INTERIM RECOVERY PLAN NO. 49

SCALY-LEAVED FEATHERFLOWER

(*VERTICORDIA SPICATA* SUBSP. *SQUAMOSA*)

INTERIM RECOVERY PLAN

1999-2002

by
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Photograph: Anne Cochrane

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Natural Heritage Trust
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Department of Conservation and Land Management

FOREWORD

Interim Recovery Plans (IRPs) are developed within the framework laid down in Department of Conservation and Land Management (CALM) Policy Statements Nos. 44 and 50.

IRPs outline the recovery actions that are required to urgently address those threatening processes most affecting the ongoing survival of threatened taxa or ecological communities, and begin the recovery process.

CALM is committed to ensuring that Critically Endangered taxa are conserved through the preparation and implementation of Recovery Plans or Interim Recovery Plans and by ensuring that conservation action commences as soon as possible and always within one year of endorsement of that rank by the Minister.

This Interim Recovery Plan will operate from November 1999 to October 2002 but will remain in force until withdrawn or replaced. It is intended that, if the taxon is still ranked Critically Endangered, this IRP will be replaced by a full Recovery Plan after three years.

This IRP was approved by the Director of Nature Conservation on 2 February 2000. The provision of funds identified in this Interim Recovery Plan is dependent on budgetary and other constraints affecting CALM, as well as the need to address other priorities.

Information in this IRP was accurate at November 1999.

SUMMARY

Scientific Name: ***Verticordia spicata*** **subsp.** ***squamosa***
Common Name: Scaly-leaved featherflower
Family: Myrtaceae
Flowering Period: October-December
CALM Region: Midwest
CALM Districts: Moora, Geraldton
Shires: Three Springs, Mingenew
Recovery Teams: Moora and Geraldton District Threatened Flora Recovery Teams (MDTFRT, GDTFRT)

Illustrations and/or further information: Patrick, S. and Brown, A. (draft 1995) Declared Rare and Poorly Known Flora in the Moora District; George, A. S. (1991) New taxa, combinations and typifications in *Verticordia* (Myrtaceae: Chamelaucieae). *Nuytsia* 7 (3): 231-394.

Current status: *Verticordia spicata* subsp. *squamosa* was declared as Rare Flora in June 1995 and was ranked in September 1995 as Critically Endangered (CR). It currently meets World Conservation Union (IUCN) Red List Category 'CR' under criteria A1c, A2c, B1+2c, C1, C2a and D as there is a total of only 23 mature individuals in seven populations (three of which currently contain no plants) with continuing decline in the quality of habitat. The main threats include weeds, disturbance by rabbits, inappropriate fire regimes and road maintenance activities.

Habitat requirements: Endemic to the Three Springs and Mingenew areas of Western Australia, *Verticordia spicata* subsp. *squamosa* is known from seven populations located along narrow road reserves, with Populations 4b and 6b extending into remnant vegetation on private property. The subspecies has a range of approximately 17 km.

Verticordia spicata subsp. *squamosa* grows in open mallee over low scrub on deep yellow sands. Associated species include *Eucalyptus jucunda, Actinostrobus arenarius, Jacksonia* sp., *Verticordia comosa, V. monadelpha, V. densiflora* var. *stelluligera, V. eriocephala* and *Grevillea biformis*.

Existing Recovery Actions: The following recovery actions have been or are currently being implemented:
1. All appropriate land managers have been informed of the subspecies locations and the associated legal responsibilities.
2. Declared Rare Flora (DRF) markers have been installed at Populations 1, 3 and 7, and Subpopulation 6a.
3. Dashboard stickers and posters describing the significance of DRF markers have been produced and distributed.
4. Cutting material was collected by Botanic Gardens and Parks Authority (BGPA) staff in 1995. CALM's Threatened Flora Seed Centre (TFSC) also collected seed in 1996, 1997 and 1998.
5. The reproductive biology, seed bank dynamics and seed germination physiology, particularly the response to smoke, are being investigated.
6. Populations 4b and 6b on private property were fenced in 1997 to prevent grazing and trampling of plants and habitat.
7. A poster that provides a description of the subspecies, and information about threats and recovery actions, has been produced.
8. The Moora and Geraldton District Threatened Flora Recovery Teams are overseeing the implementation of this IRP.
9. CALM staff from the Moora and Geraldton District Offices monitor the populations.

IRP Objective: The objective of this Interim Recovery Plan (IRP) is to abate identified threats and maintain viable *in situ* populations to ensure the long-term preservation of the subspecies in the wild.

Recovery Criteria
Criterion for success: The number of individuals within populations and/or the number of populations have increased.
Criterion for failure: The number of individuals within populations and/or the number of populations have decreased.

Recovery actions

1. Coordinate recovery actions.
2. Install Declared Rare Flora markers.
3. Implement weed control.
4. Undertake rabbit control.
5. Liaise with relevant land managers.
6. Develop and implement a fire management strategy.
7. Monitor populations.
8. Conduct further surveys.
9. Create buffers and rehabilitate habitat.
10. Collect seed and cutting material.
11. Promote awareness.
12. Start translocation process.
13. Write a full Recovery Plan.

1. BACKGROUND

History

The first collection of *Verticordia spicata* subsp. *squamosa* was from east of Three Springs in 1974 and the subspecies was described in 1991 (George 1991). Additional populations have since been located, and a total of 23 plants are now known from seven populations. Three of the populations currently contain no plants, but the habitat may still contain propagules for the subspecies. Population 2, for example, has not been seen since 1992 and it is believed to have been cleared. A new population consisting of one plant was discovered in 1997 near an existing population but has yet to be confirmed.

Description

Verticordia spicata subsp. *squamosa* is a compact shrub to 80 cm tall by 1 m wide with rounded to elliptic leaves, 1·5 - 2 mm long. The leaves have prominent oil glands, closely overlap, and are pressed to the stem providing the scaly appearance from which this subspecies derives its name (note: squamosus is Latin for scaly). The mauve-pink flowers are produced in early summer and are closely packed, forming dense spikes on the ends of the branches. The fringed sepals are 3-4 mm long and the petals are 2.5 mm long, with a 1-2 mm fringe. The stamens and linear staminodes are hairless. The style is 4 mm long and bearded below the apex.

Verticordia spicata subsp. *squamosa* differs from the typical subspecies in its smaller leaves and flowers. The hybrid with *Verticordia comosa* has spreading leaves 2-3 mm long, a hypanthium with shorter appendages, sepals with prominent auricles and a style 5 mm long with a more dense beard than that of *V. spicata* subsp. *squamosa.* Another presumed hybrid has 'off-white' flowers, with larger sepals and auricles and a style beard with longer hairs.

Distribution and habitat

Endemic to the Three Springs and Mingenew areas of Western Australia, *Verticordia spicata* subsp. *squamosa* is known from seven populations, most of which are located along narrow road reserves. Populations 4b and 6b extend into remnant vegetation on private property, and Population 5 is in a Shire gravel reserve. The subspecies has a range of approximately 17 km.

Verticordia spicata subsp. *squamosa* grows in open mallee over low scrub on deep yellow sands. Associated species include *Eucalyptus jucunda, Actinostrobus arenarius, Jacksonia* sp., *Verticordia comosa, V. monadelpha, V. densiflora* var. *stelluligera, V. eriocephala* and *Grevillea biformis*.

Biology and ecology

The genus *Verticordia* is well known for its colourful, showy flowers and most taxa in the genus have horticultural potential. Few species have proved reliable in cultivation, however, and frequently a large percentage of seed is infertile and germination is low (Wrigley and Fagg 1979). Most species make excellent cut flowers and a considerable market has been established (Leigh *et al.* 1984).

Propagation of Verticordias has been mainly from cuttings with a few grown from seed. In general, Verticordias produce only one seed per flower in the wild. Germination occurs from within old flowers that have fallen to the ground. Research by CALM's Threatened Flora Seed Centre (TFSC) has shown that seed set is generally low in Verticordias (less than 51%) and is variable between species, within the same species in different locations, and in different years at the same location (Cochrane and McChesney 1995).

Research undertaken in early 1996 on *Verticordia spicata* subsp. *squamosa* by the TFSC indicated that Population 5 had an average seed set of 10.7% per plant, and Population 3, consisting of a single plant, had a seed set of 0.3%. The low seed set for Population 3 has implications for management.

Verticordias are generally considered to be fire sensitive with post fire regeneration occurring mainly from seed. A few species have a lignotuber and can resprout after fire. Hybridisation between certain species has been noted after fire, however the mechanisms are unknown (E. George[1] personal communication).

Members of the genus *Verticordia* are generally not susceptible to infection by *Phytophthora* spp, however the pathogen has been isolated from certain species (M. Grant[2] personal communication).

Threats

Verticordia spicata subsp. *squamosa* was declared as Rare Flora in June 1995 and was ranked in September 1995 as Critically Endangered (CR). It is currently ranked 'CR' under IUCN Red List criteria A1c, A2c, B1+2c, C1, C2a and D (IUCN 1994) due to its restricted distribution, low numbers of plants and continuing decline in the quality of habitat.

Clearing for agriculture around the Three Springs area began early in this century, and has resulted in extensive habitat loss. In addition, there has been extensive clearing and widening of road reserves in the Shires of Three Springs and Mingenew in the past 10 years. The road reserve at Population 2 was graded in 1990 resulting in the loss of several plants and significantly reducing the amount of available habitat. The main threats to the subspecies are weeds, fire and grazing.

- **Weed invasion** is a threat to all populations. Weeds suppress early plant growth by competing for soil moisture, nutrients and light. They also exacerbate grazing pressure and increase the fire hazard as they produce large amounts of fuel annually. Narrow linear populations such as those on road and rail reserves are severely affected by influences from adjacent cleared land. In addition to the proximity of a weed seed source, effects include increased wind speed, increased fertiliser runoff, modified hydrology and altered disturbance regimes, including fire.

- **Rabbit warren construction is** resulting in soil disturbance at most roadside populations, in particular Populations 1 and 3, and Subpopulation 6a. Subpopulation 6b, on private property also contains rabbit warrens. Increasing nutrient levels and weeds introduced from rabbit droppings are also impacting on the habitat of the subspecies. Grazing may have an impact on the establishment of *Verticordia spicata* subsp. *squamosa* seedlings thereby limiting natural recruitment.

- **Inappropriate fire regimes** would adversely affect the viability of populations, as seeds of *Verticordia spicata* subsp. *squamosa* probably germinate following fire. If this is the case, the soil seed bank would be rapidly depleted if fires recurred before regenerating or juvenile plants reached maturity and replenished the soil seed bank. However, it is likely that occasional fires are needed for reproduction of this subspecies. High fire frequency also results in a temporary increase in the availability of nutrients, and this favours weed establishment (Panetta and Hopkins 1991).

- **Road maintenance activities** threaten plants and habitat at road reserve populations of *Verticordia spicata* subsp. *squamosa*. This includes actions such as grading the road reserves, constructing drainage channels and mowing the roadside vegetation to improve visibility. These disturbance events also often encourage weed invasion into adjacent habitat. Relevant authorities need to be informed of the location of road reserve

[1] Elizabeth A. George, Honorary Curator, WA Herbarium
[2] Malcolm Grant – Environmental Officer, CALM Albany District

populations so that the habitat can be protected. Adjacent landowners also need to be informed of the presence of this subspecies to prevent possible grazing damage.

Summary of population information and threats

Pop. No. & Location	Land Status	Year/No. plants	Condition	Threats
1. NNE of Three Springs	Shire road reserve	1992 2 1995 6 1995 2 1999 0	Poor	Road maintenance activities, weeds, agricultural chemical drift, rabbits
2. NE of Three Springs	Shire road reserve	1992 3 1999 0	Cleared	
3. ENE of Yandanooka	Shire road reserve	1994 1 1995 1 1997 1 1999 1	Poor	Road maintenance activities, weeds, agricultural chemical drift, rabbit warren construction
4a. E of Yandanooka	Shire road reserve	1993 1 1995 0 1997 0	Moderate	Road maintenance activities, weeds, agricultural chemical drift
4b. E of Yandanooka	Private property	1993 12 1995 10 1999 4	Moderate	Grazing by sheep, weeds, firebreak maintenance
5. NE of Three Springs	Shire reserve	1995 2	Moderate	Quarrying, weeds
6a. NE of Three Springs	Shire road reserve	1995 15 1999 10	Poor	Road maintenance activities, weeds, agricultural chemical drift, rabbits
6b. NE of Three Springs	Private property	1995 7 1999 7	Moderate	Weeds, grazing by sheep, rabbits
7. ENE of Yandanooka	Shire road reserve	1996 1 1999 1	Moderate	Road and fence maintenance activities, weeds, agricultural chemical drift

2. RECOVERY OBJECTIVES AND CRITERIA

Objective

The objective of this Interim Recovery Plan is to abate identified threats and maintain viable *in situ* populations to ensure the long-term preservation of the species in the wild.

Criterion for success: The number of individuals within populations and/or the number of populations have increased.
Criterion for failure: The number of individuals within populations and/or the number of populations have decreased.

3. RECOVERY ACTIONS

Existing recovery actions

All appropriate land managers have been made aware of the existence of this taxon and its locations. Local Shires and private property owners have been formally notified of the presence of *Verticordia spicata* subsp. *squamosa* populations on their lands. These notifications detailed the Declared Rare status of the taxon and the associated legal responsibilities.

Declared Rare Flora (DRF) markers have been installed at Populations 1, 3 and 7, and Subpopulation 6a. These alert people working in the area to the presence of significant flora, and help to prevent accidental damage. Awareness of the significance of these markers is being promoted to relevant land managers such as local authorities. To this end, dashboard stickers and posters have been produced and distributed. These illustrate DRF markers, inform of their purpose and provide a contact telephone number to use if such a marker is encountered.

Cutting material of *Verticordia spicata* subsp. *squamosa* was collected by Botanic Gardens and Parks Authority (BGPA) staff in 1995. In February 1996, 138 cuttings were successfully growing in the nursery. All germinants, except one clone, have since died, suggesting that the species is quite difficult to propagate. CALM's Threatened Flora Seed Centre (TFSC) collected seed from four populations in January 1996 and this is being stored at -18°C. Further collections were made in 1997 and 1998. The TFSC tests the viability of the seed initially, after one year in storage, and again after five years. The initial germination rate of this seed was found to range from 6% to 86%, and after one year in storage was 33%.

Research into the reproductive biology, seed bank dynamics and seed germination physiology (particularly the response to smoke) is being undertaken on several species of Verticordias including *V. spicata* subsp. *squamosa*, by CALM's Western Australian Herbarium and the BGPA.

Populations (4b and 6b) on private property were fenced in 1997 to prevent sheep grazing and trampling plants and habitat.

An A4 sized poster, which provides a description of the species, and information about threats and recovery actions, has been developed for *Verticordia spicata* subsp. *squamosa*. It is hoped that the poster will result in the discovery of new populations.

The Moora and Geraldton District Threatened Flora Recovery Teams are overseeing the implementation of this IRP and will include information on progress in annual reports to CALM's Corporate Executive and funding bodies.

CALM staff from the Moora and Geraldton District Offices regularly monitor the populations.

Future recovery actions

Where populations occur on lands other than those managed by CALM, permission has been or will be sought from the appropriate land managers prior to recovery actions being undertaken.

1. Coordinate recovery actions

The MDTFRT and GDTFRT will continue to oversee the implementation of the recovery actions for *Verticordia spicata* subsp. *squamosa*.

Action: Coordinate recovery actions
Responsibility: CALM (Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $4900 per year

2. Install Declared Rare Flora markers

The requirement for Declared Rare Flora (DRF) markers at Subpopulation 4a will be investigated and markers installed as necessary.

Action: Install Declared Rare Flora markers
Responsibility: CALM (Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $600 in first year

3. Implement weed control

Weeds are a threat to all populations and effective weed control with the use of herbicides and hand pulling is required. The tolerance of native plant species to herbicides at *Verticordia spicata* subsp. *squamosa* sites is unknown and weed control programs will be undertaken in conjunction with research. The aim of weed control is to maintain the pre-invasion condition of the habitat (prevention), control or arrest ongoing weed invasion (intervention) and reverse the degraded condition of the habitat where applicable (rehabilitation) (Panetta and Hopkins 1991). The following actions will be implemented:

1. Selection of appropriate herbicides after determining which weeds are present.
2. Controlling invasive weeds by hand removal or spot spraying around *Verticordia spicata* subsp. *squamosa* plants when weeds first emerge.
3. Scheduling weed control to include spraying at other threatened flora populations within the district wherever possible.

Action: Undertake weed control
Responsibility: CALM (Moora and Geraldton Districts, CALMScience) through the MDTFRT and GDTFRT
Cost: $1700 per year

4. Undertake rabbit control

Disturbance of the soil due to rabbit warren construction, and increased nutrient levels and the introduction of weeds from their droppings are affecting the habitat at most roadside populations (1, 3, 6a), and one private property population (6b). Rabbit control by annual 1080 baiting is therefore required. Baiting will be undertaken twice a year during summer in conjunction with the shire's and local farmers' baiting programs.

Action: Undertake rabbit control
Responsibility: CALM (Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $900 per year

5. Liaise with relevant land managers

Staff from CALM's Moora and Geraldton Districts will continue to liaise with appropriate landowners to ensure the populations are not accidentally damaged or destroyed.

Action: Liaise with relevant land managers
Responsibility: CALM (Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $700 per year

6. Develop and implement a fire management strategy

Fire appears to kill adult plants of the species, and regeneration is likely to be largely from seed. Frequent fire may therefore prevent the accumulation of sufficient soil stored seed to allow regeneration of the populations. A fire management strategy will be developed to determine fire control measures and fire frequency.

Action: Develop and implement a fire management strategy
Responsibility: CALM (Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $2400 in first year, and $1000 in subsequent years

7. Monitor populations

Monitoring of factors such as weed invasion, habitat degradation, salinity and population stability (expansion or decline), pollinator activity, seed production, recruitment, and longevity is essential. The populations will be inspected annually.

Action: Monitor populations
Responsibility: CALM (Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $800 per year

8. Conduct further surveys

Opportunistic surveys by CALM Moora District and CALMScience staff have located several new populations of *Verticordia spicata* subsp. *squamosa* in recent years. Reserves and other areas of native vegetation containing suitable habitat in the Shires of Mingenew and Three Springs need to be surveyed on a systematic basis for the

presence of the subspecies, particularly during the flowering period of October-December several years following disturbances such as fire. Local volunteers such as members of naturalists clubs and the Wildflower Society will be encouraged to be involved in surveys supervised by CALM staff.

Action: Conduct further surveys
Responsibility: CALM (Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $2000 per year

9. Create buffers and rehabilitate habitat

Buffers will be created and the habitat of Populations 4b and 6b will be rehabilitated using plant species endemic to the site. Rehabilitation will ideally extend beyond the current boundary of *Verticordia spicata* subsp. *squamosa* populations to provide a stable buffer to discourage weed invasion.

Action: Create buffers and rehabilitate habitat
Responsibility: CALM (Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $7100 in the second year

10. Collect seed and cutting material

The viability of seed collected by the TFSC is generally very low, and survival of plants propagated from cutting material has been extremely poor. Further collections of seed and cutting material are required, particularly to provide material for future translocations. This will be coordinated between the Moora and Geraldton District Threatened Flora Recovery Teams and the BGPA.

Action: Collect seed and cutting material
Responsibility: CALM (Moora and Geraldton Districts, TFSC) and BGPA, through the MDTFRT and GDTFRT
Cost: $3000 per year

11. Promote awareness

The importance of biodiversity conservation and the protection of the Critically Endangered *Verticordia spicata* subsp. *squamosa* will be promoted to the public. Formal links with local naturalist groups and interested individuals will also be encouraged.

Action: Promote awareness
Responsibility: CALM (Moora and Geraldton Districts, Corporate Relations) through the MDTFRT and GDTFRT
Cost: $900 per year

12. Start translocation process

Translocation is essential for the conservation of this species, as the total number of extant plants is low, and known populations are not secure from threats including road maintenance, weeds, rabbits and fire. Although translocations are generally undertaken under full Recovery Plans, it is possible to develop a Translocation Proposal and start propagating plants within the time frame of an Interim Recovery Plan. This will be coordinated by the MDTFRT and the GDTFRT. Information on the translocation of threatened animals and plants in the wild is provided in CALM Policy Statement No. 29 *Translocation of Threatened Flora and Fauna.* All translocation proposals require endorsement by the Director of Nature Conservation.

Action: Start translocation process
Responsibility: CALM (CALMScience, Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $1800 in the third year

13. Write full Recovery Plan

At the end of the three-year term of this Interim Recovery Plan, the need for further recovery will be assessed. If the species is still ranked Critically Endangered, a full Recovery Plan will be developed to describe action required for long-term maintenance. A Recovery Plan will be prepared with the benefit of knowledge gained over the time frame of this Interim Recovery Plan.

Action: Write full Recovery Plan
Responsibility: CALM (WATSCU, Moora and Geraldton Districts) through the MDTFRT and GDTFRT
Cost: $18,400 in third year

4. TERM OF PLAN

This Interim Recovery Plan will operate from November 1999 to October 2002 but will remain in force until withdrawn or replaced. It is intended that, if the taxon is still ranked Critically Endangered, this IRP will be replaced by a full Recovery Plan after three years.

5. ACKNOWLEDGMENTS

The following people have provided assistance and advice in the preparation of this Interim Recovery Plan:

Ann Carr	Volunteer, Yandanooka
Anne Cochrane	Manager, CALM Threatened Flora Seed Centre
Rebecca Evans	Previously Project Officer, CALM W.A. Threatened Species and Communities Unit
Alex George	Botanist
Elizabeth George	Honorary Curator, CALM WA Herbarium
Sue Patrick	Senior Research Scientist, CALMScience
David Rose	District Manager, CALM Moora District
Amanda Shade	Horticulturalist, Botanic Gardens and Parks Authority
Luke Sweedman	Seed Collector, Botanic Gardens and Parks Authority
Rebecca Carter	Previously Conservation Officer, CALM Moora District
Colin Yates	Research Scientist, CALMScience

Thanks also to staff of the W.A. Herbarium for providing access to Herbarium databases and specimen information, and CALM's Wildlife Branch for assistance.

6. REFERENCES

CALM (1992). Policy Statement No. 44 *Wildlife Management Programs*. Department of Conservation and Land Management, Western Australia.

CALM (1994). Policy Statement No. 50 *Setting Priorities for the Conservation of Western Australia's Threatened Flora and Fauna*. Department of Conservation and Land Management, Western Australia.

CALM (1995). Policy Statement No. 29 *Translocation of Threatened Flora and Fauna*. Department of Conservation and Land Management, Western Australia.

Cochrane, A. and McChesney, C. (1995). Verticordia Seed. *Australian Plants* 18 (145): 206-207.

George, A.S. (1991). New taxa, combinations and typifications in *Verticordia* (Myrtaceae: Chamelaucieae). *Nuytsia* 7 (3): 231-394.

IUCN (1994). *IUCN red list categories prepared by the IUCN Species Survival Commission, as approved by the 40th meeting of the IUCN Council*. Gland, Switzerland.

Leigh, J. Boden, R. and Briggs, J. (1984). *Extinct and endangered plants of Australia*, Macmillan, South Melbourne.

Panetta, F. D. and Hopkins, A. J. M. (1991). Weeds in Corridors: Invasion and Management. Pp 341-51 in *Nature Conservation 2: The Role of Corridors*. D. A. Saunders and R. J. Hobbs (eds). Surrey Beatty & Sons, N. S. W.

Patrick S. J. and Brown A. P. (draft 1995). *Declared Rare and Poorly Known Flora in the Moora District*. Department of Conservation and Land Management, Perth.

Wrigley, J. W. and Fagg, M. (1979). *Australian Native Plants*. Collins, Sydney.

7. TAXONOMIC DESCRIPTION

Extracted from: George, A.S. (1991). New combinations and typifications in *Verticordia* (Myrtaceae: Chamelaucieae). *Nuytsia* 7 (3): 368-69.

Two subspecies of *Verticordia spicata* are recognised in the following key.

Style 6.5 to 9 mm long; sepals 5 to 5.5 mm long; petals 4 to 4.5 mm long, the lamina 2 mm wide; leaves mostly 2 to 3.5 mm long……..subsp. *spicata*
Style 4 mm long; sepals 3 to 4 mm long; petals 3 mm long, the lamina 1.5 mm wide; leaves mostly 1.5 to 2 mm long…….subsp. *squamosa* A.S. George