:** Add.

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## *Diastella fraterna* Rourke 1976 Palmiet Silky-puff

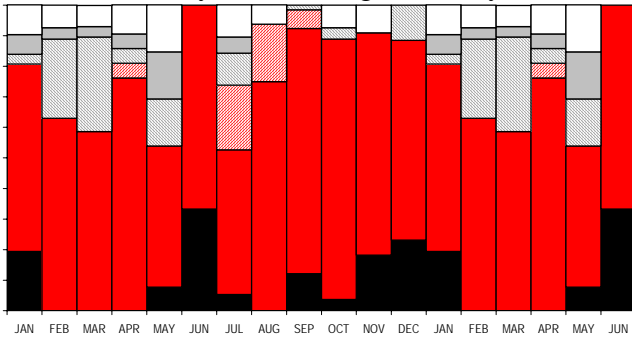
**Other Common Names:** None known.  
**Other Scientific Names:** *None*.

### 294 Records

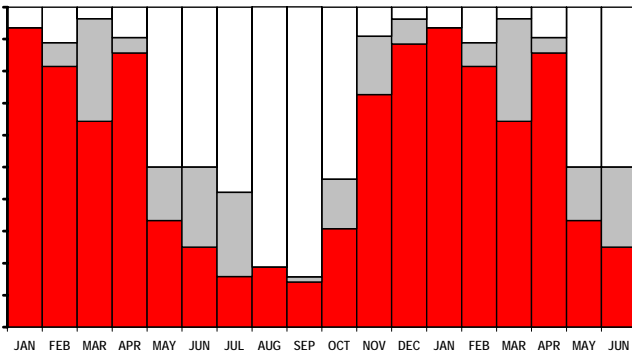
**Population** (288 records): 21% Common, 69% Frequent, 10% Rare.

**Dispersion** (277 records): 53% variable, 38% clumped, 7% widespread, 3% evenly distributed.

**Flowering** (289 records with: Jan 31, Feb 27, Mar 29, Apr 21, May 13, Jun 3, Jul 19, Aug 16, Sep 66, Oct 27, Nov 11, Dec 26): Buds from Jul to Aug; Flowering from all year round; Peak Flowering from Nov to Jan and Jun and Sep; Over from Feb to Mar and Apr to May; Fruit from May; Nothing from May and Jul. Peak levels at 100% in Jun, Aug and Dec. Historically recorded as flowering intermittently from throughout the year.



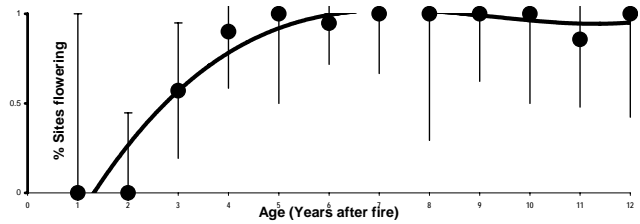
**Growth** (285 records with: Jan 31, Feb 27, Mar 28, Apr 21, May 12, Jun 4, Jul 19, Aug 16, Sep 64, Oct 26, Nov 11, Dec 26): Much from Oct to Jun; Rare from Mar, May to Jul and Oct to Nov; None from May to Oct. Peak levels at 96% in Mar.



**Seedlings** (131 records): Absent in 91%: fewer seedlings than prefire adults in 4 cases, and more in 2 cases. Seedlings found in Jan 1, Aug, Oct and Dec (3).

**Fire Survival** (11 records): 91% survived by seedlings only, 9% eliminated from the area by fires.

**Age to first flowering:** First flowers recorded at 2 years, 50% estimated at 2-3 years, and 100% recorded at 5 years.



**Height** (289 records): 17% 0-0.2 m tall, 83% 0.2-1 m tall.

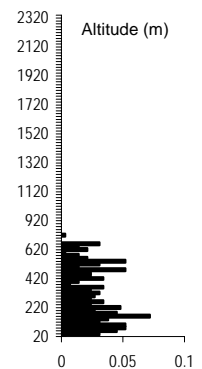
**Pollinators** (6 records): 67% bees or wasps, 33% beetles.

**Detailed Pollinators** (2 records): Honey Bee.

### Habitat:

**Distance to Ocean** (291 records): 68% inland - further than 2 km from coast.

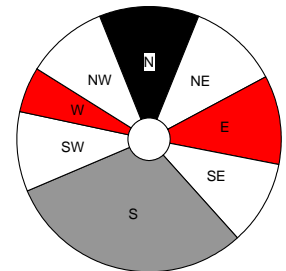
**Altitude** (291 records): 20 - 720 m; 120<sub>lq</sub> - 240<sub>med</sub> - 420<sub>uq</sub>m.



**Landform** (289 records): 71% deep soil, 24% shallow soil, 5% rocky outcrops, 0.3% swamp.

**Slope** (289 records): 50% gentle incline, 36% steep incline, 7% hill top, 7% platform, 1% valley bottom, 0.3% cliff.

**Aspect** (257 records): 41% South, 22% North, 22% East, 15% West.



**Soil Type** (289 records):

67% sandy, 17% loamy, 6% gravelly, 5% peaty, 4% rocky, 2% clayey.

**Soil Colour** (288 records): 72% grey, 10% brown, 9% black, 8% white, 1% yellow, 0.3% orange, 0.3% red.

**Geology** (286 records): 90% sandstone, 7% shale, 2% Tertiary sands, 1% conglomerate, 0.3% granite, 0.3% silcrete or ferricrete.

**Vegetation** (289 records): 100% shrubland, 0.3% grassland.

### Conservation Status and Threat:

**Red Data List Status:** Least Concern.

**Occurrence** (Fynbos): 173 km<sup>2</sup> with 65% conserved and 11% lost; **Occupancy:** 150 km<sup>2</sup> with 71% conserved and 8% lost. **Fragmentation index:** 83%.

**Nature Reserves** (291 records): 65% in nature reserves - well conserved.

**Habitat destruction** (286 records): 98% extensive natural habitat, 1% islands, 0.3% patches, 0.3% naturally linear habitats.

**Alien Invasive Species** (283 records): 58% none, 30% *Pinus*, 7% Fabaceae (chiefly alien *Acacia*), 3% Myrtaceae, 2% *Hakea*.

**Alien Density** (283 records): 58% alien-free, 39% sparse, 4% abundant.

**Cultivation & Utilization:**

**Picking** (192 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

*D. fraterna* somewhat intermediate in gizz and growth with *D. divaricata*, but measurements (leaf and flowerhead) give former (AGR99120805); Intermediate between *D. fraterna* and *D. divaricata* - heads too big for latter but growth habit intermediate (AGRY4031601).

**Confusing Species:** Most of confusion is with intermediate populations with *D. divaricata montana* near High Noon in the Highlands

Forest Station. Sporadic confusion with *D. thymaleoides* (both subspecies)  
Records of identification queries = 21  
Records of corrected identification queries = 19.

**Variation and Taxonomy:** None noted by atlassers - although approaches *D. divaricata* at High Noon. Rourke (1976) noted that some populations have distinctive brown, papery involucre bracts, but did not document any geographical details of this trait.

**Distribution:** Add.

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*Diastella thymelaeoides* ssp. *meridiana* Rourke 1976  
**Hangklip Silkypuff**

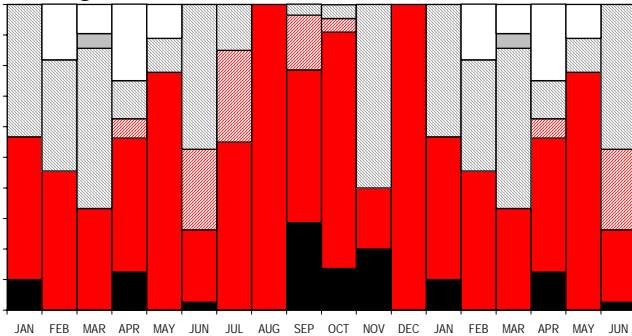
**Other Common Names:** None known.  
**Other Scientific Names:** *None*.

**220 Records**

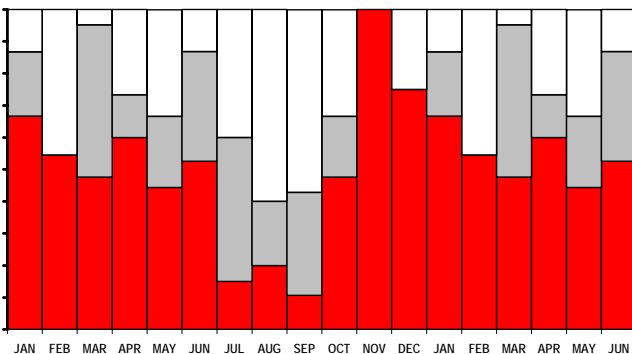
**Population** (218 records): 36% Common, 58% Frequent, 6% Rare.

**Dispersion** (214 records): 61% variable, 22% clumped, 14% widespread, 2% evenly distributed.

**Flowering** (218 records with: Jan 30, Feb 11, Mar 21, Apr 16, May 9, Jun 38, Jul 20, Aug 6, Sep 28, Oct 22, Nov 5, Dec 12): Buds from Jun to Jul and Sep; Flowering from all year round, with a dip in Jun; Peak Flowering from Jan, Apr and Sep to Nov; Over from Jan to Mar and Jun to Jul and Nov; Fruit only recorded in Mar; Nothing from Feb to May. Peak levels at 100% in Jun-Jan. Historically recorded as flowering from throughout the year, but peaking from Aug to Nov.



**Growth** (215 records with: Jan 30, Feb 11, Mar 21, Apr 15, May 9, Jun 38, Jul 20, Aug 5, Sep 28, Oct 21, Nov 5, Dec 12): Much from Oct to Jun; Rare from Mar and May to Sep; None from Feb and Apr to May and Jul to Dec. Peak levels at 100% in Nov.

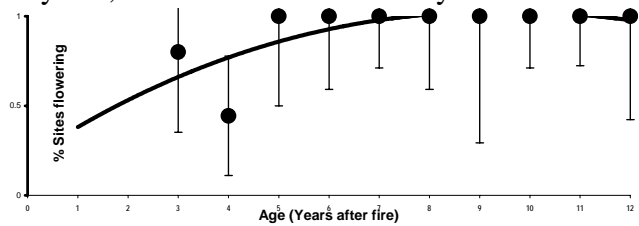


**Seedlings** (106 records): Absent in 98%: more seedlings than prefire adults in 1 cases. Seedlings found in Jul.

**Fire Survival** (5 records): 80% survived by seedlings only, 20% escaped fires in fire-safe areas.

**Age to first flowering:** y3 67% (6), y4 44% (9), y5 100% (4), y6 100% (6), y7 100% (12), y8 100% (6), y9 100% (2), y10 100% (12), y11 100% (13), y12 100% (3), y13 100% (3). First flowers recorded at 3 years (no data

from younger veld), 50% estimated at 2-3 years, and 100% recorded at 5 years.



**Height** (216 records): 7% 0-0.2 m tall, 92% 0.2-1 m tall, 0.9% 1-2 m tall.

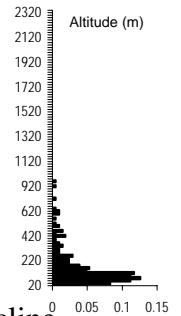
**Pollinators** (10 records): 60% beetles, 40% bees or wasps.

**Detailed Pollinators** (3 records): Monkey Beetle (2), Honey Bee.

**Habitat:**

**Distance to Ocean** (206 records): 75% coastal - less than 2 km from coast.

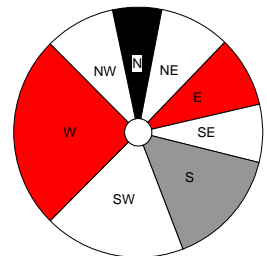
**Altitude** (206 records): 20 - 860 m; 60<sub>lq</sub> - 100<sub>med</sub> - 120<sub>uq</sub>m.



**Landform** (203 records): 54% deep soil, 32% shallow soil, 14% rocky outcrops, 1.0% swamp.

**Slope** (203 records): 49% gentle incline, 41% steep incline, 8% platform, 1% hill top, 1.0% valley bottom.

**Aspect** (187 records): 40% West, 26% South, 19% East, 15% North.



**Soil Type** (202 records): 78% sandy, 8% loamy, 5% gravelly, 5% rocky, 2% peaty, 0.5% clayey.

**Soil Colour** (202 records): 71% grey, 15% brown, 7% white, 5% black, 0.5% yellow, 0.5% orange, 0.5% red.

**Geology** (201 records): 96% sandstone, 3% shale, 1.0% Tertiary sands, 0.5% conglomerate.

**Vegetation** (203 records): 99% shrubland, 0.5% grassland, 0.5% thicket, 0.5% suburban.

**Conservation Status and Threat:**

**Red Data List Status:** Vulnerable A4c.

**Occurrence (Fynbos):** 68 km<sup>2</sup> with 58% conserved and 14% lost; **Occupancy:** 88 km<sup>2</sup> with 54% conserved and 11% lost.

**Fragmentation index:** 100%.

**Nature Reserves** (206 records): 45% in nature reserves.

**Habitat destruction** (200 records): 95% extensive natural habitat, 3% islands, 3% naturally linear habitats.

**Alien Invasive Species** (202 records): 53% none, 34% Fabaceae (chiefly alien

*Acacia*), 8% *Pinus*, 2% other aliens,  
1% Myrtaceae, 1.0% *Hakea*.

**Alien Density** (202 records): 53% alien-free,  
42% sparse, 4% abundant, 0.5% dense.

**Cultivation & Utilization:**

**Picking** (170 records): 99% no sign of picking,  
0.6% lightly picked.

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

- Vlei Rat eating plants (CRS96092102).
- A very small beetle was on several plants at 13h30 on Berg Wind day (APE92060709).

**Confusing Species:** Mainly confused with *D. fraterna*, but outside of distribution range.

Also confused with *D. thymelaeoides thymelaeoides*, and *Leucospermum bolusii*.

Records of identification queries = 13

Records of corrected identification queries = 13.

**Variation and Taxonomy:** No recorded variation.

**Distribution:** Add.

Replaces *Leucospermum bolusii*.

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*Diastella thymelaeoides* ssp. *thymelaeoides* (Berg.) Rourke 1766, 1976  
**Steenbras Silkypuff**

**Other Common Names:** Bryum-flower  
 Diastella.

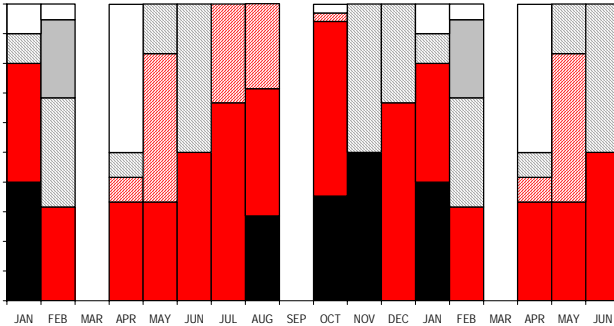
**Other Scientific Names:** *bryiflora* Salisb. ex Knight 1809, *concaya* (Lam) 1792, *villosa* Jacq ex Meisn 1856.

**105 Records**

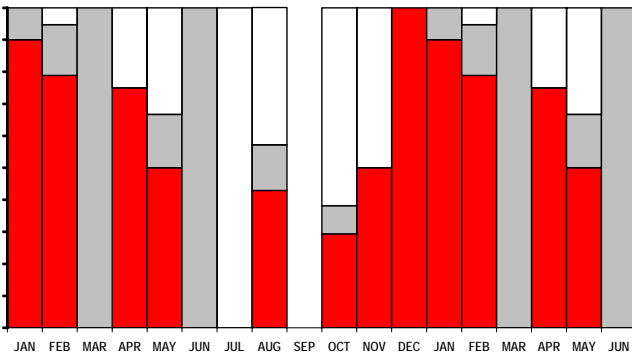
**Population** (105 records): 24% Common, 70% Frequent, 7% Rare.

**Dispersion** (103 records): 57% variable, 40% clumped, 3% widespread.

**Flowering** (104 records with: Jan 10, Feb 19, Mar 0, Apr 12, May 6, Jun 2, Jul 3, Aug 7, Sep 0, Oct 34, Nov 2, Dec 9): Buds from May and Jul to Aug; Flowering from all year round; Peak Flowering from Jan and Aug to Nov; Over from Feb and May to Jun and Nov to Dec; Fruit from Feb; Nothing from Jan to Apr. Peak levels at 100% in May to Dec. Historically recorded as flowering from throughout the year, but peaking in Aug to Nov.



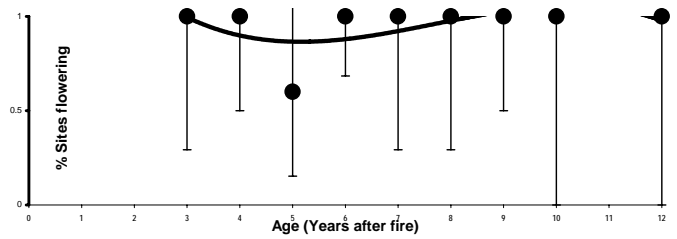
**Growth** (105 records with: Jan 10, Feb 19, Mar 1, Apr 12, May 6, Jun 2, Jul 3, Aug 7, Sep 0, Oct 34, Nov 2, Dec 9): Much from Aug to Feb and Apr to May; Rare from Feb to Mar and May to Jun; None from Apr to May and Jul to Nov. Peak levels at 100% in Dec to Mar.



**Seedlings** (39 records): All without any seedlings present.

**Fire Survival** (1 records): 100% escaped fires in fire-safe areas.

**Age to first flowering:** First flowers recorded at 3 years (no data from younger veld), 50% estimated at 2-3 years, and 100% recorded at 3 years.



**Height** (104 records): 1.0% 0-0.2 m tall, 90% 0.2-1 m tall, 9% 1-2 m tall.

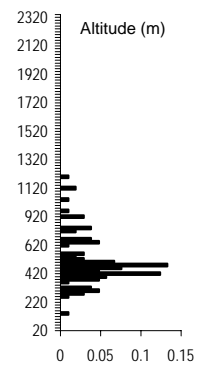
**Pollinators** (5 records): 60% beetles, 20% bees or wasps, 20% flies.

**Detailed Pollinators** (2 records): Monkey Beetle.

**Habitat:**

**Distance to Ocean** (105 records): 58% inland - further than 2 km from coast.

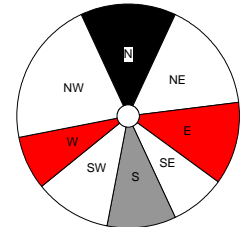
**Altitude** (105 records): 120 - 1100 m; 400<sub>lq</sub> - 440<sub>med</sub> - 480<sub>uq</sub> m.



**Landform** (105 records): 71% deep soil, 26% shallow soil, 3% rocky outcrops.

**Slope** (105 records): 62% gentle incline, 34% steep incline, 2% platform, 1.0% hill top, 1.0% valley bottom.

**Aspect** (100 records): 35% North, 24% East, 23% West, 19% South.



**Soil Type** (104 records): 69% sandy, 11% loamy, 10% clayey, 6% gravelly, 5% rocky.

**Soil Colour** (105 records): 68% grey, 23% brown, 8% white, 2% orange.

**Geology** (104 records): 88% sandstone, 12% shale.

**Vegetation** (104 records): 99% shrubland, 1.0% grassland.

**Conservation Status and Threat:**

**Red Data List Status:** Near Threatened B1a(ii)b(i,ii,iii,iv,v)+2a(ii)b(i,ii,iii,iv,v).

Occurrence (Fynbos): 132 km<sup>2</sup> with 37% conserved and 9% lost; Occupancy: 74 km<sup>2</sup> with 22% conserved and 7% lost. Fragmentation index: 54%.

**Nature Reserves** (105 records): 10% in nature reserves - inadequately conserved.

**Habitat destruction** (104 records): 97% extensive natural habitat, 3% naturally fragmented habitats.

**Alien Invasive Species** (103 records): 46% none, 37% *Pinus*, 11% Fabaceae (chiefly alien *Acacia*), 4% Myrtaceae, 3% *Hakea*.

**Alien Density** (102 records): 46% alien-free, 48% sparse, 6% abundant.

**Cultivation & Utilization:**

**Picking** (70 records): 99% no sign of picking,  
1% lightly picked.

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

Pink-flowered form (MAJ99012901,  
MAJ99082801)

**Confusing Species:** Mistaken for *D. fraterna*  
and the subspecies *meridiana*. Material not  
in flower confused with *Leucospermum*  
*truncatum*.

Records of identification queries = 8.

Records of corrected identification queries = 3.

**Variation and Taxonomy:** A pink-flowered  
form was noted at **MAJ**.

**Distribution:** Add.

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*Diastella buekii* (Gand.) Rourke 1901, 1976  
Franschhoek Silky-puff

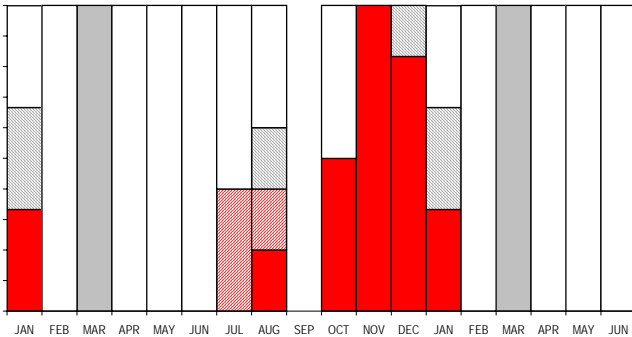
**Other Common Names:** Trailing Diastella.  
**Other Scientific Names:** *humifusa* Salisb. ex Knight 1809.

**51 Records**

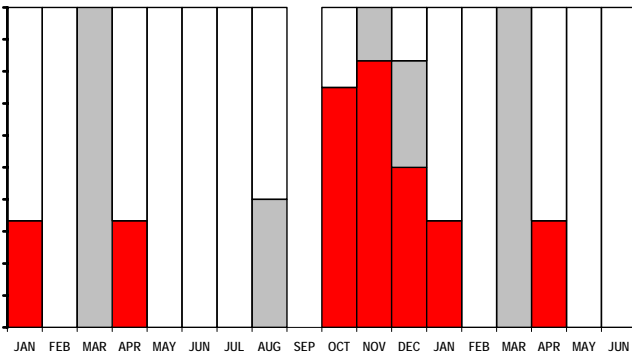
**Population** (50 records): 4% Common, 58% Frequent, 38% Rare.

**Dispersion** (41 records): 61% variable, 39% clumped.

**Flowering** (51 records with: Jan 3, Feb 1, Mar 1, Apr 3, May 14, Jun 3, Jul 5, Aug 5, Sep 0, Oct 4, Nov 6, Dec 6): Buds from Jul to Aug; Flowering from Aug to Jan; Peak Flowering not recorded; Over from Aug and Dec to Jan; Fruit from Mar; Nothing from Jan to Oct. Peak levels at 100% in Nov to Dec. Historically recorded as flowering from Aug to Nov.



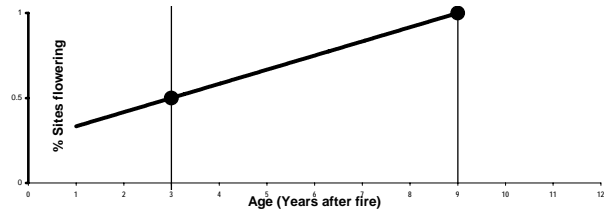
**Growth** (51 records with: Jan 3, Feb 1, Mar 1, Apr 3, May 14, Jun 3, Jul 5, Aug 5, Sep 0, Oct 4, Nov 6, Dec 6): Much from Oct to Jan and Apr; Rare from Mar, Aug and Nov to Dec; None from Dec to Feb and Apr to Oct. Peak levels at 100% in Nov.



**Seedlings** (17 records): All without any seedlings present.

**Fire Survival** (2 records): 100% survived by seedlings only.

**Age to first flowering:** First flowers recorded at 3 years (no data from younger veld), 50% estimated at 3 years, and 100% recorded at 9 years.



**Height** (50 records): 100% 0-0.2 m tall.

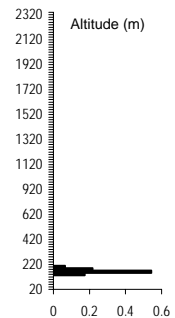
**Pollinators** (2 records): 50% bees or wasps, 50% flies.

**Detailed Pollinators** (1 record): Honey Bee.

**Habitat:**

**Distance to Ocean** (46 records): 100% inland - further than 2 km from coast.

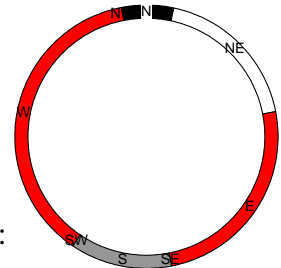
**Altitude** (46 records): 120 - 200 m; 140<sub>iq</sub> - 160<sub>med</sub> - 160<sub>uq</sub>m.



**Landform** (45 records): 98% deep soil, 2% swamp.

**Slope** (45 records): 67% platform, 24% gentle incline, 7% valley bottom, 2% dunes.

**Aspect** (16 records): 38% East, 38% West, 13% North, 13% South.



**Soil Type** (45 records): 91% sandy, 9% loamy.

**Soil Colour** (45 records): 42% grey, 40% white, 11% brown, 4% yellow, 2% black.

**Geology** (38 records): 79% Tertiary sands, 11% sandstone, 8% conglomerate, 3% granite.

**Vegetation** (45 records): 56% shrubland, 42% plantations, 2% agricultural lands.

**Conservation Status and Threat:**

**Red Data List Status:** Critically Endangered

A2a, B1b(i,ii,iii,iv,v)c(iv), Occurrence (Fynbos): 47 km<sup>2</sup> with 1% conserved and 67% lost; Occupancy: 26 km<sup>2</sup> with 3% conserved and 65% lost. Fragmentation index: 55%.

**Nature Reserves** (46 records): 4% in nature reserves - unconserved.

**Habitat destruction** (45 records): 53% extensive natural habitat, 29% islands, 9% road verges, 4% patches, 2% naturally linear habitats, 2% naturally fragmented habitats.

**Alien Invasive Species** (45 records): 69% *Pinus*, 24% Fabaceae (chiefly alien *Acacia*), 4% annual alien grasses, 2% none.

**Alien Density** (45 records): 2% alien-free, 31% sparse, 58% abundant, 9% dense.

**Cultivation & Utilization:**

**Picking** (44 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.



**Atlassers Notes:**

- Field guide says plants up to 1 m across - many of these plants are over 3 m across (PVR96011402); One 3 m by 2 m mat (SMR98052104); Some mats about 5 m in diameter (WIJ94121001).
- Plant mats acting as nursery plants for pine establishment! (ASP94110316); Dozens of 200 - 300 mm high pines weeded from some of the mats (WIJ94121001).
- Some plants dead - due to pine clearing operations? (AGR97072301); Lots dead - more than half plants gone – eliminated from 3/4 of area – looks like roadside application of herbicide (AGR97072303); Perhaps 20-40 plants on this site appear to be extinct due to clearing for quarry and aliens (NAH98030401).
- One plant dying back (LYM97081312); Found 1 dead plant; 3 moribund plants and 1 young plant (LYM98052102); There are perhaps 50 plants - 8 adult 1 m wide mats and the rest were young plants (less than 2 years old?) (NGFY0021201).
- Single plant noted within maintained pine plantation covering area of 1 m X 2 m (NAHY5042601); 2 plants Found Under Pine

Trees In Plantation At Edge Of Plot (LYM97081312); 1 plant almost hidden by pine needles - just little bits sticking through - however seems to be a healthy big mat (VCH98052104).

**Confusing Species:** None noted.

**Variation and Taxonomy:** Rourke (1976) dismissed Salisbury's name *humifusa* as the type could not be traced and "the description is so vague that it cannot be applied with certainty". However, taken in conjunction with the section Salisbury placed it in (petals beyond the anthers hairless), the description is unambiguous. It remains to find the herbarium specimen collected by Roxburgh to locate the type.

**Distribution:** In 1976 this species had not been seen since 1934 (Rourke 1976).

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# *Diastella proteoides* (L.) Druce 1753, 1914

## Flats Silkypuff

### Vlaktesterretjie

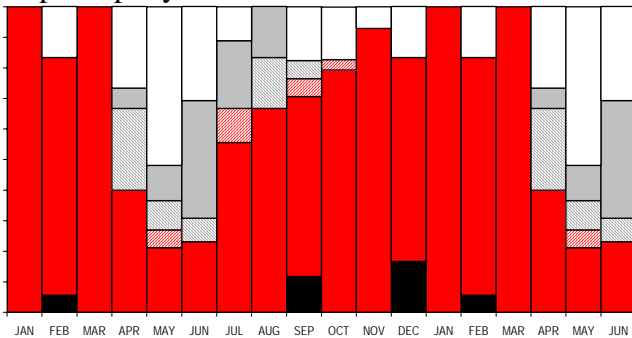
**Other Common Names:** Flats Silkystar, Flats Starlet, Heath-leaf Diastella, *Sterretjie*.  
**Other Scientific Names:** *ericaefolia* Salisb. ex Knight 1809, *homomalla* Reichb. ex Meisn. 1856, *purpurea* (L.) R. Br. 1770.

#### 197 Records

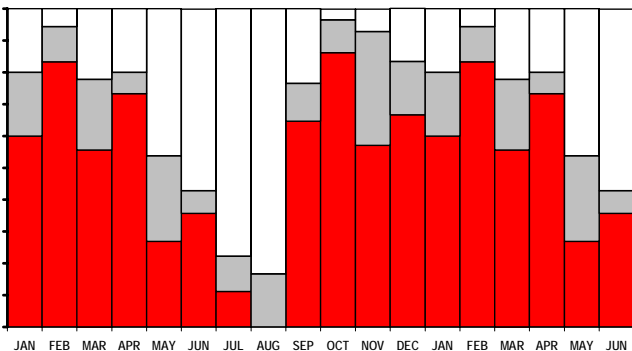
**Population** (192 records): 23% Common, 44% Frequent, 32% Rare, 1% Extinct.

**Dispersion** (164 records): 56% variable, 41% clumped, 2% widespread, 0.6% evenly distributed.

**Flowering** (193 records with: Jan 5, Feb 18, Mar 9, Apr 15, May 52, Jun 13, Jul 9, Aug 6, Sep 17, Oct 29, Nov 14, Dec 6): Buds from Jul; Flowering from all year round with a May to Jun dip; Peak Flowering from Dec; Over from Apr and Aug; Fruit from May to Aug; Nothing from Feb and Apr to Jun and Sep to Oct and Dec. Peak levels at 100% in Jan, Mar and Aug. Historically recorded as flowering erratically throughout the year, but principally from Jul to Feb.



**Growth** (194 records with: Jan 5, Feb 18, Mar 9, Apr 15, May 52, Jun 14, Jul 9, Aug 6, Sep 17, Oct 29, Nov 14, Dec 6): Much from Sep to Jun; Rare from Jan, Mar, May and Nov; None from Jan and Mar to Sep. Peak levels at 97% in Oct.



**Seedlings** (78 records): Absent in 97%: fewer seedlings than prefire adults in 1 cases. Seedlings found in Dec 1.

**Fire Survival** (11 records): 82% survived by seedlings only, 18% eliminated from the area by fires.

**Age to first flowering:** First flowers recorded at 1 years, 50% estimated at 2-3 years, and 100% estimated at 5 years.



**Height** (190 records): 25% 0-0.2 m tall, 75% 0.2-1 m tall.

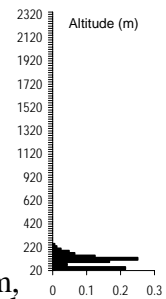
**Pollinators** (3 records): 67% bees or wasps, 33% beetles.

**Detailed Pollinators** (2 records): Solitary Bee, Pollen Wasp.

#### Habitat:

**Distance to Ocean** (167 records): 100% inland - further than 2 km from coast.

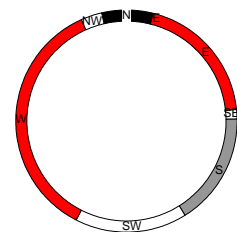
**Altitude** (167 records): 20 - 240 m; 40<sub>lq</sub> - 100<sub>med</sub> - 120<sub>uq</sub>m.



**Landform** (167 records): 99% deep soil, 0.6% swamp.

**Slope** (164 records): 74% platform, 12% gentle incline, 10% valley bottom, 2% hill top, 2% dunes.

**Aspect** (67 records): 48% West, 22% South, 20% East, 10% North.



**Soil Type** (166 records): 98% sandy, 1% loamy, 0.6% clayey.

**Soil Colour** (165 records): 37% grey, 33% white, 16% brown, 8% yellow, 5% orange, 0.6% red.

**Geology** (162 records): 81% Tertiary sands, 15% sandstone, 2% granite, 1% shale.

**Vegetation** (167 records): 91% shrubland, 5% plantations, 3% suburban, 0.6% agricultural lands.

#### Conservation Status and Threat:

**Red Data List Status:** Critically Endangered A2c+4c.

**Occurrence** (Fynbos): 778 km<sup>2</sup> with 3% conserved and 67% lost; **Occupancy:** 172 km<sup>2</sup> with 9% conserved and 55% lost. **Fragmentation index:** 11%.

**Nature Reserves** (167 records): 28% in nature reserves.

**Habitat destruction** (165 records): 52% extensive natural habitat, 36% islands, 4% road verges, 3% naturally linear habitats, 2% patches, 2% corridors, 0.6% naturally fragmented habitats.

**Alien Invasive Species** (163 records): 87% Fabaceae (chiefly alien *Acacia*),

12% *Pinus*, 1% none, 0.6% annual alien grasses.

**Alien Density** (163 records): 1% alien-free, 36% sparse, 33% abundant, 23% dense, 7% impenetrable.

**Cultivation & Utilization:**

**Picking** (156 records): 100% no sign of picking.

**Cultivation Status:** Plantings - 1 record (0.5%).

**Atlassers Notes:**

- Lots of dead senescent plants in patches of very old veld (>15 years) (AGRY4102705);
- This Kraaifor site destroyed by housing about 1996 (AGR96030707);
- These Tokai plants have longer leaves and are more prostrate than other forms from the north (ANR97042801);
- About a year ago somebody chopped down the pine tree growing out of the mat of Silky-puff presumably wishing to do it a favour - today the plant is nearly dead. Did this result in too much sun to the plant or did the hot summer of 2000/1 affect it? (NGFY1072101);
- Plants very happy and the mats have nearly doubled in size since this site in the Tokai Plantation was first discovered in July 1994. The area has been fenced but two plants remain outside the fence (NGF97112301); Counted 58 plants all within the small enclosure and therefore very localized (NGFY0120301);

**Confusing Species:** No confusion noted. Records of identification queries = 2

**Variation and Taxonomy:** Atlassers have noted that the southern plants from Tokai and Meadowridge are more prostrate (not sprawling) and have longer leaves than the other populations.

**Distribution:** Add.

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