

*Mimetes* Salisb. 1807 and *Orothamnus zeyheri* Pappe ex Hook.f 1848

**Pagodas and Marsh Rose**

Anything specific to go in here?

*Mimetes arboreus* Rourke 1982  
**Kogelberg Pagoda**  
*Kogelbergvaalstompie*

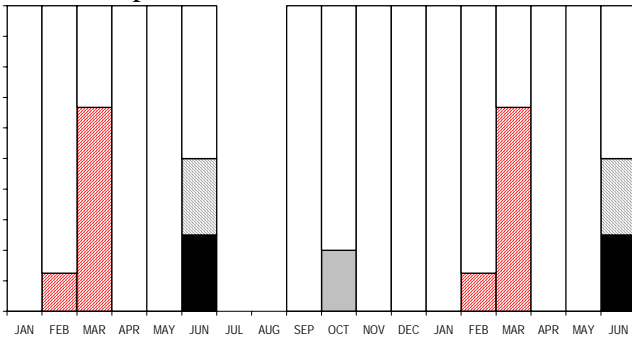
**Other Common Names:** Kogelberg-silver  
 Bottlebrush, *Boomsilwerstompie*.  
**Other Scientific Names:** *None*.

**43 Records**

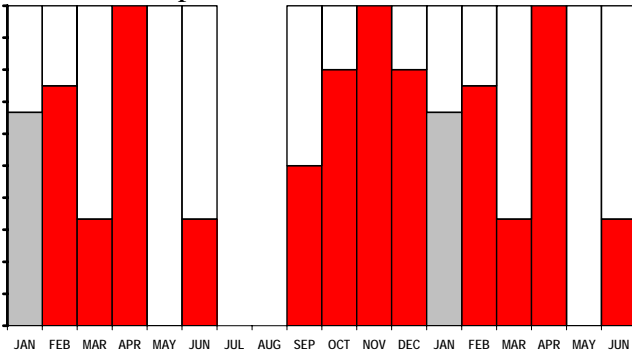
**Population** (43 records): 2% Common,  
 33% Frequent, 63% Rare, 2% Extinct.

**Dispersion** (36 records): 50% clumped,  
 47% variable, 3% widespread.

**Flowering** (41 records with: Jan 3, Feb 8, Mar 3, Apr 1, May 1, Jun 4, Jul 0, Aug 0, Sep 4, Oct 10, Nov 2, Dec 5): Buds from Mar; Flowering not recorded; Peak Flowering from Jun; Over from Jun; Fruit from Oct; Nothing from all year. Peak levels at 67% in Mar. Historically recorded as flowering from Apr to Jun and fruit from Dec to Jan.



**Growth** (40 records with: Jan 3, Feb 8, Mar 3, Apr 1, May 1, Jun 3, Jul 0, Aug 0, Sep 4, Oct 10, Nov 2, Dec 5): Much from Feb to Apr and Jun to Dec; Rare from Jan; None from Dec to Mar and May to Oct. Peak levels at 100% in Apr and Nov.



**Seedlings** (33 records): All without any seedlings present.

**Fire Survival** : No data.

**Age to first flowering:** First flowers recorded at 11 years, 50% estimated at 14 years, and 100% recorded at 11 years, but consistently only at 20 years.



**Height** (42 records): 5% 0-0.2 m tall, 81% 0.2-1 m tall, 12% 1-2 m tall, 2% 2-5 m tall.

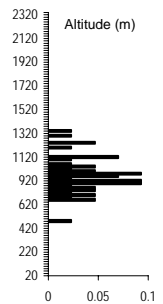
**Pollinators** : No data.

**Detailed Pollinators:** No additional data.

**Habitat:**

**Distance to Ocean** (43 records): 98% inland - further than 2 km from coast.

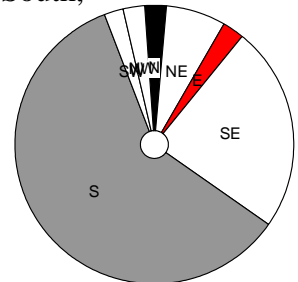
**Altitude** (43 records): 460 - 1240 m;  
 740 *lq* - 820 *med* - 880 *uq*m.



**Landform** (43 records): 56% deep soil, 44% shallow soil.

**Slope** (43 records): 58% steep incline, 19% cliff, 16% gentle incline, 5% hill top, 2% platform.

**Aspect** (42 records): 77% South, 13% East, 6% North, 4% West.



**Soil Type** (43 records):

58% peaty,  
 35% sandy,  
 2% loamy,  
 2% gravelly,  
 2% rocky.

**Soil Colour** (43 records): 42% black, 37% grey, 19% brown, 2% white.

**Geology** (43 records): 100% sandstone.

**Vegetation** (43 records): 100% shrubland.

**Conservation Status and Threat:**

**Red Data List Status:** Endangered

B1a(ii)c(iv)+2a(ii)c(iv).

Occurrence (Fynbos): 94 km<sup>2</sup> with 94% conserved and 0% lost; Occupancy: 45 km<sup>2</sup> with 84% conserved and 0% lost. Fragmentation index: 45%.

**Nature Reserves** (43 records): 95% in nature reserves - well conserved.

**Habitat destruction** (43 records):

100% extensive natural habitat.

**Alien Invasive Species** (42 records): 79% none, 21% *Pinus*.

**Alien Density** (42 records): 79% alien-free, 21% sparse.

**Cultivation & Utilization:**

**Picking** (36 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlasers Notes:**

Still to flower post fire 1991 – 9 years old!  
(MAJY0010202); About 800 plants ranging  
from 200 mm at drier localities to 500 mm  
where more moist (MAJ99102802);  
Recruitment from a single parent: 25 plants  
(MAJ99112803); Occurring only as single  
plants scattered over about 250 m of  
southern ridge top (MAJ96030502);

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

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

**Distribution:** Add.

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*Mimetes argenteus* Salisb. ex Kn. 1909

**Silver Pagoda**

*Vaalstompie*

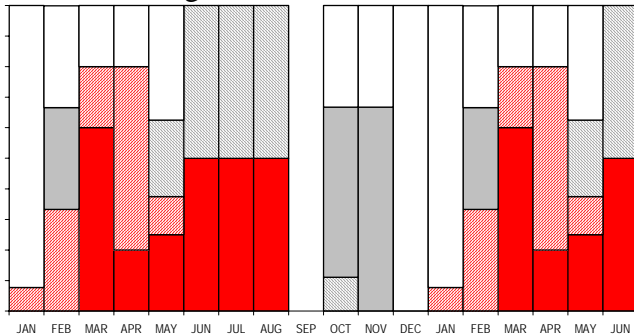
**Other Common Names:** Silver Mimetes, Silver-leaf Bottlebrush, Silvery Mimetes, *Luisbos*, *Silwerblaarstompie*, *Silwerstompie*.  
**Other Scientific Names:** *massonii* RBr 1810, *nitens* (Thunb.) Roen & Schult 1813, 1818.

**63 Records**

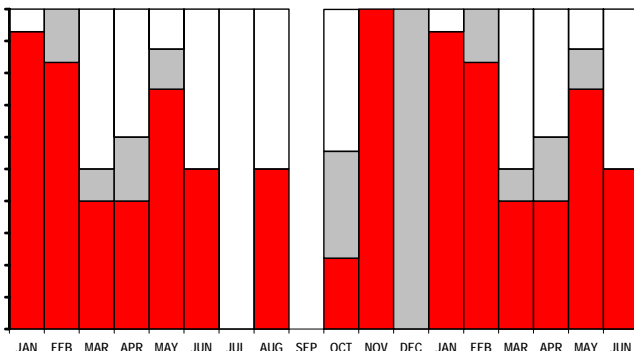
**Population** (63 records): 17% Common, 46% Frequent, 37% Rare.

**Dispersion** (54 records): 70% clumped, 26% variable, 2% evenly distributed, 2% widespread.

**Flowering** (62 records with: Jan 13, Feb 6, Mar 10, Apr 5, May 8, Jun 2, Jul 2, Aug 2, Sep 0, Oct 9, Nov 3, Dec 2): Buds from Feb to Apr; Flowering from Mar to Aug; Peak Flowering not recorded; Over from May to Aug; Fruit from Feb and Oct to Nov; Nothing from Oct to May. Peak levels at 100% in Jun to Aug. Historically recorded as flowering from Mar to Jun.



**Growth** (62 records with: Jan 14, Feb 6, Mar 10, Apr 5, May 8, Jun 2, Jul 1, Aug 2, Sep 0, Oct 9, Nov 3, Dec 2): Much from Jan to Jun and Aug and Oct to Nov; Rare from Apr, Oct and Dec; None from Mar to Apr and Jun to Oct. Peak levels at 100% in Nov to Dec and Jan.



**Seedlings** (33 records): Absent in 88%: fewer seedlings than prefire adults in 1 cases, and more in 1 cases. Seedlings found in Jun and Nov.

**Fire Survival** (10 records): 100% survived by seedlings only.

**Age to first flowering:** First flowers recorded at 6 years, 50% estimated at 6-7 years, and 100% recorded at 8 years.



**Height** (63 records): 3% 0-0.2 m tall, 62% 0.2-1 m tall, 33% 1-2 m tall, 2% 2-5 m tall.

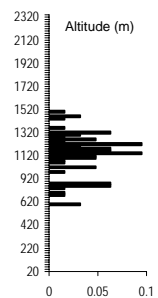
**Pollinators** : No data.

**Detailed Pollinators:** No additional data.

**Habitat:**

**Distance to Ocean** (63 records): 100% inland - further than 2 km from coast.

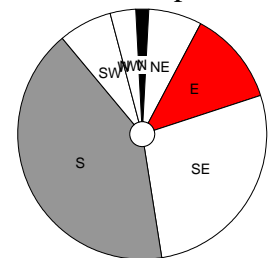
**Altitude** (63 records): 580 - 1400 m; 900<sub>lq</sub> - 1040<sub>med</sub> - 1080<sub>uq</sub>m.



**Landform** (63 records): 62% deep soil, 32% shallow soil, 3% swamp, 3% rocky outcrops.

**Slope** (63 records): 71% steep incline, 24% gentle incline, 5% hill top.

**Aspect** (58 records): 62% South, 27% East, 7% North, 4% West.



**Soil Type** (62 records): 55% sandy, 19% loamy, 18% peaty, 5% rocky, 3% gravelly.

**Soil Colour** (62 records): 52% grey, 34% black, 11% brown, 3% white.

**Geology** (57 records): 96% sandstone, 4% shale.

**Vegetation** (63 records): 98% shrubland, 2% grassland.

**Conservation Status and Threat:**

**Red Data List Status:** Near Threatened B1a(i),b(iii,v)c(iv).

**Occurrence** (Fynbos): 928 km<sup>2</sup> with 47% conserved and 19% lost; Occupancy: 83 km<sup>2</sup> with 76% conserved and 2% lost.

**Fragmentation index:** 7%.

**Nature Reserves** (63 records): 89% in nature reserves - well conserved.

**Habitat destruction** (62 records): 95% extensive natural habitat, 2% islands, 2% naturally linear habitats, 2% naturally fragmented habitats.

**Alien Invasive Species** (62 records): 79% *Pinus*, 18% none, 2% *Hakea*, 2% Fabaceae (chiefly alien *Acacia*).

**Alien Density** (62 records): 18% alien-free, 69% sparse, 5% abundant, 8% dense.

**Cultivation & Utilization:**

**Picking** (48 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

At least 10% of plants dead or nearly dead (AGRY0072609); There has been an apparent increase in the population since 2001, but this is probably due to the older plants being more visible. Total now about 200 plants (NAHY5031301);  
Isolated plant protected from fire in seep (SHR93102302);  
Plants are only by the streams (HCE96052401);

**Confusing Species:** None. Related species are geographically separated.  
Records of identification queries = 3.

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

**Distribution:** Add.

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*Mimetes hottentoticus* Phill. & Hutch. 1923

**Matchstick Pagoda**

*Vuurhoutjiestompie*

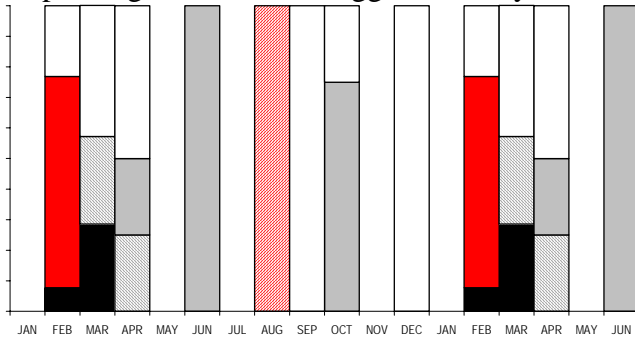
**Other Common Names:** *Vuurhoutjievlabos*.  
**Other Scientific Names:** *None*.

**41 Records**

**Population** (41 records): 22% Common, 44% Frequent, 34% Rare.

**Dispersion** (34 records): 53% clumped, 41% variable, 6% widespread.

**Flowering** (39 records with: Jan 0, Feb 13, Mar 7, Apr 4, May 0, Jun 1, Jul 0, Aug 1, Sep 2, Oct 8, Nov 0, Dec 3): Buds from Aug; Flowering from Feb; Peak Flowering from Mar; Over from Mar to Apr; Fruit from Apr to Jun and Oct; Nothing from Sep to Apr. Peak levels at 77% in Feb. Historically recorded as flowering from Jan to Mar, peaking in Feb with stragglers to May.



**Height** (40 records): 13% 0-0.2 m tall, 45% 0.2-1 m tall, 43% 1-2 m tall.

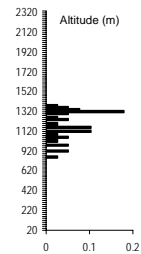
**Pollinators** (4 records): 75% birds, 25% beetles.

**Detailed Pollinators** (3 records): Cape Sugarbird (2), Southern Double-collared Sunbird.

**Habitat:**

**Distance to Ocean** (39 records): 100% inland - further than 2 km from coast.

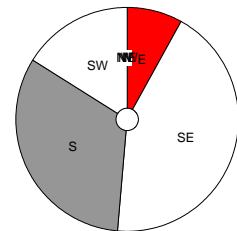
**Altitude** (39 records): 740 - 1280 m; 960 *lq* - 1060 *med* - 1200 *uq*m.



**Landform** (39 records): 72% deep soil, 28% shallow soil.

**Slope** (39 records): 67% steep incline, 26% gentle incline, 5% hill top, 3% cliff.

**Aspect** (37 records): 66% South, 23% East, 11% West.



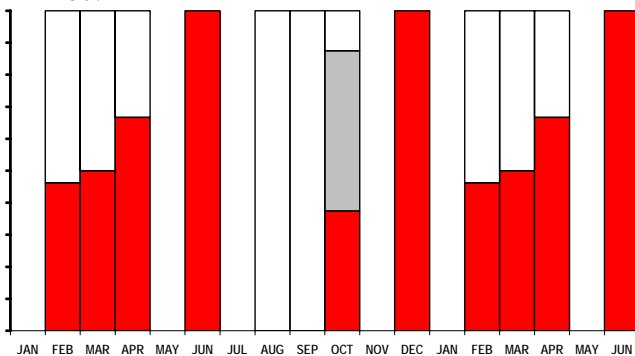
**Soil Type** (39 records): 79% peaty, 13% sandy, 5% loamy, 3% rocky.

**Soil Colour** (39 records): 51% black, 33% grey, 15% brown.

**Geology** (39 records): 100% sandstone.

**Vegetation** (39 records): 100% shrubland.

**Growth** (40 records with: Jan 0, Feb 13, Mar 8, Apr 3, May 0, Jun 1, Jul 0, Aug 1, Sep 2, Oct 8, Nov 0, Dec 4): Much from Oct to Jun; Rare from Oct; None from Feb to Apr and Aug to Sep. Peak levels at 100 in Jun and Dec.



**Seedlings** (29 records): All without any seedlings present.

**Fire Survival** : No data.

**Age to first flowering:** First flowers recorded at 8 years, 50% estimated at 8 years, and 100% recorded at 8 years.

**Conservation Status and Threat:**

**Red Data List Status:** Critically Endangered B1a(ii)c(iv).

**Occurrence** (Fynbos): 17 km<sup>2</sup> with 82% conserved and 0% lost; **Occupancy:** 20 km<sup>2</sup> with 71% conserved and 0% lost. **Fragmentation index:** about 1%.

**Nature Reserves** (39 records): 100% in nature reserves - well conserved.

**Habitat destruction** (39 records): 97% extensive natural habitat, 3% naturally linear habitats.

**Alien Invasive Species** (39 records): 79% none, 21% *Pinus*.

**Alien Density** (39 records): 79% alien-free, 21% sparse.

**Cultivation & Utilization:**

**Picking** (33 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlasers Notes:**

Plants very small for 4 years (MAJ93031309);  
Plants relatively small for age of veld at  
higher altitudes (MAJ93031312);  
A significant number of the plants still had  
mature seed from previous flowering  
occasion despite being in early bud  
(MAJ98081601);  
Area was only 5 yrs old when burned in '95,  
thus seedlings are from previous soil store as  
the plants would not yet have set seed  
(NAH98020702);

**Confusing Species:** Being fairly late maturing,  
identification of young plants using only

immature leaves resulted in some confusion  
with *M. arboreus*.  
Records of identification queries = 5.  
Records of corrected identification queries = 3.

**Variation and Taxonomy:** Add.

**Distribution:** Add.

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*Mimetes saxatilis* Phill. 1911

**Limestone Pagoda**

*Bredasdorpstompie*

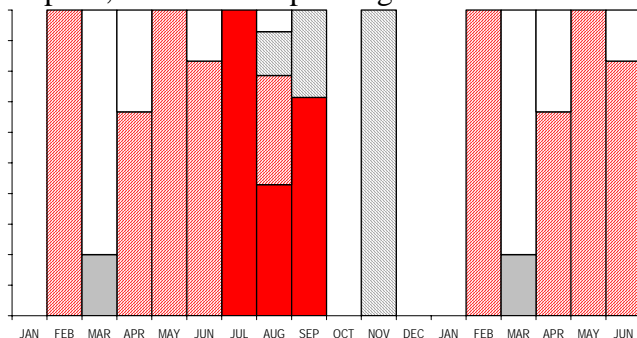
**Other Common Names:** *Geelstompie*, *Rooistompie*, *Stompie*.  
**Other Scientific Names:** *None*.

**58 Records**

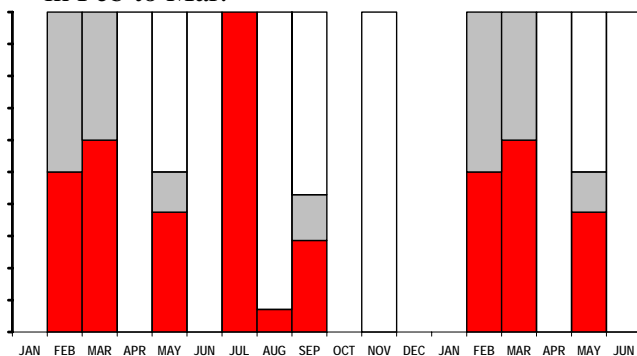
**Population** (55 records): 42% Common, 53% Frequent, 5% Rare.

**Dispersion** (53 records): 68% variable, 30% clumped, 2% evenly distributed.

**Flowering** (53 records with: Jan 0, Feb 3, Mar 5, Apr 6, May 8, Jun 6, Jul 1, Aug 14, Sep 7, Oct 0, Nov 3, Dec 0): Buds from Feb and Apr to Jun and Aug; Flowering from Jul to Sep; Peak Flowering not recorded; Over from Sep to Nov; Fruit from Mar; Nothing from Mar to Apr. Peak levels at 100% in Sep to Feb and May. Historically recorded as flowering from Jul to Dec, with an Aug peak, but erratic depending on rainfall.



**Growth** (52 records with: Jan 0, Feb 2, Mar 5, Apr 6, May 8, Jun 6, Jul 1, Aug 14, Sep 7, Oct 0, Nov 3, Dec 0): Much from Feb to May and Jul and Sep; Rare from Feb to Mar; None from Apr to Nov. Peak levels at 100% in Feb to Mar.



**Seedlings** (16 records): All without any seedlings present.

**Fire Survival:** No data.

**Age to first flowering:** First flowers recorded at 4 years, 50% estimated at 6-8 years, and 100% estimated at 13 years.



**Height** (53 records): 40% 0.2-1 m tall, 60% 1-2 m tall.

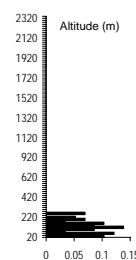
**Pollinators** (2 records): 100% birds.

**Detailed Pollinators** (2 records): Orange-breasted Sunbird.

**Habitat:**

**Distance to Ocean** (58 records): 52% inland - further than 2 km from coast.

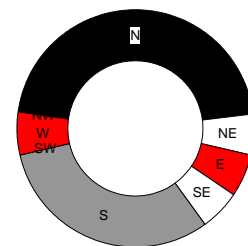
**Altitude** (58 records): 20 - 260 m; 40 lq - 100 med - 120 uq m.



**Landform** (54 records): 67% shallow soil, 31% deep soil, 2% rocky outcrops.

**Slope** (54 records): 46% gentle incline, 30% hill top, 15% steep incline, 7% platform, 2% cliff.

**Aspect** (35 records): 47% North, 34% South, 13% East, 6% West.



**Soil Type** (54 records): 69% sandy, 15% loamy, 11% rocky, 2% clayey, 2% peaty, 2% gravelly.

**Soil Colour** (54 records): 48% grey, 30% brown, 15% black, 7% white.

**Geology** (58 records): 97% limestone, 2% sandstone, 2% Tertiary sands.

**Vegetation** (58 records): 97% shrubland, 3% suburban.

**Conservation Status and Threat:**

**Red Data List Status:** Endangered

B 1a(ii)b(i,ii,iii,iv,v)+2a(ii)b(i,ii,iii,iv,v).

Occurrence (Fynbos): 215 km<sup>2</sup> with 22% conserved and 34% lost; Occupancy: 62 km<sup>2</sup> with 25% conserved and 14% lost. Fragmentation index: 21%.

**Nature Reserves** (58 records): 29% in nature reserves.

**Habitat destruction** (54 records): 72% extensive natural habitat, 15% islands, 13% naturally fragmented habitats.

**Alien Invasive Species** (54 records): 54% Fabaceae (chiefly alien *Acacia*), 46% none.

**Alien Density** (54 records): 46% alien-free, 26% sparse, 24% abundant, 4% dense.

**Cultivation & Utilization:**



**Picking** (37 records): 100% no sign of picking.  
**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**  
About 20% of plants senescent  
(NAH97062001);

**Confusing Species:** None noted.

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

**Distribution:** Add.

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*Mimetes splendidus* Salisb. ex Kn. 1809  
**Splendid Pagoda**  
*Pragstompie*

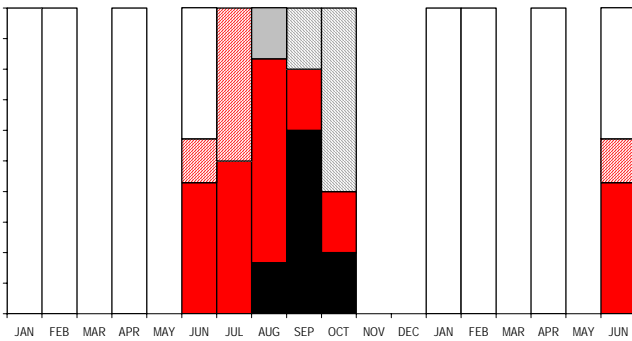
**Other Common Names:** Splendid Mimetes.  
**Other Scientific Names:** *hibbertia* RBr 1809,  
*integrifolia* Hutch. 1912.

**34 Records**

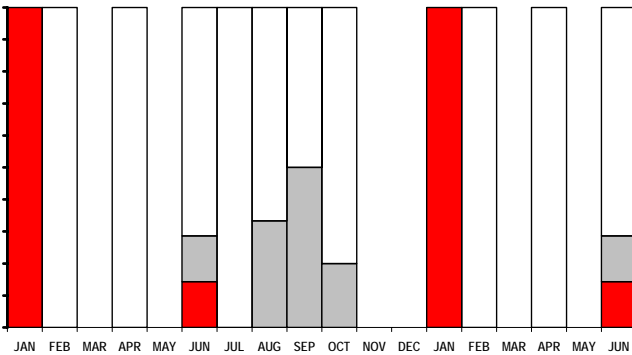
**Population** (34 records): 0% Common,  
 29% Frequent, 65% Rare, 6% Extinct.

**Dispersion** (26 records): 92% clumped,  
 8% evenly distributed.

**Flowering** (30 records with: Jan 3, Feb 1, Mar 0, Apr 1, May 0, Jun 7, Jul 2, Aug 6, Sep 5, Oct 5, Nov 0, Dec 0): Buds from Jul; Flowering from Jun to Oct; Peak Flowering from Sep to Oct; Over from Sep to Oct; Fruit from Aug; Nothing from Jan to Jun. Peak levels at 100% in Jul and Sep to Oct. Historically recorded as flowering from winter with a peak in May to Jul, and fruit from Jan to Feb.



**Growth** (29 records with: Jan 3, Feb 1, Mar 0, Apr 1, May 0, Jun 7, Jul 2, Aug 6, Sep 4, Oct 5, Nov 0, Dec 0): Much from Jan; Rare from Aug to Oct; None from Feb to Oct. Peak levels at 100% in Jan.



**Seedlings** (21 records): Absent in 71%: fewer seedlings than prefire adults in 1 case, and more in 2 cases. Seedlings found in Apr, Jun and Nov.

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

**Age to first flowering:** First flowers recorded at 4 years, 50% estimated at 7 years, and 100% recorded at 8 years.



**Height** (32 records): 6% 0-0.2 m tall, 41% 0.2-1 m tall, 38% 1-2 m tall, 16% 2-5 m tall.

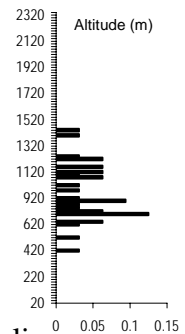
**Pollinators** : No data.

**Detailed Pollinators:** No additional data.

**Habitat:**

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

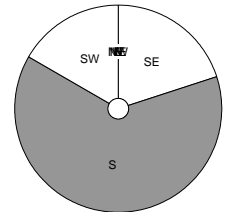
**Altitude** (32 records): 400 - 1340 m; 680 *lq* - 760 *med* - 920 *uq*m.



**Landform** (32 records): 72% deep soil, 16% shallow soil, 9% rocky outcrops, 3% riverine.

**Slope** (32 records): 94% steep incline, 6% gentle incline.

**Aspect** (30 records): 87% South, 8% West, 5% East.



**Soil Type** (32 records): 47% peaty, 38% loamy, 9% sandy, 3% clayey, 3% gravelly.

**Soil Colour** (32 records): 47% black, 31% brown, 16% grey, 6% orange.

**Geology** (32 records): 94% sandstone, 6% shale.

**Vegetation** (32 records): 94% shrubland, 3% grassland, 3% thicket.

**Conservation Status and Threat:**

**Red Data List Status:** Endangered

B1a(i)b(i,ii,iii,iv,v)c(iv)  
 +2a(i)b(i,ii,iii,iv,v)c(iv), C2a(i)b.

Occurrence (Fynbos): 2 255 km<sup>2</sup> with 23% conserved and 21% lost; Occupancy: 51 km<sup>2</sup> with 55% conserved and 5% lost. Fragmentation index: 2%.

**Nature Reserves** (32 records): 72% in nature reserves - well conserved.

**Habitat destruction** (31 records): 97% extensive natural habitat, 3% corridors.

**Alien Invasive Species** (29 records): 66% none, 34% *Pinus*.

**Alien Density** (29 records): 66% alien-free, 31% sparse, 3% abundant.

**Cultivation & Utilization:**

**Picking** (25 records): 100% no sign of picking.  
**Cultivation Status:** No noted cultivation.

**Atlasers Notes:**  
**Monitoring:**

- April '94 fire: Our only two plants died but below (mainly on southern side of parents) are 30 + 11 seedlings respectively (AWA94111701); Jan '95: 45 plants about 160 mm tall. One year after '94 fire there were about 35 seedlings. Two years after there were about 25.5 (1/2 broken off) plants about 440 mm tall, with 9 dead (AWA96062901); 3.8 yrs after fire there were 13 plants about 780 mm tall (AWA98012901); More plants have died, but not as many as Jan Vlok's blikbrein predicted: the plants are now developing flowerheads: 11 plants about 1.08 m tall. (AWA99020601).
- Jan Vlok recorded 2 plants in 1982 and 6 plants in 1983. We could not find any! We discovered a new very healthy plant lower down not seen last year (AWA99012101).

**Notes on small populations:**

Only 2 plants occur – one has about 4 dead branches (HRK94091701); Only 3 plants - all healthy (HRK94091702); 3 living (healthy) plants and 1 dead (HRK98102104); 3 dead

plants seen (OUTY0062401); Only 1 plant (destroyed by fire on 18 Apr 1991) and 50 seedlings (SJJ92042302); At least 2 or 3 plants about 1 m tall seen below the path until 2 years ago, but not this time - no fire within the last 2 years (WIJ93102703); 2 plants growing together in clump above path (AGRY0062913);

**Confusing Species:** Occasionally misidentified by atlassers (and herbarium curators) as *M. fimbriifolius*.

Records of identification queries = 4.

Records of corrected identification queries = 1.

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

**Distribution:** Add.

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*Mimetes stokoei* Phill. & Hutch. 1922

**Mace Pagoda**

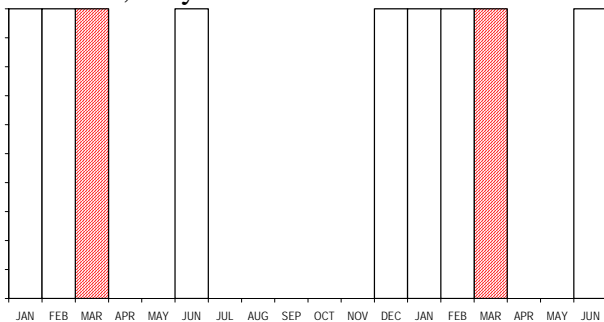
**Other Common Names:** Golden Pagoda, Stokoe's Pagoda, *Gouestompie*.  
**Other Scientific Names:** *None*.

**7 Records**

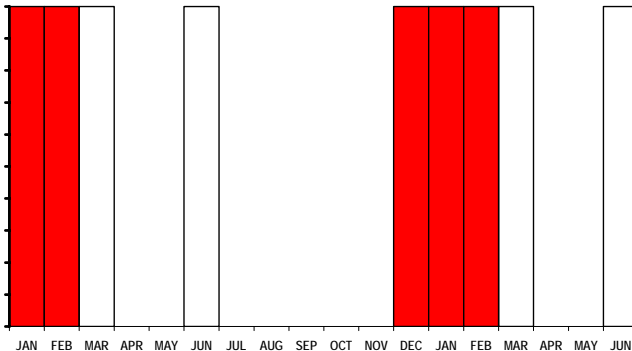
**Population** (7 records): 0% Common, 71% Frequent, 29% Extinct.

**Dispersion** (5 records): 100% clumped.

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



**Growth** (5 records with: Jan 1, Feb 1, Mar 1, Apr 0, May 0, Jun 1, Jul 0, Aug 0, Sep 0, Oct 0, Nov 0, Dec 1): Much from Dec to Feb; Rare not recorded; None from Mar and Jun. Peak levels at 100% in Mar.



**Seedlings** (2 records): All without any seedlings present.

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

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



**Height** (5 records): 20% 0-0.2 m tall, 40% 0.2-1 m tall, 40% 1-2 m tall.

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

**Detailed Pollinators** (2 records): Malachite Sunbird, Cape Sugarbird.

**Habitat:**

**Distance to Ocean** (5 records): 100% inland - further than 2 km from coast.

**Altitude** (5 records): 560 - 580 m; 560<sub>lq</sub> - 580<sub>med</sub> - 580<sub>uq</sub> m.

**Landform** (5 records): 80% deep soil, 20% swamp.

**Slope** (5 records): 100% gentle incline.

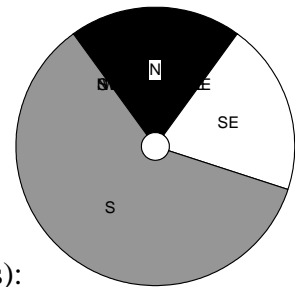
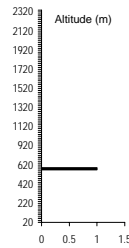
**Aspect** (5 records): 70% South, 20% North, 10% East.

**Soil Type** (5 records): 60% sandy, 40% peaty.

**Soil Colour** (5 records): 60% black, 40% grey.

**Geology** (5 records): 100% sandstone.

**Vegetation** (5 records): 100% shrubland.



**Conservation Status and Threat:**

**Red Data List Status:** Critically Endangered B1a(ii)c(iv)+2a(ii)c(iv), D.

**Occurrence** (Fynbos): 1 km<sup>2</sup> with 100% conserved and 0% lost; **Occupancy:** 3 km<sup>2</sup> with 100% conserved and 0% lost. Fragmentation index invalid.

**Nature Reserves** (5 records): 100% in nature reserves - well conserved.

**Habitat destruction** (5 records): 100% extensive natural habitat.

**Alien Invasive Species** (5 records): 60% none, 40% *Pinus*.

**Alien Density** (5 records): 60% alien-free, 20% sparse, 20% abundant.

**Cultivation & Utilization:**

**Picking** (4 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

Marie Vogts' research site - site of last sighting - None visible now! (APE91082410); Some 16 plants found by Mark and Amida Johns two weeks ago - Site inspection and confirmation by John Rourke with Chris Burgers and Ruida Pool: to be kept secret till flowering to give plants a chance (AGRY1012601); All plants have survived since they were first counted as 150 mm tall plants (NGFY3060701 PN); There are 24 Plants (AMMY3120601); A single additional plant found 100 m SE of others towards gulley (AGRY4031604);

**Confusing Species:** None.

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

**Distribution:** Add.

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*Mimetes cucullatus* (L.) R.Br. 1753, 1810

**Common Pagoda**

*Rooistompie*

**Other Common Names:** Lyre-bearing Mimetes, Red Bottlebrush, Red Pagoda, Red Stump, Redflamebush, *Dronkstompie*, *Rooitoppies*, *Soldaat*, *Stompie*, *Vuurstompies*.

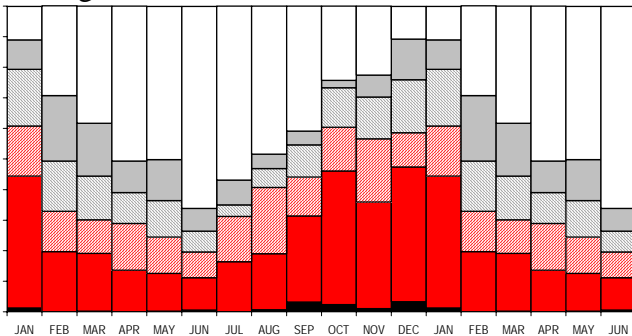
**Other Scientific Names:** *dregei* Gand & Schinz 1913, *laxifolia* Gand & Schinz 1913, *ludwigii* Steud ex Meisn 1856, *lyrigeria* Salisb. ex Knight 1809, *mixta* Gand 1901, *schinziana* Gand 1913.

**6871 Records**

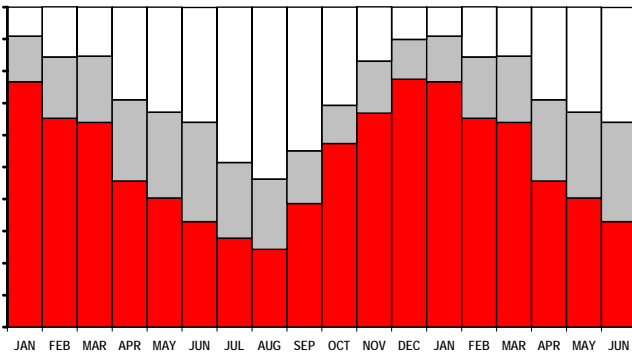
**Population** (6823 records): 0.1% Abundant, 17% Common, 69% Frequent, 14% Rare, 0.0% Extinct.

**Dispersion** (6261 records): 63% variable, 31% clumped, 5% widespread, 0.9% evenly distributed.

**Flowering** (6617 records with: Jan 677, Feb 538, Mar 652, Apr 536, May 403, Jun 310, Jul 371, Aug 535, Sep 773, Oct 797, Nov 633, Dec 392): Buds from Aug and Nov; Flowering from Sep to Jan; Peak Flowering from none; Over from Dec to Feb; Fruit from Feb to Mar; Nothing from Feb to Nov. Peak levels at 80% in Jan. Historically recorded as flowering from all year, but mainly from Aug to Mar.



**Growth** (6574 records with: Jan 669, Feb 530, Mar 655, Apr 541, May 401, Jun 306, Jul 360, Aug 526, Sep 769, Oct 791, Nov 631, Dec 395): Much from all year; Rare from Mar to Aug; None from Apr to Oct. Peak levels at 91% in Jan.

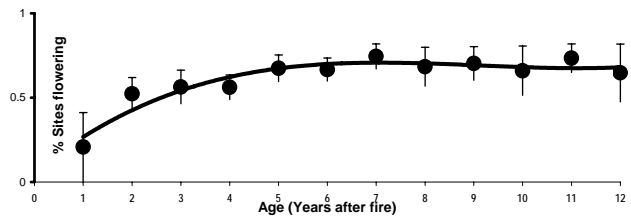


**Seedlings** (2693 records): Absent in 94%: fewer seedlings than prefire adults in 60 cases, and more in 24 cases. Seedlings found in Jan

(10), Feb (6), Mar (5), Apr (2), May (5), Jun (7), Jul (10), Aug (10), Sep (12), Oct (4), Nov (5) and Dec (8) – exceptional for a resprouter.

**Fire Survival** (479 records): 95% resprouted from underground boles, 2% survived by seedlings only, 2% resprouted from aerial trunks, 0.8% escaped fires in fire-safe areas, 0.6% eliminated from the area by fires.

**Age to first flowering:** First flowers recorded at 1 years, 50% estimated at 2 years, and 100% recorded at 18 years.



**Height** (6682 records): 2% 0-0.2 m tall, 87% 0.2-1 m tall, 11% 1-2 m tall, 0.1% 2-5 m tall.

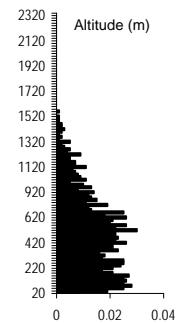
**Pollinators** (92 records): 85% birds, 7% bees or wasps, 3% beetles, 3% none observed, 2% butterflies or moths.

**Detailed Pollinators** (76 records): Cape Sugarbird (41), Orange-breasted Sunbird (26), Honey Bee (5), Malachite Sunbird (2), Table Mountain Beauty Butterfly, Great Protea Beetle.

**Habitat:**

**Distance to Ocean** (6725 records): 90% inland - further than 2 km from coast.

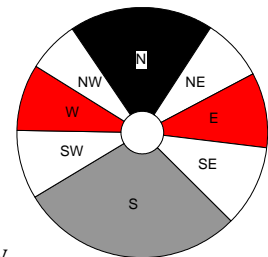
**Altitude** (6725 records): 20 - 1660 m; 220 *lq* - 440 *med* - 640 *uq*m.



**Landform** (6563 records): 77% deep soil, 18% shallow soil, 4% rocky outcrops, 1% swamp, 0.3% riverine, 0.0% lake edge.

**Slope** (6564 records): 50% gentle incline, 34% steep incline, 7% platform, 7% hill top, 2% valley bottom, 0.7% cliff, 0.1% dunes.

**Aspect** (5838 records): 39% South, 26% North, 18% East, 16% West.



**Soil Type** (6538 records): 56% sandy, 26% loamy, 6% gravelly, 5% peaty, 4% rocky, 3% clayey.

**Soil Colour** (6520 records): 56% grey, 24% brown, 11% black, 5% white, 2% orange, 2% yellow, 0.2% red.

**Geology** (6506 records): 87% sandstone, 8% shale, 2% silcrete or ferricrete, 2% Tertiary sands, 0.7% limestone, 0.6% granite, 0.2% conglomerate.  
**Vegetation** (6693 records): 98% shrubland, 1% plantations, 0.6% grassland, 0.1% thicket, 0.1% agricultural lands, 0.0% woodland, 0.0% suburban, 0.0% forest.

**Conservation Status and Threat:**

**Red Data List Status:** Least Concern.  
Occurrence (Fynbos): 29 872 km<sup>2</sup> with 23% conserved and 19% lost; Occupancy: 4 133 km<sup>2</sup> with 33% conserved and 17% lost. Fragmentation index: 6%.

**Nature Reserves** (6725 records): 46% in nature reserves.

**Habitat destruction** (6450 records): 94% extensive natural habitat, 3% islands, 2% naturally linear habitats, 0.7% road verges, 0.3% naturally fragmented habitats, 0.2% corridors, 0.0% patches.

**Alien Invasive Species** (6394 records): 42% none, 29% *Pinus*, 14% Fabaceae (chiefly alien *Acacia*), 12% *Hakea*, 2% Myrtaceae, 0.1% other aliens, 0.0% annual alien grasses.

**Alien Density** (6378 records): 42% alien-free, 45% sparse, 9% abundant, 3% dense, 0.4% impenetrable.

**Cultivation & Utilization:**

**Picking** (4555 records): 100% no sign of picking, 0.2% lightly picked, 0.0% severely picked.

**Cultivation Status:** Plantings - 2 records (0.03%).

**Witch's Broom Infestation:** 1 records (0.01%).

**Atlassers Notes:**

**Habit:**

- Sprawling over the rocks (JBB98041204); Sprawling growth form (GEH93050901); Low-growing and sprawling (WIJ98072508);
- The tallest I have come across - 3 m - can you beat it ! (VJK96080401);

**Colour and growth habit:**

- Deep cherry red colour: (OUT94040909, OUT95111805+9, OUT96110905+6)
- Normal red form (not yellow dwarf) (AGRY1020112);
- Yellow colour form: (AGR96021712, AGR96081009, AGRY1022813, AMMY1013104+5, AMMY1020119, LYM97081603, NGFY3012601, PVR92121903, SJJ92042304, VJK94060504)
- Dwarf yellow form: (AGR96020402, ASP94120309, DEB99021809, SJJ92062104)
- Insipid small, pale-yellow form: (AGRY3103121+4)
- Dwarf form: (AGRY0072008, AGRY0090815, DEB99010604, DEB99010622, DEB99022201, JIDY0072005+6)
- Silver-leaf form: (AGRY0010807+9)
- Looked different: grey-green hairy leaves (VJK93041802); Leaves copper-brown top to bottom (VJK93052303);
- Includes yellow variant (CJL96121501, CJL96121601); Half of population a much smaller yellow form (AMMY3103112);

- Not typical: stunted, branched and flowers more protruding (PVR93092404); A few plants appear unusual in having dark red hairy flattened topmost leaves vaguely like *M. hirtus* but these are resprouting (TLEY0010902);

**Flowering:**

- Not blooming whereas in full bloom a few km away (AWA94092702, AWA94102501, AWA96111206, VJK93022104, VJK93101001);

**Resprouting:**

- Resprouting plants flowered for 2nd time after fire – veld age is about 3 years (AWA95092701);
- Many with single stems (WIJY1010202);

**Mortality:**

- Stressed (AWA99092804, AWAY0100602, DFJ99092401, SHR98092602); Poor condition (CNR95041301, CVV95072508); Unhealthy looking (AKS92061207, SMRY0032903); Dying back (TLEY0031203, WIJY0102807), Dead plants (AGR96020308, SMRY0032903), Dead plants - looks like it has been very dry (VCH99040805); Very stressed and dying – driest winter in recorded history (WMPY0110402)

**Grazing:**

- One bush very heavily grazed - almost no leaves = a very sorry bush (AGRY0011336); Heavily grazed by sheep (SHRY0072902);

**Misc:**

- The absence of plants is noted: seen flowering here profusely first 1-2 seasons after '86 fire - first noted Dec '86 – 10 months after fire - last time seen in area burnt was Mar '90 in flower – and following Mar '91 fire seen in flower in Feb '92 and Dec '93 (TLE95011009);
- One bush with all heads with cetonid beetles - ca 20 mm long, brown spots - typically seen in protea heads. Was a yellow dwarf form –might these be pollinated by beetles? (ASP94120309);
- Seems to proliferate under the pine trees (WEL94043002, WEL94050108);

**Confusing Species:** Occasionally mistaken for *M. fimbriifolius*, but resprouting habit is diagnostic in genus. A form of *Leucospermum oleifolium* is indistinguishable from a distance of more than 1 m.

Records of identification queries = 50

**Variation and Taxonomy:** Dwarf forms with smaller heads and narrower leaves occur “randomly within” the range, and are reputedly encountered with intermediates (Rourke 1984). Colour variations include a yellow-green confluence form, but again are reputedly encountered with intermediates (Rourke 1984). Atlassers additionally noted sprawling forms and silver-leaf forms, but only one record of intermediate forms between the typical and yellow form was noted.

**Distribution:** Add.

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# *Mimetes fimbriifolius* Salisb. ex Kn. 1809

## Tree Pagoda

### *Maanhaarstompie*

**Other Common Names:** Fringe-leaf Mimetes, Fringed Bottlebrush.

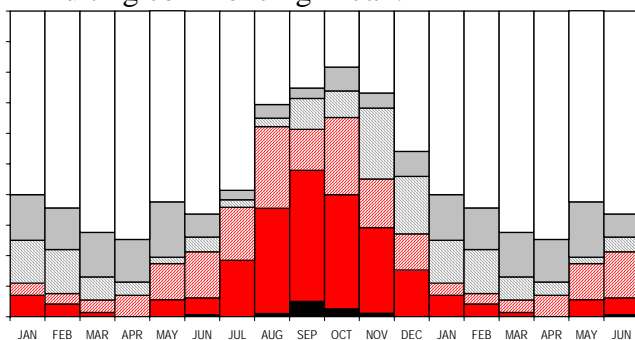
**Other Scientific Names:** *cucullatus* (Lam) 1792, *hartogii* RBr 1810.

#### 1610 Records

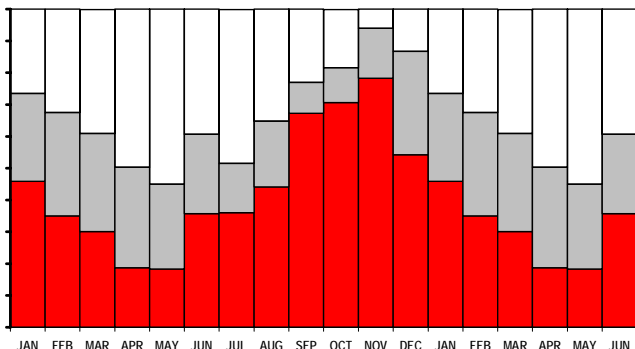
**Population** (1606 records): 10% Common, 64% Frequent, 26% Rare, 0.1% Extinct.

**Dispersion** (1433 records): 67% variable, 26% clumped, 6% widespread, 1% evenly distributed.

**Flowering** (1554 records with: Jan 100, Feb 118, Mar 145, Apr 158, May 144, Jun 146, Jul 162, Aug 180, Sep 119, Oct 115, Nov 82, Dec 85): Buds from Jul to Nov; Flowering from Aug to Nov; Peak Flowering from no month; Over from Nov; Fruit from no month; Nothing from Nov to Sep. Peak levels at 74% in Oct. Historically recorded as flowering from all year, but erratically with a Jul to Dec high and a Sep peak, and fruiting commencing in Jan.



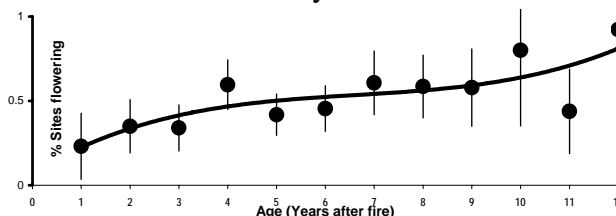
**Growth** (1518 records with: Jan 98, Feb 120, Mar 146, Apr 155, May 131, Jun 140, Jul 161, Aug 179, Sep 113, Oct 109, Nov 83, Dec 83): Much from Jun to Mar; Rare from Dec to Jun and Aug; None from Jan to Sep. Peak levels at 94% in Nov.



**Seedlings** (483 records): Absent in 85%: fewer seedlings than prefire adults in 30 cases, and more in 7 cases. Seedlings found in Jan, Feb, Mar (3), Apr, May (4), Jun, Jul (9), Aug (8), Sep (4), Oct (2) and Nov (3).

**Fire Survival** (257 records): 46% resprouted from aerial trunks, 45% escaped fires in fire-safe areas, 5% survived by seedlings only,

2% resprouted from underground boles, 1% eliminated from the area by fires.  
**Age to first flowering:** First flowers recorded at 1 years, 50% estimated at 6-7 years, and 100% recorded at 17 years.



**Height** (1594 records): 0.5% 0-0.2 m tall, 10% 0.2-1 m tall, 63% 1-2 m tall, 26% 2-5 m tall, 0.1% taller than 5 m.

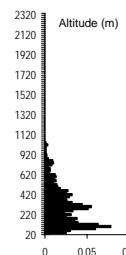
**Pollinators** (16 records): 94% birds, 6% bees or wasps.

**Detailed Pollinators** (17 records): Orange-breasted Sunbird (9), Cape Sugarbird (4), Malachite Sunbird (2), Red-winged Starling, Honey Bee.

#### Habitat:

**Distance to Ocean** (1568 records): 52% coastal - less than 2 km from coast.

**Altitude** (1572 records): 20 - 940 m; 100<sub>lq</sub> - 240<sub>med</sub> - 340<sub>uq</sub>m.



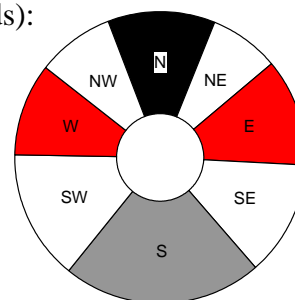
#### Landform

(1567 records): 73% deep soil, 16% shallow soil, 10% rocky outcrops, 0.4% swamp, 0.2% riverine, 0.1% lake edge.

**Slope** (1555 records): 58% gentle incline, 18% steep incline, 14% platform, 9% hill top, 2% valley bottom, 0.1% cliff, 0.1% dunes.

#### Aspect

(1270 records): 36% South, 22% West, 22% East, 20% North.



#### Soil Type

(1565 records): 92% sandy, 5% loamy, 1% rocky, 1% gravelly, 0.6% peaty, 0.1% clayey.

**Soil Colour** (1564 records): 74% grey, 13% white, 9% brown, 3% black, 0.5% yellow, 0.5% orange, 0.1% red.

**Geology** (1540 records): 98% sandstone, 0.6% silcrete or ferricrete, 0.5% shale, 0.4% granite, 0.4% Tertiary sands.

**Vegetation** (1568 records): 99% shrubland, 0.5% grassland, 0.1% wooded grassland, 0.1% thicket, 0.1% plantations.

#### Conservation Status and Threat:

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



Occurrence (Fynbos): 326 km<sup>2</sup> with 62% conserved and 29% lost; Occupancy: 295 km<sup>2</sup> with 70% conserved and 15% lost. Fragmentation index: 67%.

**Nature Reserves** (1572 records): 89% in nature reserves - well conserved.

**Habitat destruction** (1543 records): 97% extensive natural habitat, 2% naturally linear habitats, 0.6% islands, 0.3% naturally fragmented habitats, 0.1% corridors, 0.1% patches.

**Alien Invasive Species** (1494 records): 55% none, 27% Fabaceae (chiefly alien *Acacia*), 16% *Pinus*, 1% *Hakea*, 0.8% Myrtaceae, 0.1% other aliens.

**Alien Density** (1488 records): 55% alien-free, 38% sparse, 6% abundant, 0.8% dense.

#### **Cultivation & Utilization:**

**Picking** (895 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

#### **Atlassers Notes:**

##### **Demography:**

- Appears to have had a population crash from common before fire to just 2 plants (AGRY1101402); About 2/3 plants dead in some localized patches (shallower soil than normal – no fire) (AGRY4041105); Some old plants have died – senescence? (PVR93053002).

##### **Killed by fire:**

- 50% of large plants (AKS92081204); About 30% (AKS92081205); Taller specimens not killed (AKS93081203); Sole survivor is half dead from scorching (AKS94072706); 80% survival (GYC95111601); About 50% escaped - lots of young plants (HCE96060105); 60-70% of adult plants killed (PVR92060604); About 25% killed (PVR92061602); Most adults killed

(PVR93070704); Only largest trees have survived (PVR97081503);

- 3 height classes reflecting previous survival from fires BAW99112102;

- Seedlings only - no live large plants (CVV95070605+6);

- Big plants protected somewhat by rocks (CVVY0102202);

- All large plants destroyed in this area by last fire - many small plants spread through out area (FBH95091003);

##### **Habitat:**

- Clustered at top of slope (AKS92081201); Confined to ridges (TLE94070213, TLEY0062504); On koppies (TLE96101302, TLE97082408); On koppies and ridges (TLE97081004); On rocky outcrops (TLE93010213, TLE96101305, TLE97050303, TLE98062010); Especially on slightly higher ground (TLE96101901); Lower down on slopes (TLE91092204); More prevalent relative to *Ls* cono on higher ground (TLE94061109); Took over from *Ls* cono on shallow soil (TLE96030303); Growth Very Stunted Compared With Lower Slopes (PVR97081503);

**Confusing Species:** Misidentified with *M. cucullatus* and *Leucospermum conocarpodendron*, especially when not in flower.

Records of identification queries = 39

Records of corrected identification queries = 34.

**Variation and Taxonomy:** Add.

**Distribution:** Add.

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*Mimetes chrysanthus* Rourke 1988  
Golden Pagoda  
Gouestompie

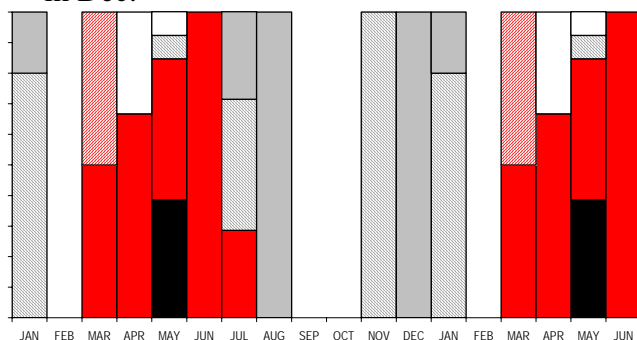
**Other Common Names:** None known.  
**Other Scientific Names:** *None*.

**44 Records**

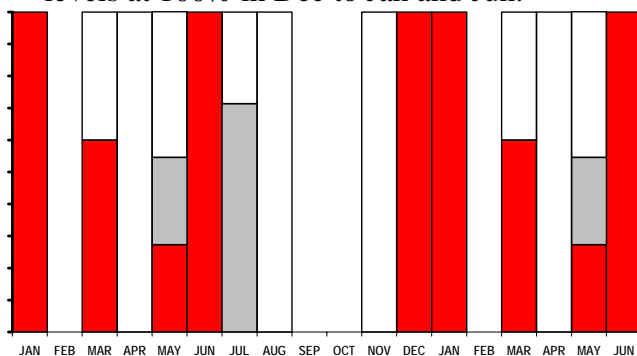
**Population** (44 records): 11% Common, 73% Frequent, 14% Rare, 2% Extinct.

**Dispersion** (41 records): 37% variable, 37% clumped, 24% evenly distributed, 2% widespread.

**Flowering** (43 records with: Jan 5, Feb 0, Mar 6, Apr 6, May 13, Jun 2, Jul 7, Aug 2, Sep 0, Oct 0, Nov 1, Dec 1): Buds from Mar; Flowering from Mar to Jul; Peak Flowering from May; Over from Jan, Jul and Nov; Fruit from Dec to Jan and Jul to Aug; Nothing from Apr. Peak levels at 100% in Mar and Jun. Historically recorded as flowering from Mar to Jul, peaking in Apr to May with fruit in Dec.



**Growth** (39 records with: Jan 5, Feb 0, Mar 5, Apr 5, May 11, Jun 2, Jul 7, Aug 2, Sep 0, Oct 0, Nov 1, Dec 1): Much from Dec to Mar and May to Jun; Rare from May and Jul; None from Mar to May and Jul to Nov. Peak levels at 100% in Dec to Jan and Jun.



**Seedlings** (24 records): Absent in 75%: more seedlings than prefire adults in 3 cases. Seedlings found in May and Jul (2).

**Fire Survival** (4 records): 50% eliminated from the area by fires, 50% survived by seedlings only.

**Age to first flowering:** First flowers recorded at 2 years, 50% estimated at 2-4 years, and 100% recorded at 7 years.



**Height** (43 records): 7% 0-0.2 m tall, 23% 0.2-1 m tall, 60% 1-2 m tall, 9% 2-5 m tall.

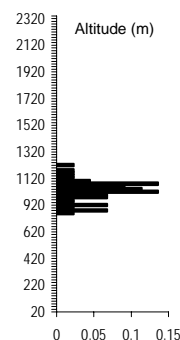
**Pollinators** (12 records): 50% bees or wasps, 33% beetles, 17% birds.

**Detailed Pollinators** (2 records): Carpenter Bee (1), Cape Sugarbird (1).

**Habitat:**

**Distance to Ocean** (44 records): 100% inland - further than 2 km from coast.

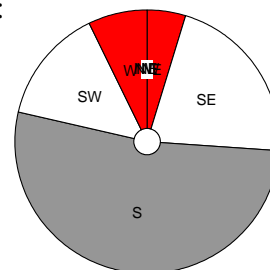
**Altitude** (44 records): 740 - 1120 m; 860 *lq* - 920 *med* - 940 *uq* m.



**Landform** (44 records): 59% shallow soil, 32% deep soil, 9% rocky outcrops.

**Slope** (44 records): 77% steep incline, 18% gentle incline, 5% hill top.

**Aspect** (42 records): 71% South, 14% East, 14% West.



**Soil Type** (44 records): 43% sandy, 39% loamy, 16% rocky, 2% gravelly.

**Soil Colour** (43 records): 53% grey, 30% brown, 14% black, 2% orange.

**Geology** (44 records): 100% sandstone.

**Vegetation** (44 records): 100% shrubland.

**Conservation Status and Threat:**

**Red Data List Status:** Vulnerable D2(ii).

Occurrence (Fynbos): 108 km<sup>2</sup> with 45% conserved and 2% lost; Occupancy: 37 km<sup>2</sup> with 49% conserved and 1% lost. Fragmentation index: 20%.

**Nature Reserves** (44 records): 43% in nature reserves.

**Habitat destruction** (43 records): 93% extensive natural habitat, 7% islands.

**Alien Invasive Species** (44 records): 57% none, 39% *Hakea*, 5% *Pinus*.

**Alien Density** (44 records): 57% alien-free, 43% sparse.

**Cultivation & Utilization:**

**Picking** (26 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

Baboon damage to plants; both old and more recent damage (MAJ92050901);

**Confusing Species:** None.

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

**Distribution:** Add.

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*Mimetes capitulatus* R.Br. 1810 typical form  
**Conical Pagoda**  
*Skraalstompie*

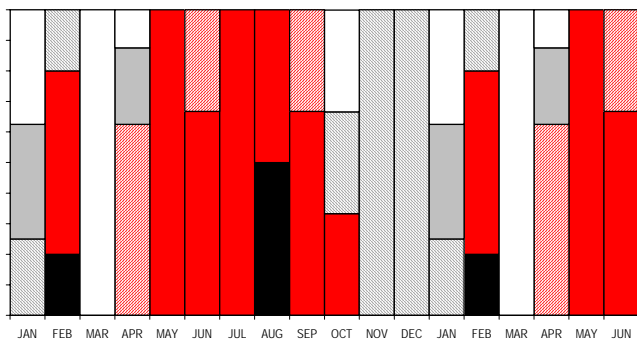
**Other Common Names:** None known.  
**Other Scientific Names:** *None*.

**40 Records**

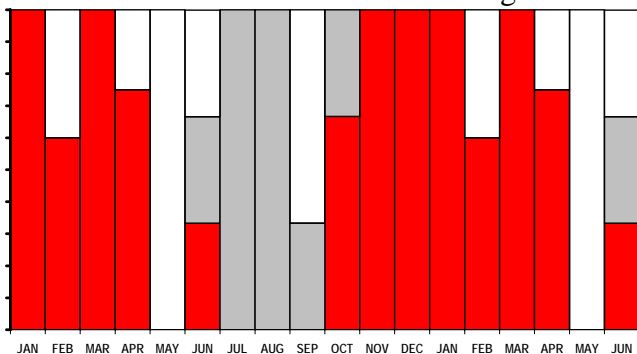
**Population** (39 records): 8% Common, 54% Frequent, 38% Rare.

**Dispersion** (36 records): 47% clumped, 44% variable, 6% evenly distributed, 3% widespread.

**Flowering** (40 records with: Jan 8, Feb 5, Mar 2, Apr 8, May 2, Jun 3, Jul 1, Aug 2, Sep 3, Oct 3, Nov 2, Dec 1): Buds from Apr, Jun and Sep; Flowering from Feb and May to Oct; Peak Flowering from Feb and Aug; Over from Oct to Feb; Fruit from Jan and Apr; Nothing from Jan, Mar 100 and Oct. Peak levels at 100% in Feb and May to Sep and Nov to Dec. Historically recorded as flowering from Jun to Dec, peaking in Aug, with fruit from Nov to Feb.



**Growth** (40 records with: Jan 8, Feb 5, Mar 2, Apr 8, May 2, Jun 3, Jul 1, Aug 2, Sep 3, Oct 3, Nov 2, Dec 1): Much from Oct to Apr and Jun; Rare from Jun to Oct; None from Feb and Apr to Jun and Sep. Peak levels at 100% in Oct to Jan and Mar and Jul to Aug.



**Seedlings** (32 records): All without any seedlings present.

**Fire Survival** (3 records): 100% survived by seedlings only.

**Age to first flowering:** First flowers recorded at 4 years, 50% estimated at 4-5 years, and 100% recorded at 6 years.



**Height** (37 records): 5% 0-0.2 m tall, 81% 0.2-1 m tall, 14% 1-2 m tall.

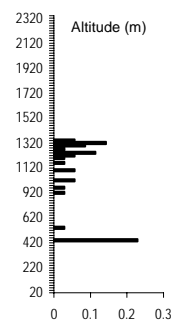
**Pollinators** : No data.

**Detailed Pollinators:** No additional data.

**Habitat:**

**Distance to Ocean** (34 records): 100% inland - further than 2 km from coast.

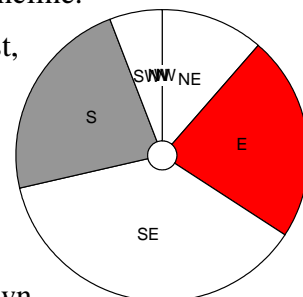
**Altitude** (34 records): 420 - 1240 m; 800 *lq* - 1120 *med* - 1160 *uq*m.



**Landform** (34 records): 68% deep soil, 21% swamp, 12% shallow soil.

**Slope** (34 records): 53% steep incline, 47% gentle incline.

**Aspect** (34 records): 49% South, 44% East, 4% North, 3% West.



**Soil Type** (34 records): 53% peaty, 47% sandy.

**Soil Colour** (34 records): 59% grey, 26% black, 15% brown.

**Geology** (34 records): 100% sandstone.

**Vegetation** (34 records): 100% shrubland.

**Conservation Status and Threat:**

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

Occurrence (Fynbos): 453 km<sup>2</sup> with 24% conserved and 45% lost; Occupancy: 23 km<sup>2</sup> with 54% conserved and 9% lost.  
 Fragmentation index: 5%.

**Nature Reserves** (34 records): 94% in nature reserves - well conserved.

**Habitat destruction** (34 records): 94% extensive natural habitat, 6% islands.

**Alien Invasive Species** (33 records): 61% none, 39% *Pinus*.

**Alien Density** (33 records): 61% alien-free, 36% sparse, 3% dense.

**Cultivation & Utilization:**

**Picking** (34 records): 94% no sign of picking, 6% lightly picked.

**Cultivation Status:** Plantings - 1 records (3%).

**Atlasers Notes:**

Branches bare except for last 300 mm - few  
branches - Some almost 2 m tall: moribund?  
(MAJ92060801);  
Excessive Vlei Rat activity as well as on  
*Witsenia* And *Nebelia* (MAJ98062501);  
Very odd locality in a low lying vlei  
(MAJ97091401).

**Confusing Species:** None.  
Records of identification queries = 3

**Variation and Taxonomy:** We have separated  
the two forms of the species that atlasers

have discovered. This is the spreading leaf  
form that forms low rounded bushes. Rourke  
(1984) mentions the two growth forms, but  
has the Paardeberg form as the mature  
version of this form – this is not borne out by  
field observations.

**Distribution:** Add.

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*Mimetes capitulatus* R.Br. 1810 Platberg form  
Ice-cream Cone Pagoda

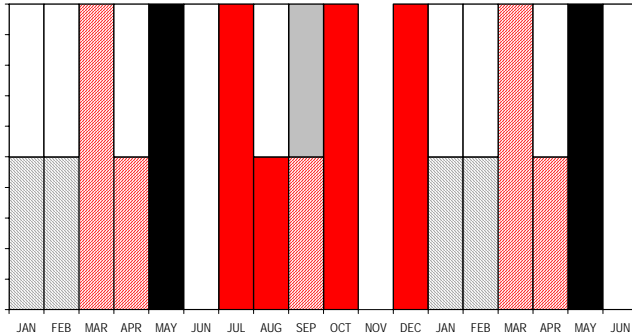
**Other Common Names:** None known.  
**Other Scientific Names:** *None*.

**19 Records**

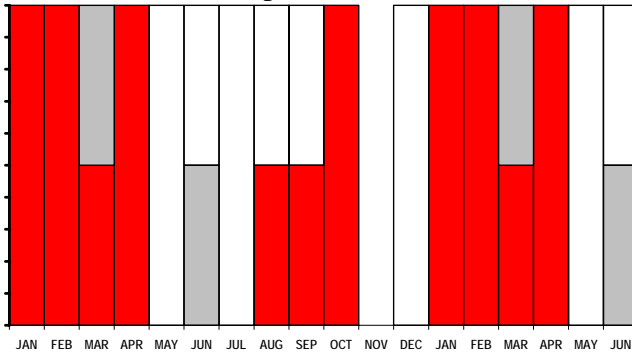
**Population** (19 records): 0% Common, 42% Frequent, 58% Rare.

**Dispersion** (18 records): 94% clumped, 6% variable.

**Flowering** (19 records with: Jan 2, Feb 2, Mar 2, Apr 2, May 1, Jun 2, Jul 2, Aug 2, Sep 2, Oct 1, Nov 0, Dec 1): Buds from Mar to Apr and Sep; Flowering from Jul to Aug and Oct to Dec; Peak Flowering from May; Over from Jan to Feb; Fruit from Sep; Nothing from Jan to Feb and Apr and Jun 100 and Aug. Peak levels at 100% in Mar, May, Jul, Oct and Dec. Historically recorded as flowering from Jun to Dec, peaking in Aug, with fruit from Nov to Feb.



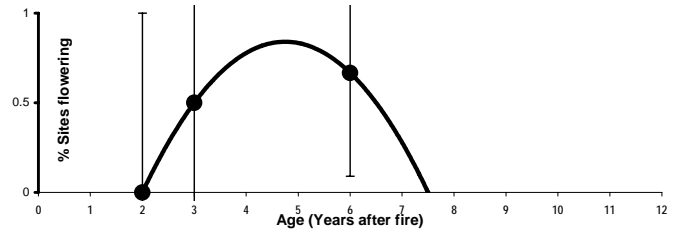
**Growth** (19 records with: Jan 2, Feb 2, Mar 2, Apr 2, May 1, Jun 2, Jul 2, Aug 2, Sep 2, Oct 1, Nov 0, Dec 1): Much from Jan to Apr and Aug to Oct; Rare from Mar and Jun; None from May to Sep and Dec. Peak levels at 100% in Jan to Apr and Oct.



**Seedlings** (9 records): All without any seedlings present.

**Fire Survival** (3 records): 67% survived by seedlings only, 33% eliminated from the area by fires.

**Age to first flowering:** First flowers recorded at 3 years, 50% estimated at 3 years, and 100% estimated at about 10 years.



**Height** (18 records): 6% 0-0.2 m tall, 61% 0.2-1 m tall, 33% 1-2 m tall.

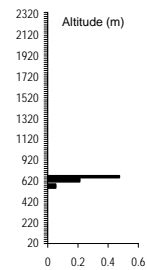
**Pollinators** : No data.

**Detailed Pollinators:** No additional data.

**Habitat:**

**Distance to Ocean** (19 records): 100% inland - further than 2 km from coast.

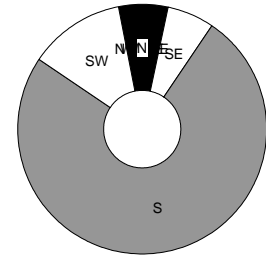
**Altitude** (19 records): 540 - 660 m; 600<sub>lq</sub> - 620<sub>med</sub> - 640<sub>uq</sub> m.



**Landform** (19 records): 84% deep soil, 5% riverine, 5% swamp, 5% rocky outcrops.

**Slope** (19 records): 58% gentle incline, 21% hill top, 16% steep incline, 5% platform.

**Aspect** (16 records): 81% South, 9% West, 6% North, 3% East.



**Soil Type** (19 records):

42% peaty, 37% loamy, 16% sandy, 5% rocky.

**Soil Colour** (19 records): 37% black, 37% brown, 21% grey, 5% white.

**Geology** (19 records): 95% sandstone, 5% conglomerate.

**Vegetation** (19 records): 100% shrubland.

**Conservation Status and Threat:**

**Red Data List Status:** Critically Endangered B1a(ii)c(iv)+2a(ii)c(iv), D.

**Occurrence (Fynbos):** 5 km<sup>2</sup> with 100% conserved and 0% lost; Occupancy: 9 km<sup>2</sup> with 100% conserved and 0% lost.

**Fragmentation index:** invalid.

**Nature Reserves** (19 records): 100% in nature reserves - well conserved.

**Habitat destruction** (19 records): 100% extensive natural habitat.

**Alien Invasive Species** (19 records): 95% none, 5% *Pinus*.

**Alien Density** (19 records): 95% alien-free, 5% sparse.

**Cultivation & Utilization:**

**Picking** (12 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

None.

**Confusing Species:** None.

Records of identification queries = 2.

**Variation and Taxonomy:** This form produces a rounded low bush of vegetative leaves, from which arise long, erect, sparsely-branched reproductive stems. Flowersheads are seldom produced except on

these branches. The leaves tightly clasp the stem, especially on the reproductive stems.

**Distribution:** Add.

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*Mimetes hirtus* (L.) Salisb. ex Kn. 1760, 1809

**Marsh Pagoda**

*Vleistompie*

**Other Common Names:** Hairy Mimetes, Pineapplebush, Red-and-yellow Bottlebrush, Tall Pagoda, *Kreupelboom*, *Pynappelstompie*, *Stompie*.

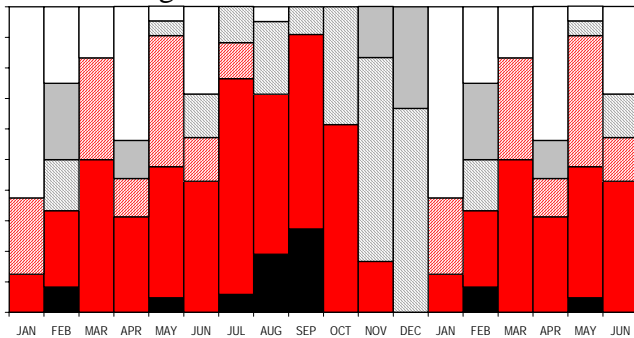
**Other Scientific Names:** *None*.

**149 Records**

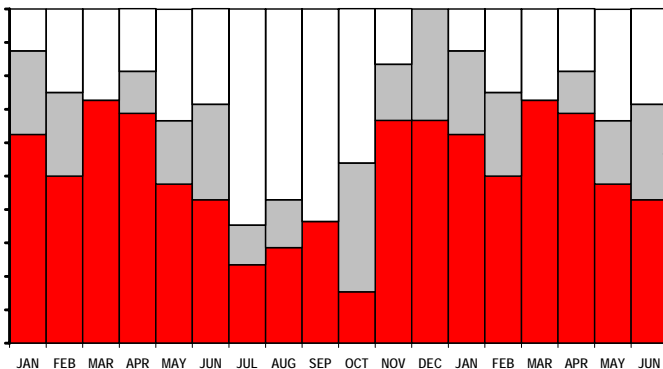
**Population** (144 records): 0.7% Abundant, 21% Common, 63% Frequent, 15% Rare.

**Dispersion** (138 records): 67% clumped, 26% variable, 5% evenly distributed, 1% widespread.

**Flowering** (147 records with: Jan 8, Feb 12, Mar 12, Apr 16, May 21, Jun 7, Jul 17, Aug 21, Sep 11, Oct 13, Nov 6, Dec 3): Buds from Jan, Mar and May; Flowering from Feb to Oct; Peak Flowering from Aug to Sep; Over from Aug and Oct to Dec; Fruit from Feb and Dec; Nothing from Jan to Feb and Apr and Jun. Peak levels at 100% in July and Sep to Oct. Historically recorded as flowering from May to Nov with a peak in Jul to Aug.



**Growth** (146 records with: Jan 8, Feb 12, Mar 11, Apr 16, May 21, Jun 7, Jul 17, Aug 21, Sep 11, Oct 13, Nov 6, Dec 3): Much from Nov to Sep; Rare from Dec to Feb and Jun and Oct; None from Feb to Oct. Peak levels at 100% in Dec.



**Seedlings** (74 records): Absent in 76%: fewer seedlings than prefire adults in 7 cases, and more in 2 cases. Seedlings found in Feb (2), Mar, Apr (5) and May.

**Fire Survival** (14 records): 93% survived by seedlings only, 7% eliminated from the area by fires.

**Age to first flowering:** First flowers recorded at 3 years, 50% estimated at 4-5 years, and 100% recorded at 7 years.



**Height** (145 records): 1% 0-0.2 m tall, 28% 0.2-1 m tall, 69% 1-2 m tall, 2% 2-5 m tall.

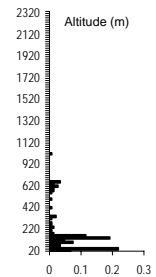
**Pollinators** (19 records): 58% birds, 42% beetles.

**Detailed Pollinators** (12 records): Cape Sugarbird (11), Orange-breasted Sunbird.

**Habitat:**

**Distance to Ocean** (143 records): 53% coastal - less than 2 km from coast.

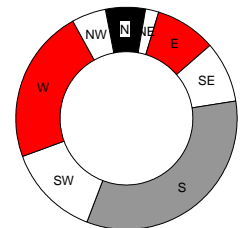
**Altitude** (144 records): 20 - 660 m; 20<sub>lq</sub> - 40<sub>med</sub> - 60<sub>uq</sub> m.



**Landform** (143 records): 61% deep soil, 32% swamp, 6% riverine, 0.7% lake edge, 0.7% shallow soil.

**Slope** (141 records): 55% gentle incline, 32% platform, 9% valley bottom, 3% hill top, 2% steep incline.

**Aspect** (100 records): 44% South, 33% West, 15% East, 9% North.



**Soil Type** (142 records): 49% sandy, 27% peaty, 23% loamy, 1% gravelly.

**Soil Colour** (141 records): 40% grey, 30% black, 23% brown, 8% white.

**Geology** (134 records): 96% sandstone, 2% Tertiary sands, 0.7% conglomerate, 0.7% shale.

**Vegetation** (144 records): 98% shrubland, 1% thicket, 0.7% suburban.

**Conservation Status and Threat:**

**Red Data List Status:** Vulnerable A4c. Occurrence (Fynbos): 909 km<sup>2</sup> with 40% conserved and 22% lost; Occupancy: 105 km<sup>2</sup> with 63% conserved and 13% lost. Fragmentation index: 6%.

**Nature Reserves** (144 records): 79% in nature reserves - well conserved.

**Habitat destruction** (141 records): 85% extensive natural habitat, 9% naturally linear habitats, 4% islands, 0.7% road verges, 0.7% patches, 0.7% corridors.

**Alien Invasive Species** (138 records): 65% none, 22% Fabaceae (chiefly alien



*Acacia*), 8% *Pinus*, 3% *Hakea*,

1% Myrtaceae, 0.7% annual alien grasses.

**Alien Density** (138 records): 65% alien-free, 28% sparse, 4% abundant, 1% dense, 0.7% impenetrable.

**Cultivation & Utilization:**

**Picking** (117 records): 97% no sign of picking, 3% lightly picked, 0.9% severely picked.

**Cultivation Status:** Plantings - 2 records (1%).

**Atlassers Notes:**

New up after fire and after pines cleared! (AGRY2102001); Lots damaged by trampling along path and 3 plants almost killed (AGRY5021301); Formerly seen here is now not visible among dense pine seedlings (AKS93090107); Previously Recorded As A Large Population - Now Only 7 Plants (CRS94101302); Some 8 plants growing in a seep. This is the population that was rumoured but not yet found by atlassers (NGFY5021301); Almost wiped out by the building of a golf

course and caravan park on a wetland - remaining plants severely threatened due to lack of management and insensitive municipal officials (PAP92011201); Confined to stream - normally linear but other plants more extensive (CVV98030102); Mr Miniki (major landowner in area) tells me that until 1960 there were large populations in the upper Klaasjagers river valley which were then bulldozed for kikuyu planting (NAH99041402).

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

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

**Distribution:** Add.

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*Mimetes palustris* Salisb. ex Kn. 1809

**Cryptic Pagoda**

*Geelstompie*

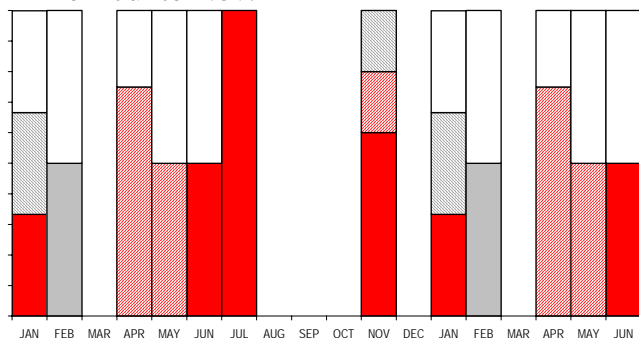
**Other Common Names:** Marsh Mimetes.  
**Other Scientific Names:** *decapitata* Meisn. 1856.

**20 Records**

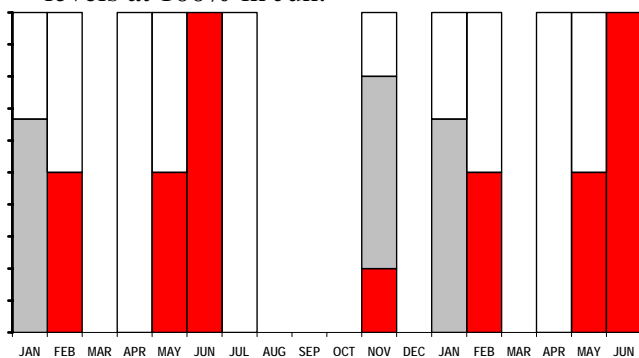
**Population** (20 records): 10% Common, 55% Frequent, 35% Rare.

**Dispersion** (18 records): 50% clumped, 44% variable, 6% evenly distributed.

**Flowering** (20 records with: Jan 3, Feb 2, Mar 0, Apr 4, May 2, Jun 2, Jul 2, Aug 0, Sep 0, Oct 0, Nov 5, Dec 0): Buds from Apr to May and Nov; Flowering from Nov to Jan and Jun to Jul; Peak Flowering not recorded; Over from Nov to Jan; Fruit from Feb; Nothing from Jan to Jun. Peak levels at 100% in Jul and Nov. Historically recorded as flowering from Jul to Nov.



**Growth** (20 records with: Jan 3, Feb 2, Mar 0, Apr 4, May 2, Jun 2, Jul 2, Aug 0, Sep 0, Oct 0, Nov 5, Dec 0): Much from Feb, May to Jun and Nov; Rare from Jan and Nov; None from Jan to May and Jul and Nov. Peak levels at 100% in Jun.



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

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

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



**Height** (20 records): 25% 0-0.2 m tall, 75% 0.2-1 m tall.

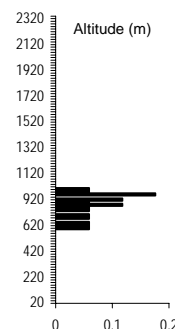
**Pollinators** : No data.

**Detailed Pollinators:** No additional data.

**Habitat:**

**Distance to Ocean** (17 records): 100% inland - further than 2 km from coast.

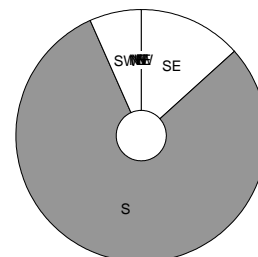
**Altitude** (17 records): 580 - 900 m; 680<sub>lq</sub> - 780<sub>med</sub> - 800<sub>uq</sub>m.



**Landform** (17 records): 88% deep soil, 12% shallow soil.

**Slope** (17 records): 53% steep incline, 29% gentle incline, 12% hill top, 6% platform.

**Aspect** (15 records): 90% South, 7% East, 3% West.



**Soil Type** (17 records): 41% sandy, 35% peaty, 24% loamy.

**Soil Colour** (17 records): 71% black, 29% grey.

**Geology** (17 records): 100% sandstone.

**Vegetation** (17 records): 100% shrubland.

**Conservation Status and Threat:**

**Red Data List Status:** Critically Endangered B1b(iii)c(iv).

**Occurrence** (Fynbos): 26 km<sup>2</sup> with 38% conserved and 20% lost; **Occupancy:** 31 km<sup>2</sup> with 39% conserved and 21% lost. **Fragmentation index:** 100%.

**Nature Reserves** (17 records): 29% in nature reserves.

**Habitat destruction** (17 records):

100% extensive natural habitat.

**Alien Invasive Species** (17 records): 53% none, 47% *Pinus*.

**Alien Density** (17 records): 53% alien-free, 47% sparse.

**Cultivation & Utilization:**

**Picking** (17 records): 100% no sign of picking.

**Cultivation Status:** No noted cultivation.

**Atlasers Notes:**

Some 6 plants 1-1.5 m tall - could these be *M. capitulatus* (not flowering)? (AGR95040518);

**Confusing Species:** None noted. Some taller plants might be *M. capitulatus*.

Records of identification queries = 3.

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

**Distribution:** Add.

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# *Mimetes pauciflorus* R.Br. 1810

## Three-flowered Pagoda

### *Slankevlambos*

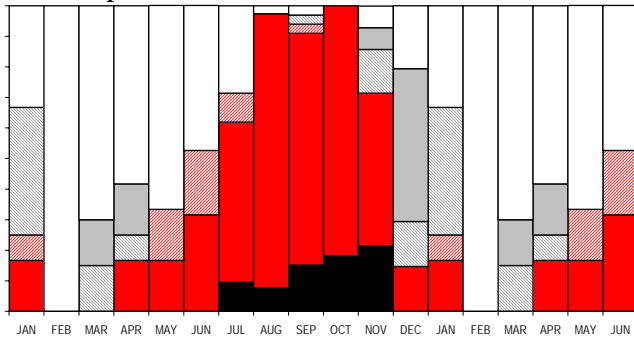
**Other Common Names:** Slender Pagoda, *Outeniquastompie*.  
**Other Scientific Names:** *rehmanni* Gand & Schinz 1913.

#### 244 Records

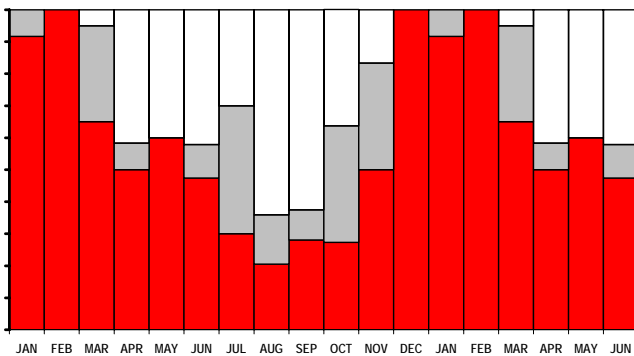
**Population** (244 records): 0.8% Abundant, 16% Common, 72% Frequent, 11% Rare.

**Dispersion** (229 records): 55% clumped, 29% variable, 11% widespread, 4% evenly distributed.

**Flowering** (237 records with: Jan 12, Feb 10, Mar 20, Apr 12, May 12, Jun 19, Jul 21, Aug 39, Sep 33, Oct 11, Nov 14, Dec 34): Buds from Jun; Flowering from Jun to Nov; Peak Flowering from Nov; Over from Jan; Fruit from Dec; Nothing from Dec to Jul. Peak levels at 100% in Oct. Historically recorded as flowering from Aug to Nov, with a peak in Sep.



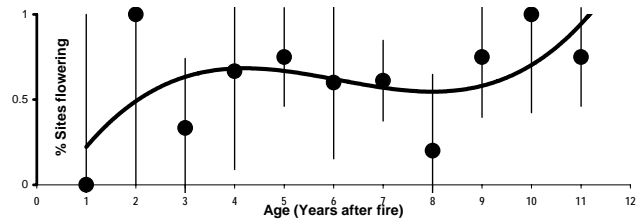
**Growth** (231 records with: Jan 12, Feb 10, Mar 20, Apr 12, May 10, Jun 19, Jul 20, Aug 39, Sep 32, Oct 11, Nov 12, Dec 34): Much from all year; Rare from Mar, Jul and Oct to Nov; None from Apr to Oct. Peak levels at 100% in Dec to Feb.



**Seedlings** (105 records): Absent in 75%: fewer seedlings than prefire adults in 7 cases, and more in 6 cases. Seedlings found in Jan (2), Jul (6), Aug (2), Sep, Oct, and Nov.

**Fire Survival** (17 records): 88% survived by seedlings only, 12% escaped fires in fire-safe areas.

**Age to first flowering:** First flowers recorded at 2 years, 50% estimated at 2-4 years, and 100% recorded at 10 years.



**Height** (243 records): 5% 0-0.2 m tall, 51% 0.2-1 m tall, 42% 1-2 m tall, 2% 2-5 m tall.

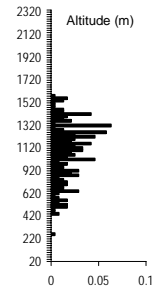
**Pollinators** (2 records): 50% birds, 50% beetles.

**Detailed Pollinators** (1 record): Cape Sugarbird.

#### Habitat:

**Distance to Ocean** (240 records): 100% inland - further than 2 km from coast.

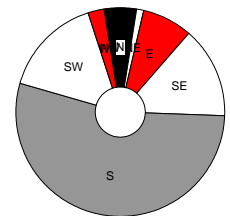
**Altitude** (240 records): 240 - 1480 m; 780 *lq* - 1020 *med* - 1160 *uq*m.



**Landform** (238 records): 77% deep soil, 18% shallow soil, 5% rocky outcrops.

**Slope** (240 records): 57% steep incline, 21% gentle incline, 19% hill top, 3% cliff, 0.8% platform.

**Aspect** (200 records): 71% South, 13% East, 11% West, 6% North.



**Soil Type** (239 records): 51% loamy, 32% peaty, 15% sandy, 1% gravelly, 1% rocky.

**Soil Colour** (239 records): 57% black, 23% grey, 20% brown.

**Geology** (238 records): 100% sandstone, 0.4% shale.

**Vegetation** (240 records): 98% shrubland, 2% grassland.

#### Conservation Status and Threat:

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

**Occurrence** (Fynbos): 2 096 km<sup>2</sup> with 39% conserved and 18% lost; **Occupancy:** 254 km<sup>2</sup> with 52% conserved and 11% lost. **Fragmentation index:** 10%.

**Nature Reserves** (240 records): 68% in nature reserves - well conserved.

**Habitat destruction** (224 records):

99% extensive natural habitat, 0.9% corridors, 0.4% islands.

**Alien Invasive Species** (235 records):

52% *Pinus*, 31% none, 14% *Hakea*, 2% Fabaceae (chiefly alien *Acacia*), 0.4% annual alien grasses, 0.4% other aliens.

**Alien Density** (234 records): 31% alien-free, 65% sparse, 3% abundant, 0.4% dense.

**Cultivation & Utilization:**

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

**Cultivation Status:** No noted cultivation.

**Atlassers Notes:**

In flower can this be due to the very dry spell being experienced in the outenique's at this time? (DFJ96062901);

In spite of very dry conditions young plants were all thriving. Were they responding as if there had just been a fire? (DFJ96062902);

At least 10 000 seedlings - coming up like hairs on a dogs back in 1-yr old veld (OUT97030107);

Very healthy & widespread here - also contrary to protea guide many young plants pushing up through dense fynbos without stimulus of fire! (DFJ97083002);

Most plants dead - a lot of seedlings around, some plants with new shoots

(AMMY0121304); Some plants dead - appears to be from old age (OUT95060301); Plants dying from drought (OUTY0080501); Some 575 plants - about 25% in flower and about an additional 10% dead - drought conditions (MCIY1072601);

**Confusing Species:** None noted, typing mistakes of *M. palustris*.

Records of identification queries = 2

Records of corrected identification queries = 1.

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

**Distribution:** Add.

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*Orothamnus zeyheri* Pappe ex Hook.f 1848

**Marsh Rose**

*Bergroos*

**Other Common Names:** Mountain Rose, *Vleiroos*.

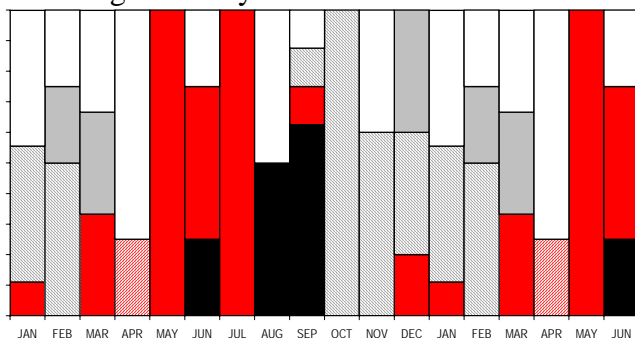
**Other Scientific Names:** *None*.

**52 Records**

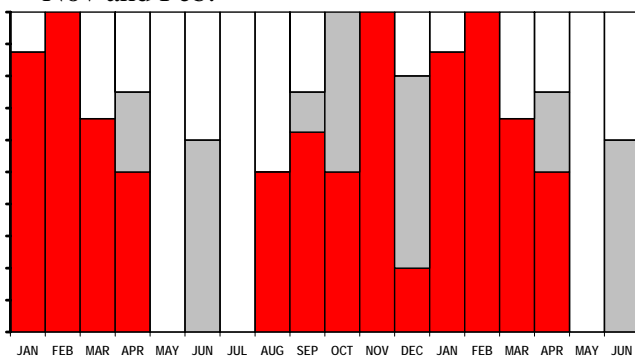
**Population** (51 records): 41% Common, 39% Frequent, 20% Rare.

**Dispersion** (50 records): 68% variable, 32% clumped.

**Flowering** (52 records with: Jan 9, Feb 4, Mar 3, Apr 4, May 1, Jun 8, Jul 1, Aug 2, Sep 8, Oct 2, Nov 5, Dec 5): Buds from Apr; Flowering from Mar and May to Jul; Peak flowering from Jun and Aug to Sep; Over from Oct to Feb; Fruit from Feb to Mar and Dec; Nothing from Jan to Apr, Jun, Aug and Nov. Peak levels at 100% in May and Jul. Historically recorded as flowering from throughout the year.



**Growth** (48 records with: Jan 8, Feb 4, Mar 3, Apr 4, May 1, Jun 5, Jul 1, Aug 2, Sep 8, Oct 2, Nov 5, Dec 5): Much from Aug to Jan; Rare from Apr, Jun, Oct and Dec; None from Mar to Sep. Peak levels at 100% in Oct to Nov and Feb.



**Seedlings** (44 records): All without any seedlings present.

**Fire Survival** (4 records): 75% survived by seedlings only, 25% eliminated from the area by fires.

**Age to first flowering:** First flowers recorded at 5 years, 50% estimated at 7 years, and 100% recorded at 8 years.



**Height** (52 records): 12% 0-0.2 m tall, 29% 0.2-1 m tall, 42% 1-2 m tall, 17% 2-5 m tall.

**Pollinators** (1 record): 100% bees or wasps.  
**Detailed Pollinators** (1 record): Honey Bee.

**Habitat:**

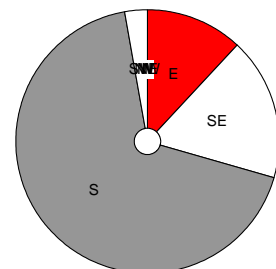
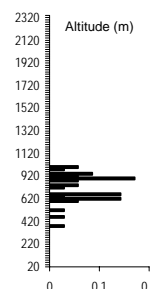
**Distance to Ocean** (35 records): 100% inland - further than 2 km from coast.

**Altitude** (35 records): 360 - 900 m; 600<sub>lq</sub> - 660<sub>med</sub> - 720<sub>uq</sub>m.

**Landform** (35 records): 83% deep soil, 14% swamp, 3% shallow soil.

**Slope** (35 records): 46% steep incline, 26% cliff, 26% gentle incline, 3% hill top.

**Aspect** (34 records): 78% South, 21% East, 1% West.



**Soil Type** (35 records): 86% peaty, 6% sandy, 6% loamy, 3% gravelly.

**Soil Colour** (35 records): 51% black, 34% brown, 14% grey.

**Geology** (35 records): 100% sandstone.

**Vegetation** (35 records): 100% shrubland.

**Conservation Status and Threat:**

**Red Data List Status:** Vulnerable  
B1a(i)b(ii,iv,v)c(iv)+2a(i)b(ii,iv,v)c(iv).  
Occurrence (Fynbos): km2 with % conserved and % lost; Occupancy: km2 with % conserved and % lost. Fragmentation index: %.

**Nature Reserves** (35 records): 97% in nature reserves - well conserved.

**Habitat destruction** (34 records): 97% extensive natural habitat, 3% naturally linear habitats.

**Alien Invasive Species** (35 records): 100% none.

**Alien Density** (35 records): 100% alien-free.

**Cultivation & Utilization:**

**Picking** (49 records): 100% no sign of picking.  
**Cultivation Status:** No noted cultivation.

**Atlasers Notes:**

Small-leaved population (MAJ98091601);

Over 4.5m tall. Amazing! (ASP96092301);  
Still to flower - slow maturing population  
(MAJY0011501);  
Plants looks sick! (APE93042517);  
New growth falling open in a wilting manner on  
three of the plants (MAJ94010201);  
Soon to be less than frequent with 2 of 11 plants  
dying - senescent? (SHRY2012701);  
Poor regeneration of 22-26 plants: population  
double burnt Mar '95 with 80-85 plants  
(MAJ97012801, MAJ98043001);  
Post fire there were 18 seedlings - today 7  
plants remain - 2 skeletons are evident. Two  
plants were described as "McCann's plants"  
(NGFY3060702);  
The honey bee was a surprize ! First time ive  
seen it being actively visited ie plant to plant  
by any pollinator ! (MAJY0042201);

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

**Variation and Taxonomy:** Add.

**Distribution:** Add.

INCLUDEPICTURE

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MERGEFORMAT \d