Western Botanical

Review of *Microcorys elatoides* P1, September 2025

Prepared for: Covalent Lithium Pty Ltd

Report Ref: WB1083

5 Robinson Road Mahogany Creek WA 6072
PO Box 294 Mundaring WA 6073
T: 0407 193 637 E: info@westernbotanical.com.au

Citation: Western Botanical (2025) Review of *Microcorys elatoides* P1, September 2025. Consultant's Report Covalent Lithium Pty Ltd. Report Ref: WB1083 V2.

Version	Prepared By	Approved for Issue	Issue Date
1	Geoff Cockerton	19th Sept 2025	
1a minor edits	Geoff Cockerton	10th October 2025	10th October 2025
2 Revision with additional Methodology	Geoff Cockerton	17th Dec 2025	17th Dec 2025
2.1 Added fire history map	Geoff Cockerton	18th Dec 2025	18th Dec 2025
2.2 Added Limitations section	Geoff Cockerton	18th Dec 2025	18th Dec 2025
2.3 Amended IUCN Criteria review	Geoff Cockerton	19th Dec 2025	19th Dec 2025

This report has been designed for double-sided printing

Contents

Tables

Figures

Appendices

Executive Summary

Microcorys elatoides is a long lived lignotuberous, geosporous, perennial shrub to 1m in height with terete linear bright green leaves to 25mm in length and white flowers in mid to late Spring. It occurs on shallow aeolian sand over laterite pizolitic gravely hills on low rolling hill tops and upper slopes and is endemic to the Mt Holland area, some 112 km SSE of Southern Cross. Its distribution is wholly contained within the western fringe of the Southern Cross subregion of the Coolgardie biogeographic region, with proportions of the currently known population within the Jilbadji Nature Reserve as well as in Unallocated Crown Land.

Of the total 364,577 number of *Microcorys elatoides* plants known to date:

- 61,409 (16.8439%) plants are known within the Jilbadji Nature Reserve.
- 204,258 (56.0260%) plants are known within Unallocated Crown Land outside the EGLP tenements.
- 3,078 plants representing 0.8443% of the overall known population have been already taken to September 2025, including:
    - Eight individuals (representing 0.0038% of the overall population) were taken early in site development at the intersection of the mine access road and the Marvel Loch – Forrestania road alignment, their taking approved in MS1199.
    - 3,070 plants (representing 0.8421% of the overall population) were taken in the upgrade of the Marvel Loch - Forrestania road alignment, approved under CPS10049.
    - 7,962 individuals (representing 2.18% of the overall known population) plants approved to be taken within the mine footprint (MP121883) under MS1199.
- 33,256 individuals (representing 9.1218% of the overall known population) lie within the proposed Life of Mine Disturbance Footprint.

Utilising the data collected by Covalent on the abundance and distribution of *Microcorys elatoides*, and using the DBCA criteria for conservation listing of Priority Species, *Microcorys elatoides* clearly falls within the DBCA's Priority 2 category. Further, given the geographical distribution of *M. elatoides* within a 20 km radius of the EGLP in northerly, western and south-western directions; the distribution of populations and sub-populations within this region and the relatively large Extent of Occurrence and Area of Occupancy; and considering the proposed impacts to the species by either (i) the EGLP LOM proposal or (ii) the overall cumulative impacts to the species by the EGLP, *M. elatoides* could be considered a Priority 4 species (Rare, adequately surveyed and that are considered not currently threatened).

Based on the data generated by Covalent Lithium over the period 2019-2025, *Microcorys elatoides* does not meet the Criteria for IUCN listing for either IUCN Category Critically Endangered (CR), Endangered (EN) or Vulnerable (VU).

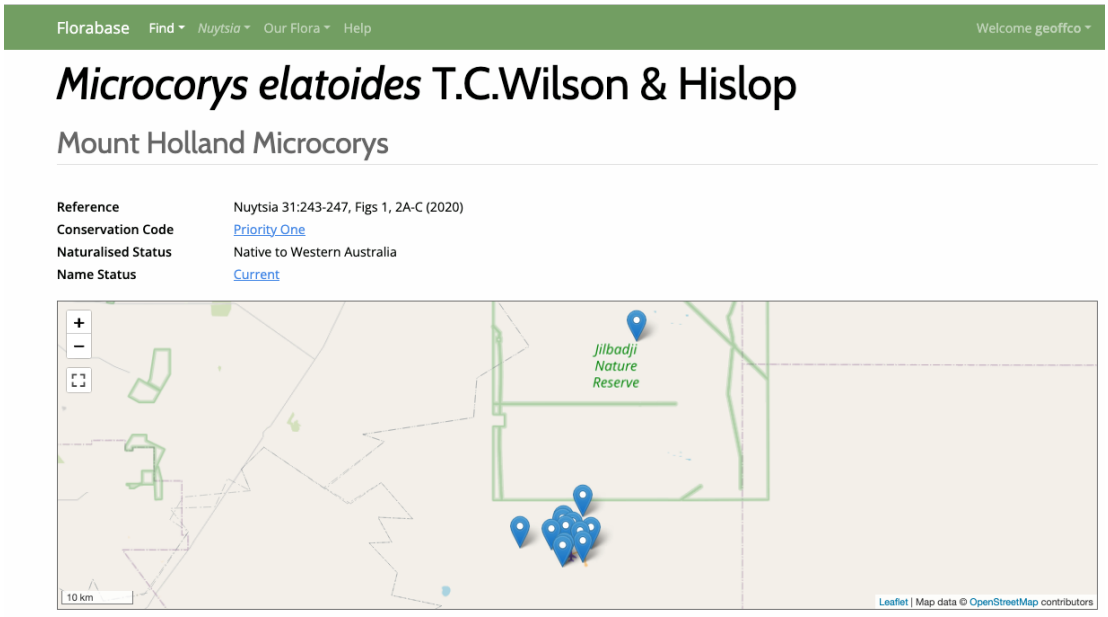
Background

Covalent Lithium Pty Ltd (Covalent) operate the Earl Grey Lithium Project (EGLP) near Mount Holland, some 120 km south of Southern Cross. The development of the EGLP was approved under Ministerial Statement MS1118 in November 2019 which approved the taking of 6,957 individuals of *Microcorys* sp. Mt Holland (D. Angus DA2397), since described as *Microcorys elatoides* in 2020, which is listed as a Priority 1 taxon by the Department of Biodiversity Conservation and Attractions (DBCA). The Ministerial Statement was revised (i) in May 2021 (MS1167) where the number of *Microcorys elatoides* allowed to be taken was increased to 9,732 individuals and (ii) November 2022 (MS1199) where there was no change to the number of *Microcorys elatoides* permitted to be taken.

History of vouchered collections

The understanding of numbers and distribution of *Microcorys elatoides* has evolved substantially since the species was first recorded by G. Barrett (22nd Aug 1995, PERTH 05204097) at the former Bounty Gold Mine (now the site of the EGLP). It was subsequently collected again by P. Armstrong (5th Nov 2004, PERTH 08802564, within the Jilbadji Nature Reserve) and Department of conservation and Land Management (CALM) / Department of Environment and Conservation (DEC) staff W. Thompson and J. Allen (24 Sept 2009, PERTH 08455228) near the EGLP. With the advent of surveys conducted for the EGLP by consultants, primarily Mattiske Consulting Pty Ltd, a series of collections were made from the same region (including 25th Oct 2016, PERTH 08864837; 7th Sep 2017, PERTH 09251154; 15th Jun 2018, PERTH09251200; 13th Sep 2019, PERTH 009191844) and by DBCA staff R. Davis and M. Hislop (10th Oct 2020, PERTH 09054146). A total of 13 specimens of *M. elatoides* have been vouchered at the WA Herbarium as shown on the Florabase website, Figure 1.

Figure 1. Specimens of *Microcorys elatoides* vouchered at the WA Herbarium



Surveys within the Earl Grey Lithium Project's Development Envelopes

Surveys for *M. elatoides* within the Earl Grey Lithium Project's mine (MP121883) Development Envelope (DE) and the proposed Life of Mine Development Envelope (LOM), Figure 2, were conducted primarily by Mattiske Consulting Pty Ltd with additional scopes fulfilled by 360 Environmental Pty Ltd, AECOM Australia Pty Ltd, GHD Pty Ltd and Strategen-JBS&G. Specimens collected during these surveys and vouchered at the WA Herbarium appear on the Florabase website, Figure 1.

Three publicly available IBSA submissions relevant to the EGLP have been lodged with the IBSA website:

IBSA-2018-0102, Flora and Vegetation Assessment

IBSA-2018-0101, Targeted Flora Survey

IBSA-2020-0106, Threatened and Priority Flora Assessment

IBSA-2023-0451, Threatened and Priority Flora Assessment

Of these, IBSA-2020-0106 and IBSA-2023-0451 contains records of *M. elatoides.* Other IBSA submissions relevant to the EGLP are not publicly available and have not been reviewed.

Disclaimer:

Western Botanical has not undertaken a review of any populations of significant flora within the mine Development Envelope, the Life of Mine Development Envelope or and other population of significant flora external to these that were surveyed by other consultancies.

Regional surveys undertaken

Since MS1118 was issued, extensive surveys for conservation-significant flora, including *M. elatoides*, have been undertaken by Western Botanical (2020 – 2024) outside the mine DE and LOM. These were focussed on assessing populations of conservation-significant species that were either previously found within the mine's DE and the LOM or adjacent to the road alignment from Mt Holland to Moorine Rock which was subject to a proposed widening and sealing from December 2021 to April 2024. The Marvel loch – Forrestania road alignment was assessed under three Clearing Permits; CPS10049 (southern section, closest to the EGLP), CPS10197 (northern section near Moorine Rock) and CPS10265 (central section including around the Parker Range).

Targeted surveys for *Microcorys elatoides* extended in increasing radii from the EGLP, focussed on low lateritic gravelly rises where the species was found to be present. *M. elatoides* extends to the north, west and south of the EGLP where favourable landforms and soils exist. The area east of the EGLP rapidly gives way to sandplains on duplex soils and then downstream parts of the Lake Barker paleochannel, which are both unsuitable for *M. elatoides*.

Representative specimens of significant flora had been submitted for verification of identification to the WA Herbarium (Accession 10259, June 2023), and while specimens of *M. elatoides* have been collected from many sites outside the mine DE or LOM, and stored at Western Botanical's office, these have only recently been vouchered at WA Herbarium in September 2025 (ACC pending).

Figure 2. Approved Earl Grey Lithium Project mine (MP121883), Life of Mine footprint and roads footprint.

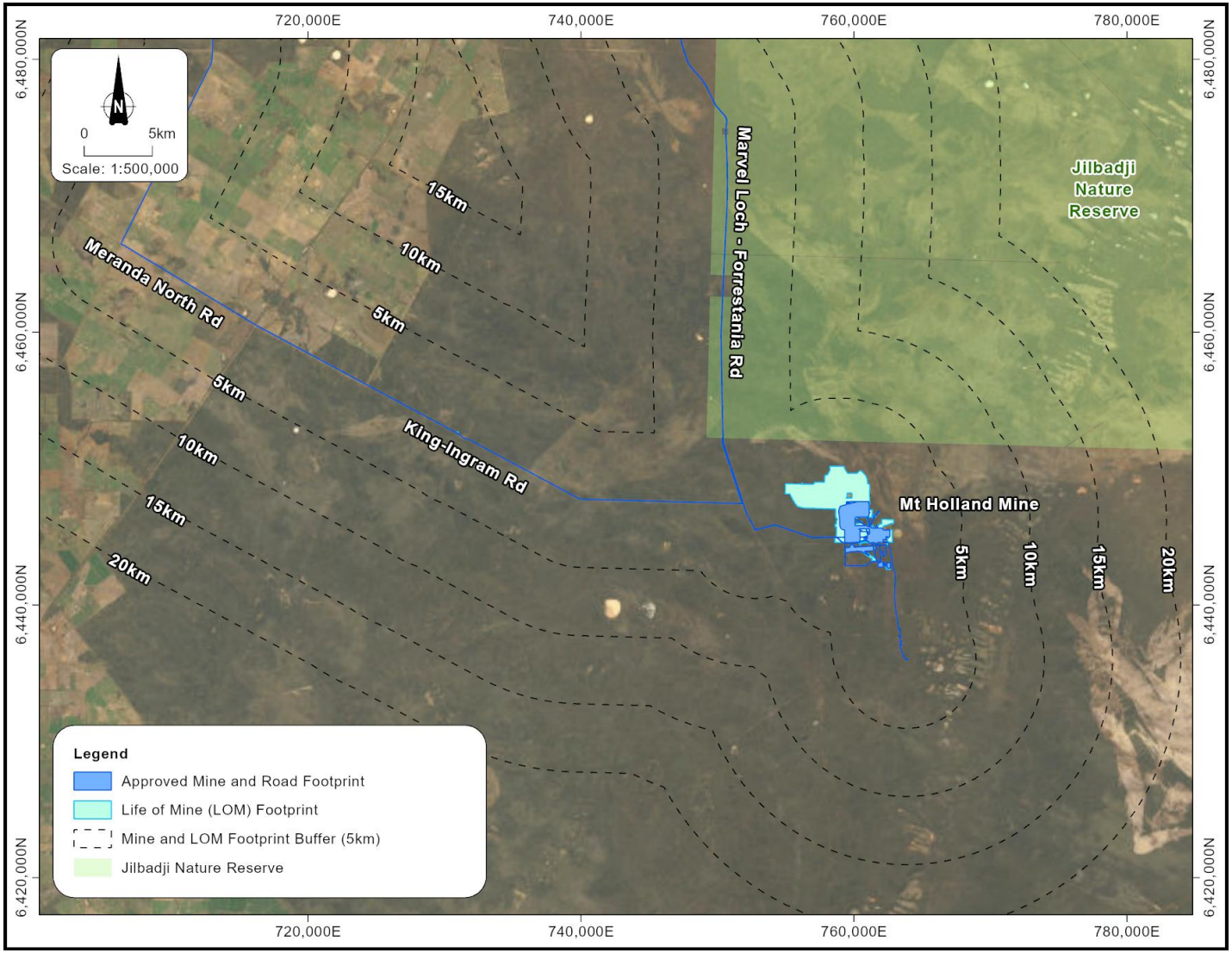
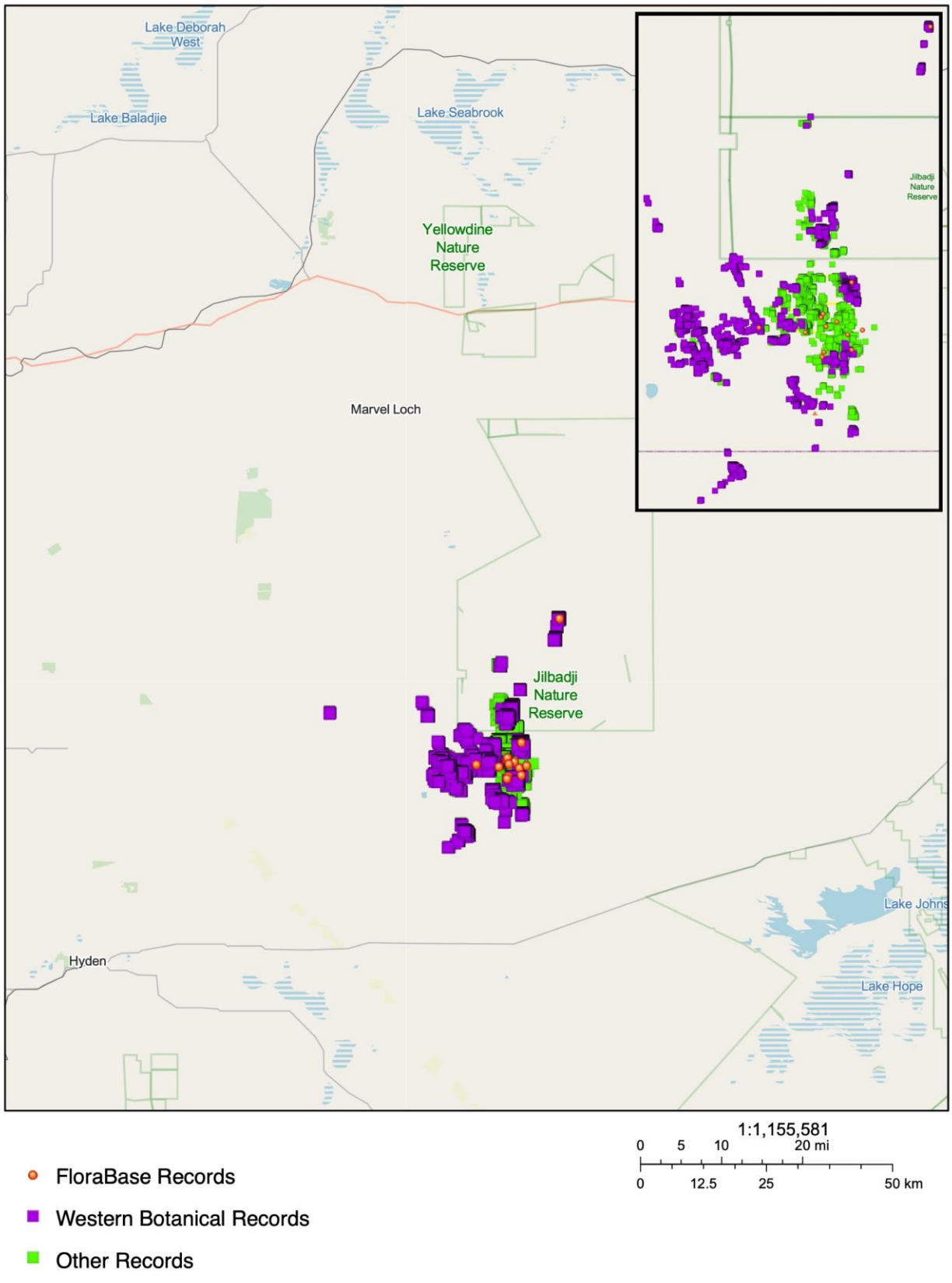


Figure 3. Known distribution of *Microcorys elatoides* as at 10th July 2025.



Field assessment methods

In all off-tenement Targeted Flora Surveys, the following methodology was employed.

Flora surveys within the flowering period of many species were regarded as being essential to effective assessment and where this was the case, those species were only targeted during their respective flowering periods. The allocation of human resources and timing of flora surveys was carefully managed so that optimal survey results would be likely. This means that particular areas often had to be assessed at least twice, sometime three times, in a given season as the flowering phenology of the numerous targeted species progressed, meaning that as some species finished flowering, others would commence flowering. This applied to species flowering in early Spring such as *Balaustion grandibracteatum* subsp. *junctura* (P2), *Balaustion grandibracteatum* subsp. *grandibracteatum* (P3) and diminutive species such as *Gompholobium cinereum* (P3). Species requiring survey in late Spring to early summer included most *Verticordia* species other than *Verticordia stenopetala* (P3) which could be recognised outside flowering. Typically, *Chamelaucium* sp. Mt Holland (G. Cockerton & G. Grigg WB40918) (P1), *Thryptomene jilbadji* (P1) and *Verticordia* species were the last to flower in late Spring to early Summer (Nov-Dec) each year.

Field teams were led by experienced, senior botanists familiar with the significant flora of the region. Staff were all made aware of the significant flora being targeted within a particular survey area and reference specimens were either viewed (in the case of *Banksia dolichostyla* (T)) or reference specimens of Priority or otherwise significant flora were viewed and/or collected by staff for ready confirmation of taxa encountered during survey. A comprehensive Reference Field Herbarium was maintained and available to the team during surveys for further morphological review of specimens.

During field surveys, team members walked pre-determined parallel traverses shown on the iPads at 10m spacings, each operator effectively covering a 10m wide swathe. Typically recording points were made every 5m to 10m within a given transect line.

Within vegetation of a given fire-age (years since last known fire), plants of each target species generally conformed to a single size class, *i.e.* plants observed were largely uniform in size and therefore assumed age.

This was particularly the case for species which are obligate re-seeder species which regenerate from soil-stored or canopy stored seed following a fire. Examples of this are *Chamelaucium jilbadji* (P1) and *Chamelaucium* sp. King Ingram Road (G. Grigg WB40916) (P1).

In the case of resprouter species such as *Microcorys elatoides* (P1), it was very difficult to distinguish seedlings from small resprouted plants. In these cases, both appear as small single-stemmed plants and may have been in the order of 10 to 40 cm tall and the presence of a small resilient root stock was not able to be discerned until the base of the plant was excavated or the plant was removed to investigate the rootstock. This was clearly not feasible in other than a few

specific cases where plant growth was reviewed. Older plants with a significant lignotuber were readily recognised but were in the minority in areas that had been recently burnt (within the last 2 to 3 years).

In all cases, the numbers of observed target plants were counted as one size class, or estimated in the case of large numbers, and values entered directly into iPads running ARCGIS FieldMaps®. High resolution satellite imagery on the iPads ensured location of collection was correctly recorded with a typical estimated positional error of +/- 2.5m.

Data was uploaded at the end of each work day to the CAD Resources Pty Ltd ESRI Server and reviewed daily and at the end of a field survey by the field team leader before being synthesized into the Covalent Significant Flora Database held by CAD Resources Pty Ltd.

Specimens of significant flora were collected on an ad-hock basis for vouchering at the WA Herbarium. Some specimens have already been vouchered while others are awaiting delivery to WAHERB.

As the methods of counting individuals of *Microcorys elatoides* outside the proposed EGLP Development Envelope and mine footprint are essentially equivalent to those used within EGLP Development Envelope and mine footprint, we believe the numbers within and outside the DE and mine footprint can be compared directly.

This review incorporates data held by CAD Resources at 10th July 2025.

Finding populations and increasing numbers

A brief overview of the biology and preferred habitat of *Microcorys elatoides,* prepared in May 2022 for Covalent and addressed to DBCA is presented in Appendix 1.

The off-tenement regional surveys 2019-2025 continue to record new populations and increase numbers of *Microcorys elatoides*. These are recorded on low lateritic gravely rises, often on mid to lower slopes where some aeolian sand covers the laterite.

Soil Landscapes of the region centred on the EGLP study area are depicted in Figure 4 (DPIRD, 1987). This shows that *Microcorys elatoides* appears to be primarily correlated with subunits within the AC1 Atlas Land System, Figure 4.

- AC1 Atlas system: Gently sloping to gently undulating plateau areas, or uplands, on granites, gneisses, and allied rocks, with long gentle slopes and, in places, abrupt erosional scarps. [Note, this subunit of the Atlas System would also include lateritised hill tops and slopes, transported gravels and abutting shallow Aeolian sandsheets which have not been described or mapped at the scale at which the soil landscapes have been presented].

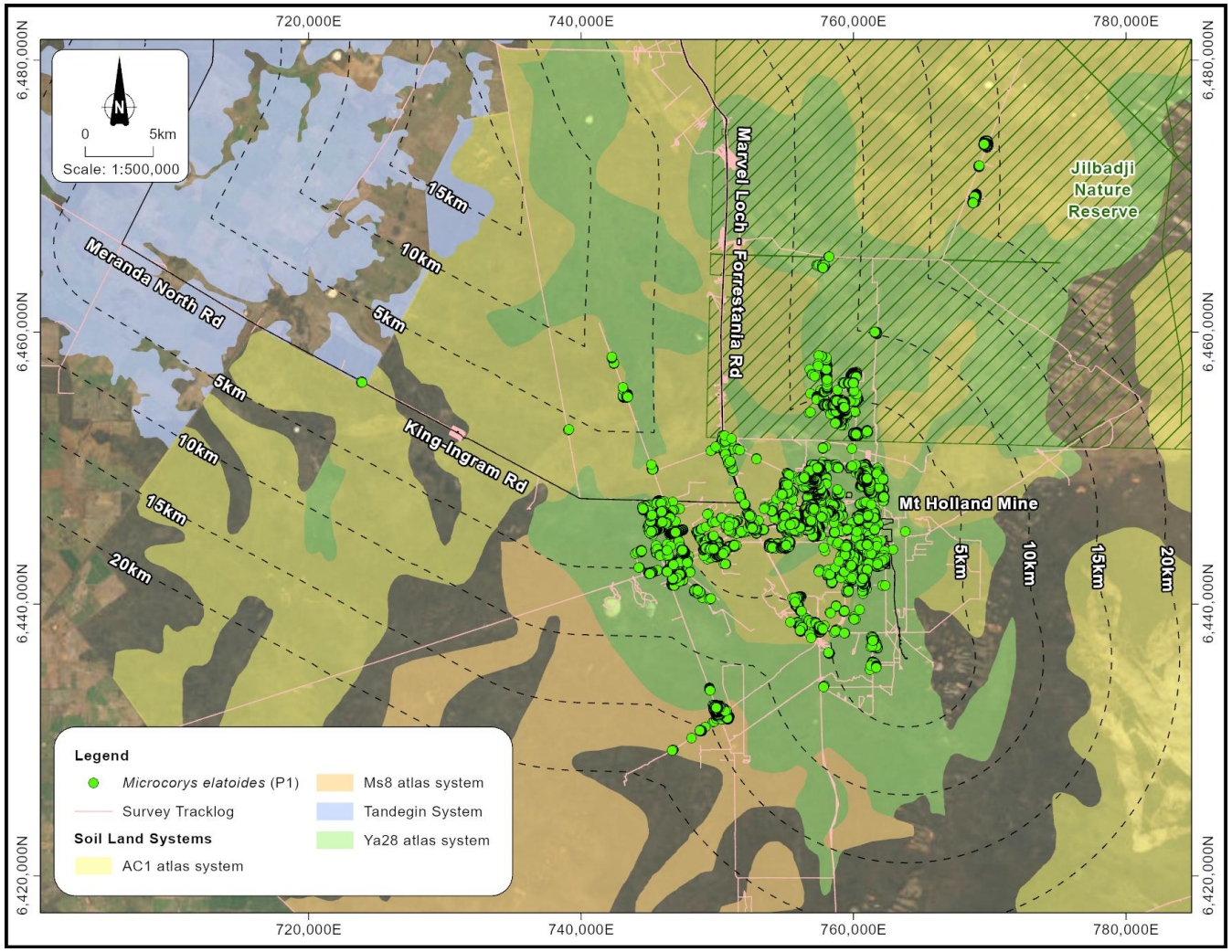
- Ms8 Atlas system: Gently undulating plains with broad shallow drainage depressions.

- Ya28 Atlas system: Sandy plains with some clay pans and small salt lakes, dunes, and lunettes.

- Tandegin System: Sandplain dominated interfluves with weakly indurated lateritised crests and upper slopes and long colluvial yellow sandplain upper to lower slopes. Unlateritised surfaces dominated by sodic and alkaline duplex soils.

Given the 1:250,000 scale of capture of the Soil Landscapes vs the local variability in soils and vegetation, and the recorded presence of *M. elatoides*, the correlation is not perfect, and differences are attributed to assessment at differing scales.

Figure 4. Soil Landscape Systems near the EGLP and *Microcorys elatoides* distribution

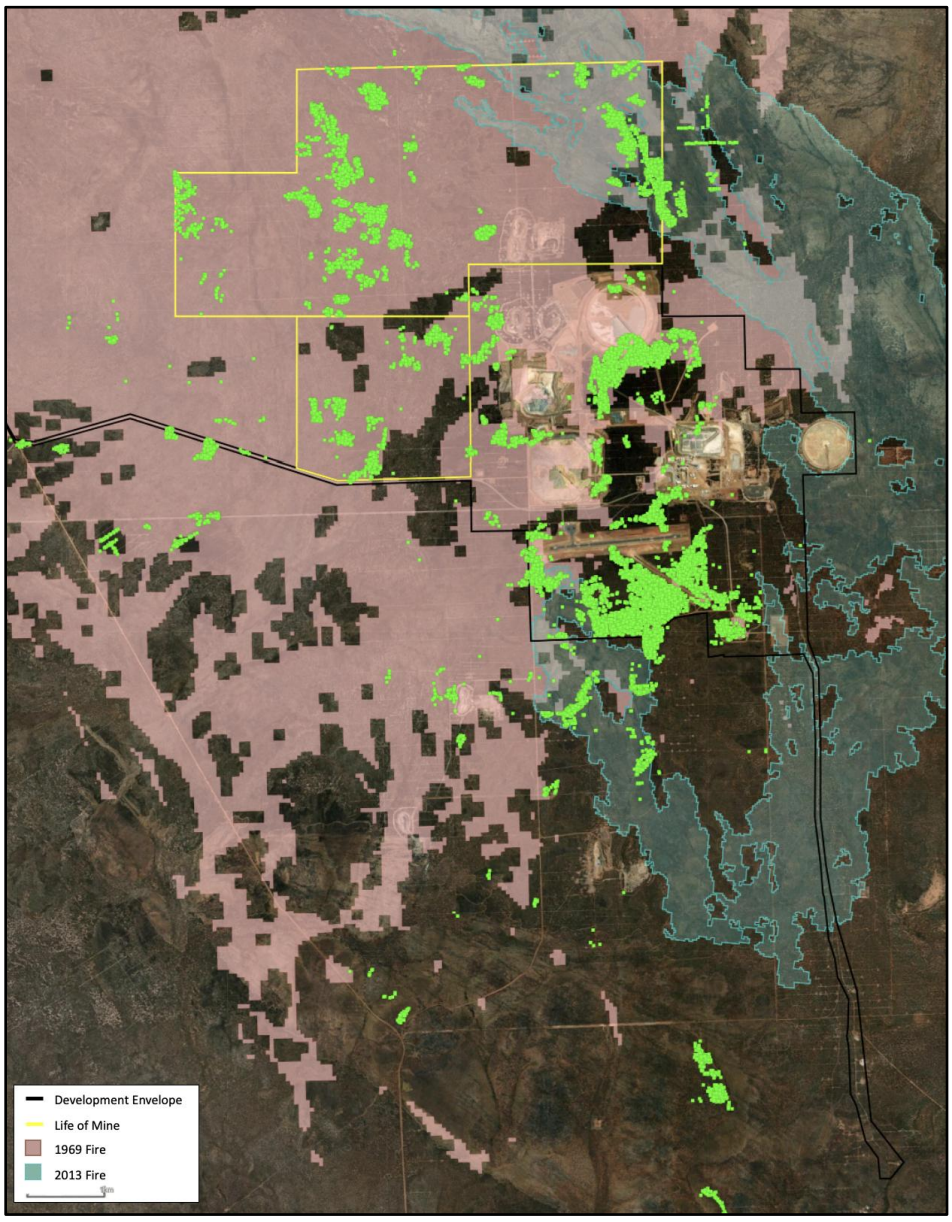


Western Botanical

January 2025 bushfire

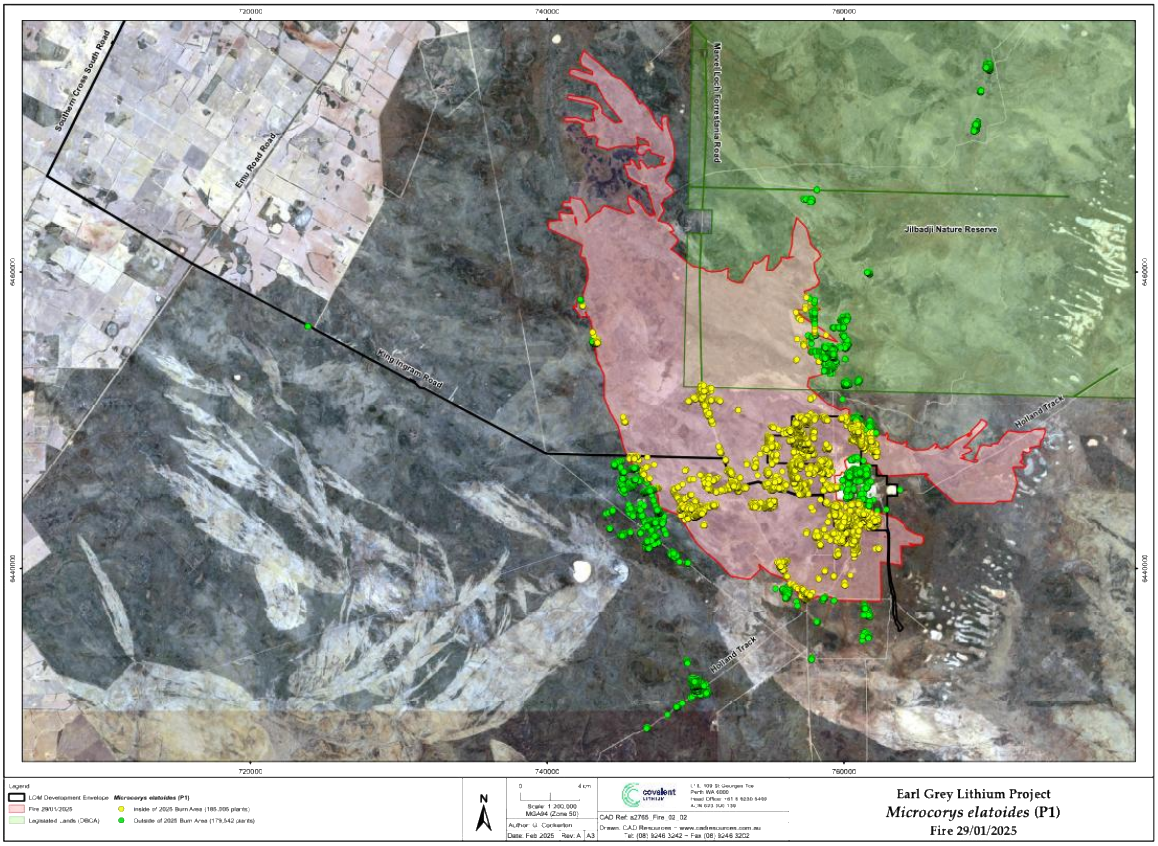
Many differing fire-age patches of vegetation were surveyed, specifically targeting the Atlas system landform and soil association, and frequently *M. elatoides* was recorded. A demographic assessment of *M. elatoides* in relation to fire age has been reported in Western Botanical (2025). Since 1969 there have been seven fires in the Mount Holland region that have affected known *Microcorys elatoides* (P1) populations: September 1969, January 1994, February 2002, January 2008, November 2013, November 2015, and November 2023. These are depicted in Western Botanical 2025. In particular, the 1969 and 2013 fires burnt through a large area of today's Development Envelope and Life of Mine Footprint, Figure 5.

Figure 5. Fire history 1969 and 2013



The majority of surveys recording *Microcorys elatoides* by a range of consultants including Western Botanical were conducted from 2016 to December 2024. In January 2025, a lightning strike ignited a fire near Skeleton Rock. This was pushed by a south-easterly wind and burnt through much of the habitat previously surveyed for *Microcorys elatoides*, Figure 6.

Figure 6. The recent (January 2025) lightning-strike, Skeleton Rock bush fire.



Surveys for *Microcorys elatoides* conducted to date indicate that further numbers and sub-populations are likely to be found, particularly within the central-southern portions of Jilbadji Nature Reserve, where suitable habitat for the species is inferred via association with known populations, but has not yet been surveyed as these lie considerable distance from available access tracks.

Current understanding of the numbers and distribution of *Microcorys elatoides*

At approval of the EGLP on 7th Oct 2019, EPA Report 1651, the numbers of *Microcorys elatoides* (Priority 1) plants known consisted of 5,692 within the mine Development Envelope and 10,856 regionally, a total 16,584 plants. Subsequent extensive surveys were conducted by Western Botanical between December 2019 and February 2025, leading to the numbers and distribution of *M. elatoides* being considerably extended. As at 10th July 2025, the overall population of *Microcorys elatoides* recorded stands at 364,577 individuals.

Microcorys elatoides is known from many populations and sub-populations. Populations are defined by DBCA as either (i) being physically separated by 600m (a value that likely restricts gene flow between populations); or (ii) being present on lands of differing tenure (reflecting differing ownership or management potentials). *Microcorys elatoides* has populations within the Jilbadji Nature Reserve as well as Unallocated Crown Land (UCL) and within Mining Tenements, Figure 3

Of the overall total 364,577 plants of *Microcorys elatoides* recorded to date, the numbers of plants on varying tenure are presented in Table 1 and Figure 7.

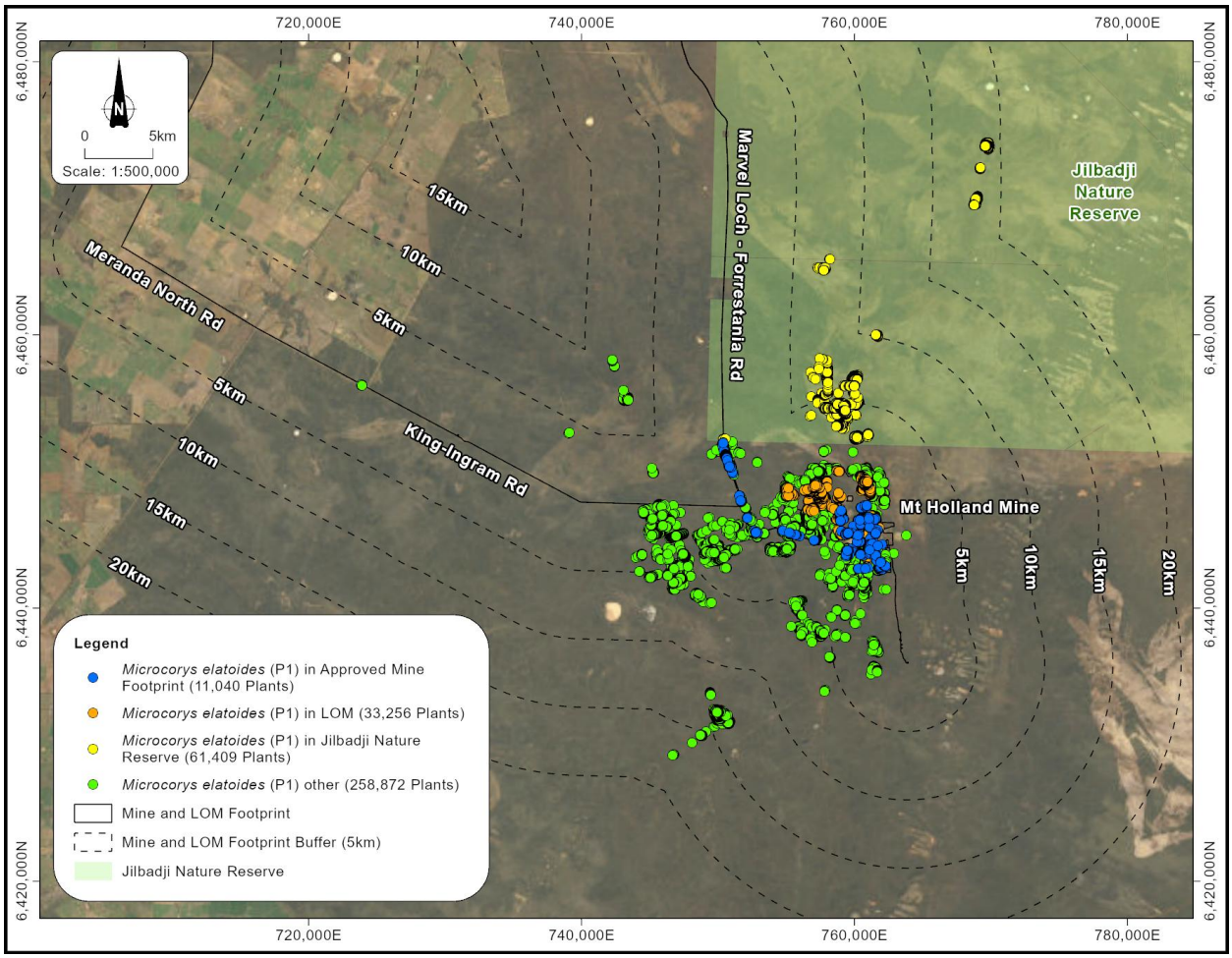
Table 1. *Microcorys elatoides* recorded and land tenure

	Count	% of Overall population recorded
Plants in the approved mine footprint (MP121883)	11,040[1]	3.03%
Plants in the LOM Development Envelope	33,256	9.1218%
Plants in the Jilbadji Nature Reserve	61,409	16.8439%
Plants within UCL outside the above	258,872	71.01%
Total recorded plants	364,577	100.00%

Microcorys elatoides also resprouts from lignotuber and numbers of plants reduces over longer timeframes, in the order of 20 to 30 years (Western Botanical, 2025).

[1] Only 7,962 plants within the Mine footprint (MP121883) are proposed to be taken.

Figure 7. Map of *Microcorys elatoides* and Land Tenure



Western Botanical

Microcorys elatoides population numbers and proposed impacts from the LOM

Of the total 364,577 number of *Microcorys elatoides* plants known to date:

- 3,078 plants representing 0.8443% of the overall known population have been already taken to September 2025, including:
    - Eight individuals (representing 0.0038% of the overall population) were taken early in site development at the intersection of the mine access road and the Marvel Loch – Forrestania road alignment, their taking approved in MS1199.
    - 3,070 plants (representing 0.8421% of the overall population) were taken in the upgrade of the Marvel Loch - Forrestania road alignment, approved under CPS10049.
- Approved to be taken in MP121883, MS1199:
    - 7,962 individuals (representing 2.18% of the overall known population) is the group of plants approved to be taken within the mine footprint (MP121883) under MS1199.
- LOM proposal:
    - 33,256 individuals (representing 9.1218% of the overall known population) lie within the proposed Life of Mine Development Footprint.

Table 2. Numbers and tenure of *Microcorys elatoides* populations

	Region	Taken	Not taken	Proportion of Population	Data Source
Regional, outside Mine and LOM	Regional, outside LOM and mine DE	-	14	0.0038%	DBCA
	Regional, outside LOM and mine DE	-	46,216	12.6766%	Other Consultants
	Regional, outside LOM and mine DE, excluding Jilbadji NR	-	158,028	43.3456%	Western Botanical
	Regional, within Jilbadji Nature Reserve		61,409	16.8439%	Western Botanical
	Regional, within CPS10049 footprint	3,070	-	0.8421%	Western Botanical
	Regional, outside LOM and mine DE, adjacent to CPS10049	-	4,989	1.3684%	Western Botanical
	Regional, within CPS10265 footprint	-	-	0.0000%	Western Botanical
	Regional, within CPS10197 footprint	-	-	0.0000%	Western Botanical
	Regional, outside LOM and DE, adjacent to CPS10197	-	-	0.0000%	Western Botanical
	Regional, outside LOM and DE, adjacent to CPS10265	-	-	0.0000%	Western Botanical
Mine and LOM	Local, within LOM Development Envelope	-	19,631	5.3846%	Mattiske Consulting et. al.
	Local, within LOM Footprint	-	399	0.1094%	Mattiske Consulting et. al.
	Local, within MP121883 mine footprint	-	29,595	8.1176%	Mattiske Consulting et. al.
	Local, proposed to be taken within LOM footprint	33,256	-	9.1218%	Mattiske Consulting et. al.
	Local, taken within MLF MS1199 footprint	8	-	0.0022%	Mattiske Consulting et. al.
	Local, approved to be taken within MP121883	7,962	-	2.1839%	Mattiske Consulting et. al.
	Total already taken (CPS10049 and MS1199)	3,078		0.8443%	
	Total, proposed to be taken within MP121883 and LOM	**41,218**		11.3057%	
	Total not taken at 10/7/25		**320,281**	87.8500%	
	Overall population known at 10/7/2025		**364,577**	100.0000%	
	Proportion of Overall Population	**11.31%**	**87.85%**		

Extent of Occurrence and Area of Occurrence

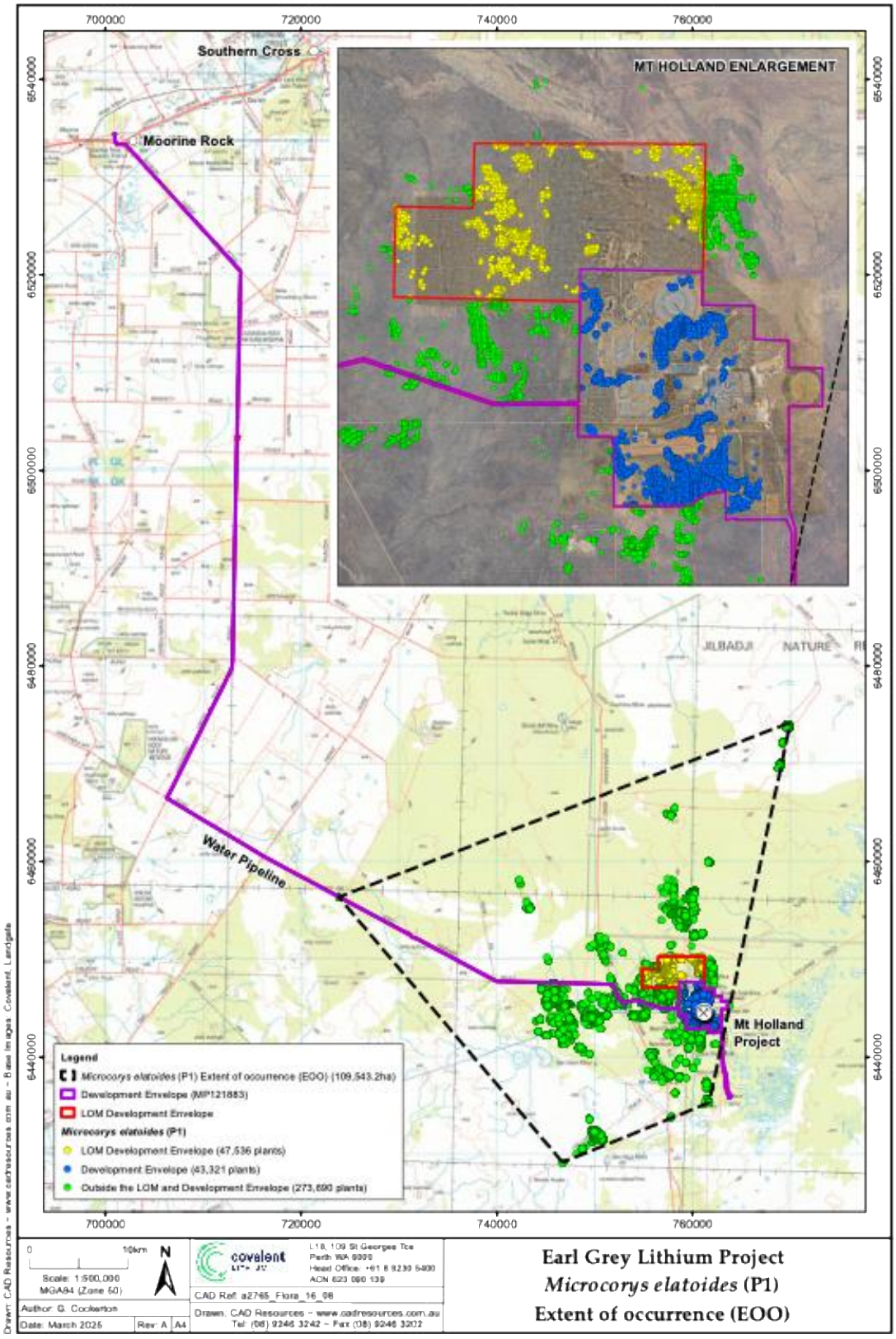
The extent of Occurrence (EOO), a polygon encompassing all known populations of *M. elatoides*; and the Area of Occupancy (AOO) calculated as a 5m radius around each data point (reflecting the field sampling technique) are presented in Western Botanical (2025, in prep). This states:

> "The Extent of Occurrence (EOO)) of *Microcorys elatoides*, inclusive of all known populations of the species, is calculated as 109,543 ha extending from south and east of the EGLP minesite, northwards to the Jilbadji Nature Reserve and westwards to a population on King Ingram Road."
>
> Within the EOO polygon, the Area of Occupancy (AOO), is calculated as 331.17 ha, representing 0.30% of the EOO. The AOO assumed a 5m radius around any given data point recorded in surveys for *Microcorys elatoides*.
>
> Of the 331.17 ha AOO occupied by *Microcorys elatoides* known as at March 2025, 13.60 ha lies within the proposed MP121883 mine footprint and 30.50 ha lies within the proposed LOM footprint. These represent 4.11% and 9.07% respectively (13.18% total) of the overall known AOO of the population to date. Outside the proposed mine areas, 43.62 ha (13.17%) of the AOO lies within the Jilbadji Nature Reserve and 243.90 ha (73.65%) of the AOO remains outside this, within Unallocated Crown Land (UCL).
>
> This data is presented in Table 3, Figure 8 and Figure 9.

Table 3. Area of Occupancy (AOO) of *Microcorys elatoides*

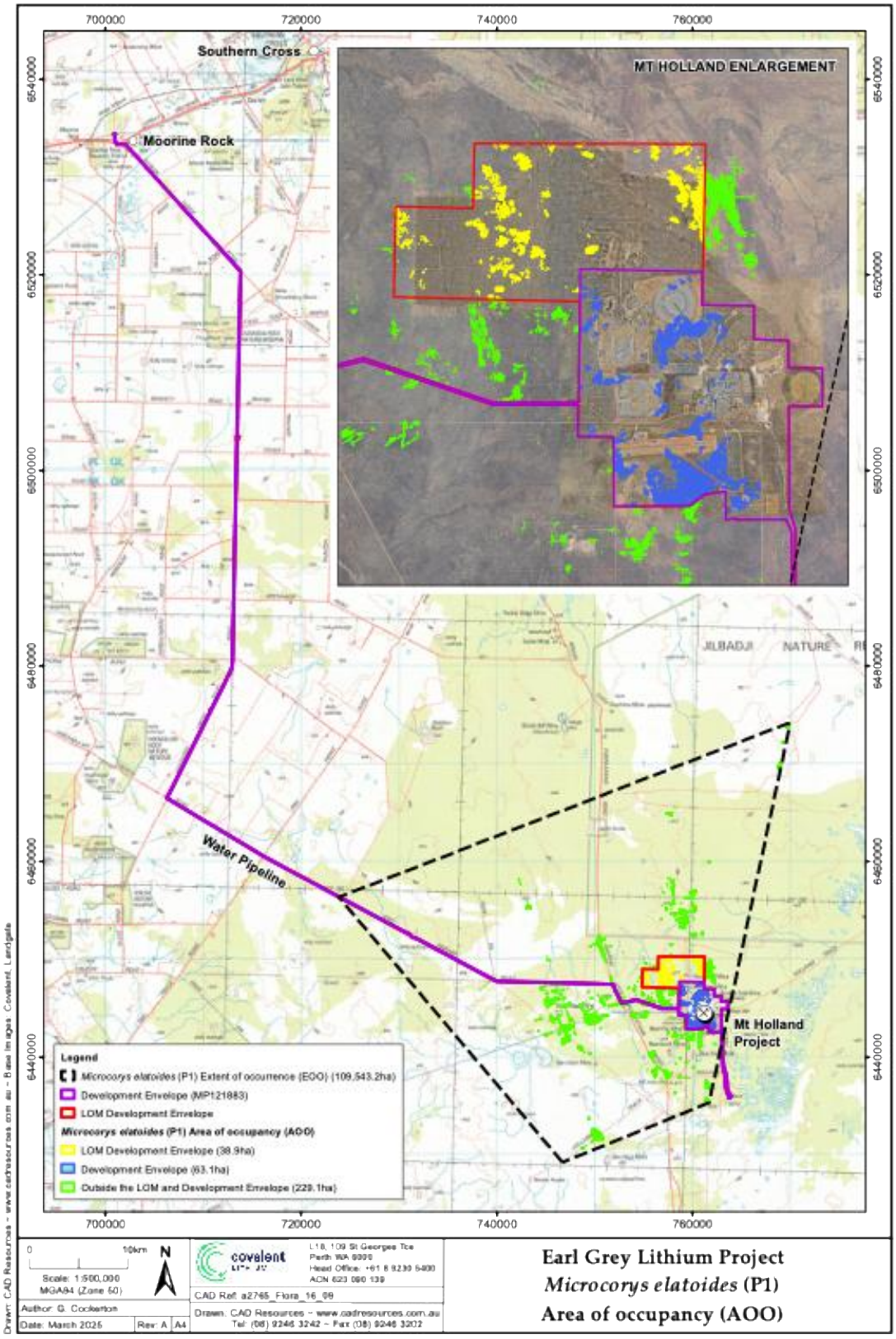
Area of Occupancy of *Microcorys elatoides* proposed to be taken in MP121883 and LOM footprints	**Conserved**		**To Be Taken**	
	Area (ha)	**%**	**Area (ha)**	**%**
Microcorys elatoides in the MP121883 mine footprint			13.60	4.11%
Microcorys elatoides in the LOM footprint			30.05	9.07%
Total of *Microcorys elatoides* within mine footprint and LOM			43.65	13.18%
Microcorys elatoides within Jilbadji NR	43.62	13.17%		
Microcorys elatoides outside the LOM footprint (and not in the Jilbadji NR), within UCL	243.90	73.65%		
Total of *Microcorys elatoides* remaining outside mine footprint and LOM	287.52	86.82%		

Figure 8. Extent of Occurrence of *Microcorys elatoides* as at July 2025.



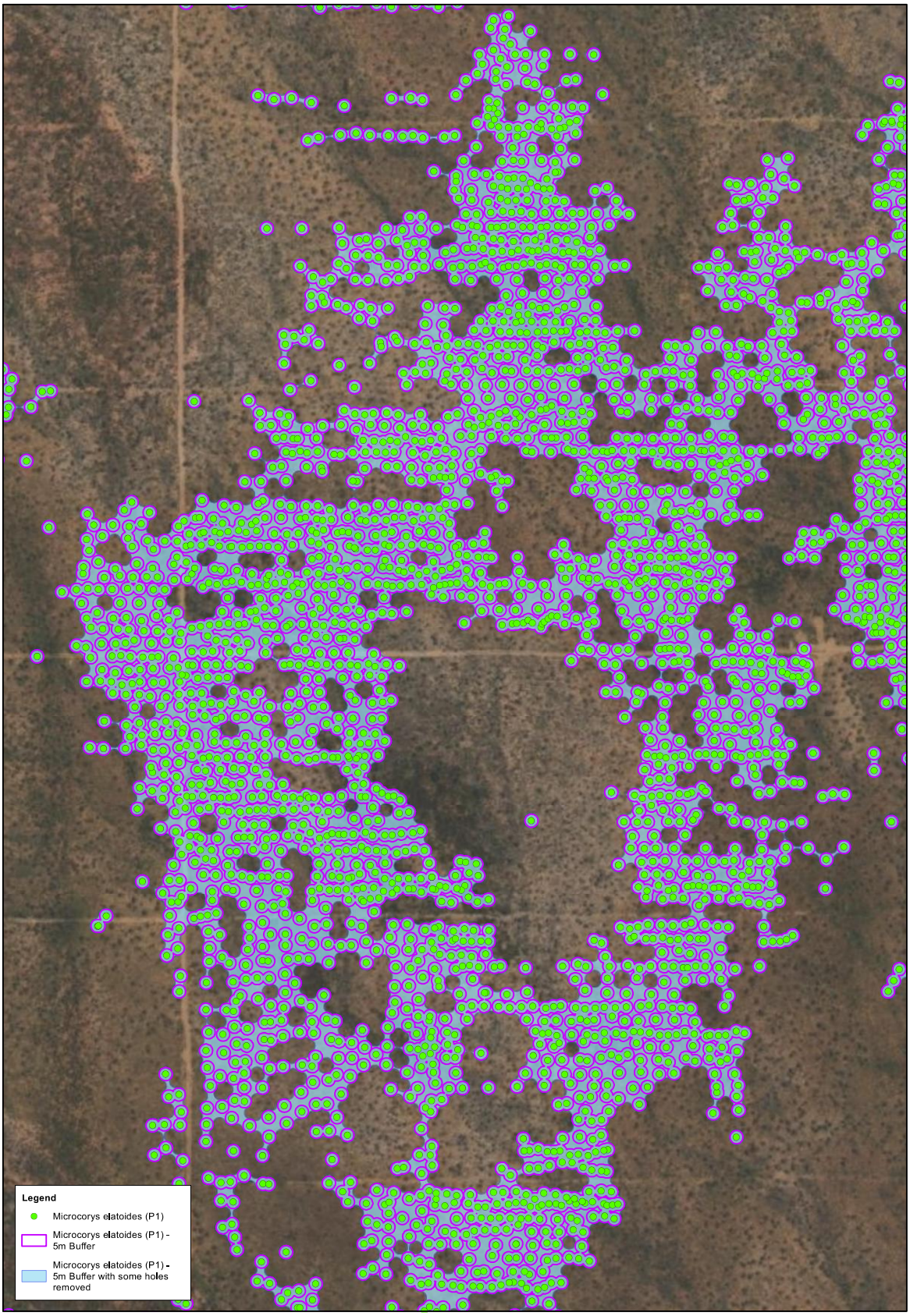
Western Botanical

Figure 9. Area of Occupancy of *Microcorys elatoides* at at July 2025



A closer inspection of the method used to determine the AOO is presented in Figure 10.

Figure 10. Sample of detailed view of *Microcorys elatoides* AOO assessment.



Microcorys elatoides is known from 127 populations and sub-populations. Populations are defined by DBCA as either (i) being physically separated by 500m (a value that likely restricts gene flow between populations); or (ii) being present on lands of differing tenure (reflecting differing ownership or management potentials).

Microcorys elatoides has populations within the Jilbadji Nature Reserve as well as Unallocated Crown Land (UCL) and within Mining Tenements, Figure 3.

Table 4. *Microcorys elatoides* numbers and Land Tenure

Land Tenure	Count	% of Overall population recorded
Plants in the approved mine footprint (MP121883)	11,040	3.03%
Plants in the LOM Development Envelope	33,256	9.12%
Plants in the Jilbadji Nature Reserve	61,409	16.84%
Plants within UCL outside the above	258,872	71.01%
Total	**364,577**	**100.00%**

Reviewing the Conservation Listing of *Microcorys elatoides*

It is understood the Priority 1 status currently applied to *Microcorys elatoides* was based upon this being a newly discovered taxon with a restricted distribution and < 11,000 individuals recorded regionally in 2019.

Following extensive regional surveys 2019 – 2025, the overall population known as at July 2025 is 364,577, with an acknowledgement that further numbers are yet to be potentially recorded both within and outside the Jilbadji Nature Reserve.

A substantial number of plants, 61,409 representing 16.84% of the overall known population occurs within the Jilbadji Nature Reserve.

A review of Department of Biodiversity, Conservation and Attractions Criteria for defining Priority Flora (Western Botanical, 2022) finds that *M. elatoides* fulfils the criteria for listing as a Priority 2 species:

> "Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, for example, national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation."

On review of the AOO and overall distribution of the species known to date, it may be argued that the species, while restricted to a 20km radius north, west and south of Mt Holland, is comprised of 127 populations and sub-populations. It may therefore be argued that a Priority 3 (poorly known but with more than five populations known); or Priority 4 (restricted distribution but not threatened) listing may also be appropriate for the species. With the level of survey undertaken specifically for this species to date, it should no longer be regarded as "poorly known". It is however, geographically restricted.

The greatly expanded AOO, is calculated as 331.17 ha (3.3117 sq. km), representing 0.30% of the EOO. Surveys funded by covalent have increased numbers by a factor of 33 times over those known at the time of its assessment and listing as a Priority 1 flora species (2018: fewer than 11,00 plants (3.0171%) known vs 2025: 364,577 (96.9829%) total plants recorded to date). The extant population is 320,281 plants calculated as at July 2025.

Data generated in surveys for Covalent indicate that M. elatoides has a range of 20 km radius of Mt Holland (in northerly, westerly and southerly directions). Much of the northern extents of the EOO and AOO were burnt in January 2025, triggering natural regeneration processes.

Assessment of *Microcorys elatoides* against the IUCN Red Book Categories

The International Union for Nature Conservation (IUCN) produces the Red Book, a comprehensive method for assessing conservation status of species. This takes into account the biology of the species, overall numbers, areas of occupancy and threatening processes. The IUCN Red Book Categories and Criteria are presented in .

Microcorys elatoides is known from one large population, originally 364,577 plants, less 11,048 plants taken to date, with a residual extant population of 320,281 individuals as at July 2025. Several disjunct populations and sub-populations, ranging in size from a few hundred individuals to tens of thousands of plants, are known within a 20 km radius of Mt Holland, following favourable landscape and soil type occurrences. These lie in the western edge of the Southern Cross (COO 2) Interim Biogeographic Regionalisation of Australia (IBRA) subregion. A minimum of 61,409 individuals are known occur within the Jilbadji Nature Reserve and a minimum of 204,268 plants are known to occur within Unallocated Crown Land outside areas of proposed disturbance.

Microcorys elatoides has an Extent of occurrence of 109,543 ha (1,095.43 sq. km) and an Area of occurrence of 331.17 ha (3.3117 sq. km).

The current threat to *Microcorys elatoides* is from proposed mining with 33,256 plants (9.1218% of the overall population) proposed to be taken in the Earl Grey Lithium Project (EGLP) Life of Mine (LOM) footprint. The cumulative impact to date from all sources, is 11,408 plants (3.0304% of the overall known population). The combined impact, following implementation of the LOM is 44,304 plants (12.1522% of the overall known population).

A review of *Microcorys elatoides* against the IUCN Red Book Criteria is presented in Table 5.

Table 5. Review of *Microcorys elatoides* against the IUCN Red Book Criteria

Criterion	Discussion
IUCN CR and EN Category A (reduction in population size)	IUCN Categories CR and EN based on reduction in Population are not triggered by EGLP LOM proposal. The overall number of plants recorded of *Microcorys elatoides* stands at 364,577 plants to July 2025, excluding the effects of the January 2025 bush fire. Some of these have already been taken (CPS10049 footprint (3,070 plants, 0.08421%), MS1199 footprint (8 plants, 0.0022%), within MP121883 (7,962 plants, 2.1839%), leaving an extant population of 320,281 plants (87.8500% of the overall population). The cumulative reduction in population size from development of the EGLP to July 2025 stands at 3.0304%. The LOM proposal will take 33,256 plants, 9.1218% of the overall population. The total reduction in population size of *Microcorys elatoides* from all processes associated with the EGLP, both historical and proposed (CPS10049 footprint (3,070 plants), MLF MS1199 footprint (8 plants), within MP121883 (7,962 plants), and the LOM proposal is 44,304 plants, 12.1500%. **Neither the level of impact from the LOM proposal alone nor the Cumulative impact to date trigger the IUCN Category A (reduction in population size) or for *Microcorys elatoides* as either Critically Endangered (>80%), Endangered (>50%) or Vulnerable (>30%).**
IUCN Category B1 (Extent of Occupancy, EOO)	IUCN Category B (CR) – Critically Endangered is triggered if the EOO is less than 500 sq. km and if any 2 of the following are met: (a) severely fragmented or known to exist at no more than five locations; (b) continuing decline in EOO, AOO, quality of habitat, number of locations or subpopulations, number of mature individuals; or (c) extreme fluctuations in EOO, AOO, number of locations or subpopulations, number of mature individuals. IUCN Category B (EN) – Endangered is triggered if the Extent of Occurrence (EOO) is less than 5,000 Sq Km with the same additional criteria (a) to (c). The Extent of Occurrence is 109,543 ha (1,095.43 sq. km), based on the populations and sub-populations known to date, this being less than 5,000 sq. km noted for Category B (EN). The EGLP LOM Proposal does have a one-off impact on the species with a reduction in numbers of 33,256 plants, (9.1218% of the overall population). However, it does not meet two of the three sub-criteria for decline in either

Criterion	Discussion
	numbers, EOO or AOO, *i.e.,* the reduction in numbers and AOO are considered a one-off event, and are not on-going in nature. A recent analysis of *M. elatoides* distribution using CAD techniques (Microcorys_elatoides_20250710_Cad_DBCA_LID_Ten – ArcGIS) and a using a measure of physical separation of 600m and/or change in land tenure, *Microcorys elatoides* is known from 127 populations and 183 sub-populations at 63,300 data points. The western-most point recorded consists of 85 plants recorded adjacent to the Vermin Proof Fence on King Ingram Rd. This point is significantly disjunct from other points recorded. It is route to continue finding additional individuals of *Microcorys elatoides* when visiting areas of suitable soil type and landscape position which have not been assessed to date. It is considered unlikely the EOO would be greatly increased but that the AOO and numbers of plants within the EOO would be increased to some degree with further survey. ***Microcorys elatoides* does not meet the IUCN listing Criteria for Endangered (CR) based on Extent of Occurrence (EOO < 500 sq. km).** ***Microcorys elatoides* does have an EOO less than 5,000 sq. km, meeting the IUCN listing Criteria for Endangered (EN) based on EOO (1,095.43 sq. km), however, the Impacts by the EGLP LOM Proposal on numbers and AOO are considered a one-off impact and not on-going in nature.** **For this reason, we believe *Microcorys elatoides* does not meet the Criteria for listing as either Critically Endangered or Endangered based on EOO.**
IUCN Category B2 (Area of Occupancy, AOO)	IUCN Category B2 is triggered if the Area of Occupancy (AOO) is less than 10 sq. km with the same additional criteria (a) to (c). *Microcorys elatoides* has a total Area of Occupancy of 331.17 ha (3.3117 sq. km), based on a 5 m radius around each plant. Of this, 13.6 ha (4.11%) lies within the approved MS121883 footprint. A further 30.5 ha (9.07 ha) lies within eh proposed Life of Mine footprint. 43.62 ha (13.17%) lies within the Jilbadji Nature Reserve. 243.9 ha (73.62%) lies within Unallocated Crown Land within the EOO. ***Microcorys elatoides* does meet the Criterion for Endangered B2: Area of Occurrence (AOO) less than 10 sq. km, however, the Impacts by the EGLP**

Criterion	Discussion
	LOM Proposal on numbers and AOO are considered a one-off impact and not on-going in nature. **For this reason, we believe *Microcorys elatoides* does not meet the Criteria for listing as either Critically Endangered or Endangered based on AOO.**

The results of this assessment against the IUCN Categories is presented in Table 6. Based on the data generated by Covalent Lithium over the period 2019-2025, *Microcorys elatoides* does meet the Criteria for IUCN listing as Endangered (EN) B1 b (ii) (v), meeting the categories

EN Endangered, B1 (Geographic Range Extent of Occurrence (EOO) less than 5,000 sq. km

Table 6. Assessment of *Microcorys elatoides* against the three highest applicable IUCN Categories

IUCN Category	Criterion	Proportional Impact Area	Reduction in Population Size	Extent of Occurrence	Area of Occurrence	Resulting IUCN Listing
Extinct (EX)			No	No	No	
Extinct in the Wild (EW)			No	No	No	
Critically Endangered (CR)	Reduction in Pop's size >90%; EOO <100 sq. km; AOO<10 sq. km	LOM impact Alone	No	No	No	Nil
		Cumulative Impact	No	No	No	Nil
Endangered (EN)	Reduction in Pop's size >70%; EOO <100 sq. km; AOO<10 sq. km	LOM impact Alone	No	No	No	Nil
		Cumulative Impact	No	No	No	Nil
Vulnerable (VU)	Reduction in Pop's size >50%; EOO <20,000 sq. km; AOO<2,000 sq. km	LOM impact Alone	No	No	No	Nil
		Cumulative Impact	No	No	No	Nil

Limitations

Limitation	Discussion
Available sources of contextual information	• At the time of commencement of surveys, desktop information on the flora and vegetation of the Study Area was limited. • Mattiske consulting had developed a document providing information on the Threatened and Priority flora of the EGLP Study Area, which was most useful. • Further, through use of WA Herbarium and JSTOR Global Plants resources, and occasional reference to specialist taxonomists in WA and other states, flora identifications were adequately resourced. This is not a Limitation for the works reported
The Scope of the survey	• The assessment was Scoped as a Targeted Survey for Significant Flora, meeting EPA Guidance 2016. This is not a Limitation for the works reported
Proportion of flora collected and identified	• Experienced senior botanists lead teams in the field at all times. • All Threatened and Priority encountered flora were thoroughly assessed with reference material for all significant species maintained and referred to on a regular basis. • Through the collection of specimens of all species encountered, those that represented potential new species were recognised and added to a dynamic Reference Field Herbarium. This is not a Limitation for the works reported
Completeness and further work which may be needed	• Through on-going works from 2019 to Dec 2024, a good understanding of the species vs soil type / landform and vegetation community associations was developed. • Project areas were carefully evaluated and were thoroughly assessed at 10m spacings between operators, allowing excellent coverage of the areas surveyed. • Within the areas assessed, where a particular group of species were targeted, surveys were thorough and carefully conducted to minimise gaps in coverage.

Limitation	Discussion
	• Targeted Surveys for significant flora were conducted with a target cumulative impact calculation for all species of less than 5%. Where ever possible, species were included in field surveys until this target was achieved. Once the low percentage impact was achieved, species were not further specifically targeted but were recorded where ever observed incidentally to other works in the area. • The surveys presented here can be considered thorough and accurate for the areas and species assessed. • It should be noted that further survey in areas not yet assessed will likely yield additional numbers of individuals and potentially additional populations of some or all of the target species. However, given the quantum of surveys undertaken; the detail at which it was undertaken; and the low level of cumulative impacts achieved, further survey of most significant flora is not regarded as being required. Essentially, the more we search, the more we find, but in diminishing returns for effort. This is not a Limitation for the works reported
Mapping reliability	• Mapping was conducted utilising iPads running ARCGIS FieldMaps application with high resolution satellite imagery base maps and GPS accuracy of between +/- 2.5m to 3.5m regularly achieved. • Data points included counts and / or estimates of numbers of plants within a 5m radius of each point. This is not a Limitation for the works reported
Timing: weather, season	• Data presented here incorporates records from 2016 to 2024, a period of eight years. There were many opportunities to address species in the appropriate time of year to maximise effectiveness and accuracy. • Despite the extensive period of surveys, few days were lost to inclement weather, either heat or cold/wet conditions, and the quality of surveys was not compromised. • Many species targeted were cryptic and needed to be assessed when in flower. This applied, for example, to early

Limitation	Discussion
	season flowering genera such as *Balaustion, Eutaxia, Gompholobium* and late-flowering genera such as *Chamelaucium* and *Verticordia.* • Field surveys were planned and undertaken in appropriate seasons that were favourable to the ready sighting and identification of each species assessed. • Due to the flowering phenology of the broad of species targeted, some areas were assessed two or three times as some species finished flowering and other species commenced flowering. This is not a Limitation for the works reported
Disturbances	• Two disturbances influenced the effectiveness of surveys undertaken for EGLP: (i) occurrence of wildfires which stimulated fire-responsive species; and (ii) establishment of strategic firebreaks (chaining and burning of 50 to 100m wide strips of vegetation on roadsides) by DBCA on King Ingram Road and on the Marvel Loch – Forrestania Road alignments. • The north-eastern portion of the Life of Mine Development Envelope was burnt in 2013 which meant that assessment within the LOM 2016 to 2019 were undertaken in favourable timeframes following fire. • The roadside strategic firebreaks on King Ingram Road and the Marvel Loch – Forrestania Road were established in ?2018 and vegetation was in an early stage of recovery when surveys commenced in that part of the Study Area in 2021. • In both cases, the disturbances stimulated establishment of understory species to either germinate from seed or re-sprout from rootstocks and lignotubers, and benefited the assessment of target species. This is not a Limitation for the works reported

Limitation	Discussion
Intensity	• Surveys were undertaken at 10m spacings between individual observers, on pre-determined grids which were depicted on iPads running the ESRI FieldMaps application and using high resolution satellite imagery base maps. • Spacings of operators allowed full coverage of areas assessed for all species. • In the case of assessments for *Eutaxia* sp. North Ironcap (P1), spacings of operators was usually reduced to 5m apart as this species is very cryptic. This is not a Limitation for the works reported.
Resources	• Adequate resources and funds were made available by Covalent to address the agreed Scope at all times. This is not a Limitation for the proposal
Access	• Access to the Study Area was excellent in all areas. This is not a Limitation for the proposal
Experience levels	• The team developed and utilised for this project undertook the works in a systematic fashion and was led at all times by at least one senior botanist per team. • All but two team members have maintained longevity in the Western Botanical team throughout the period, conducting surveys between Moorine Rock and Forrestania, meaning that knowledge of the flora of the region has been gained and maintained. • The use of a dynamic field herbarium and contemporaneous identification of species while field works were being implemented meant that the field teams were responsive to newly recognised significant flora in appropriate timeframes to allow assessments to be undertaken in appropriate seasonal conditions in most cases. This is not a Limitation for the proposal

References

- Atlas of Living Australia occurrence download at https://biocache.ala.org.au/occurrences/search?&q=taxa%3A%22microcorys+elatodies%22&disableAllQualityFilters=true&qc=data_hub_uid%3Adh9 accessed on 19 September 2025.

- CAD Resources Pty Ltd (2025) *Analysis of Microcorys elatoides populations and sub-populations, 19th Dec 2025.* Analysis provided to Covalent Lithium. Ref: (Microcorys_elatoides_20250710_Cad_DBCA_LID_Ten – ArcGIS).zip.

- Department of Biodiversity, Conservation and Attractions (2025) Conservation Categories Definitions for Western Australian Fauna and Flora. Department of Biodiversity, Conservation and Attractions, Perth, Western Australia.

- Department of Primary Industries and Regional Development (1987) *Soil-landscape systems Western Australia.* Department of Primary Industries and Regional Development, Perth, Western Australia.

- IUCN. (2012). IUCN Red List Categories and Criteria: Version 3.1. Second edition. Gland, Switzerland and Cambridge, UK: IUCN. iv + 32pp.

- Western Australian Herbarium (1998–). Florabase—the Western Australian flora. Department of Biodiversity, Conservation and Attractions. https://florabase.dbca.wa.gov.au/browse/profile/50147, Accessed 19 September 2025.

- Western Botanical (2022) *Review of Microcorys elatoides (P1) Conservation Listing.* Consultant's report prepared for Covalent Lithium Pty Ltd. Report Ref: WB979.

- Western Botanical (2025) *Microcorys elatoides Pilot Demographic Study.* Consultant's report prepared for Covalent Lithium Pty Ltd. Report Ref: WB1055 (in preparation).

List of Participants

Staff Member	Field Surveys	Specimen Identification	Data Analysis	Report Preparation
Geoff Cockerton B.Sc. (Biology) Flora Taking (Biological Assessment) License No. – FB62000046	**1**	**1**	**1**	**1**

Appendix 1. Western Botanical (2022) Review of *Microcorys elatoides* (P1) Conservation Listing.

Our Ref: WB979

Tuesday, 17 May 2022

Ms Catherine Bourke
Species and Communities Branch
Department of Biodiversity, Conservation and Attractions
By email: catherine.bourke@dbca.wa.gov.au

Dear Catherine

Review of *Microcorys elatoides* (P1) Conservation Listing.

Western Botanical is undertaking botanical surveys for Covalent Lithium Pty Ltd (Covalent Lithium) on related to the Earl Grey Lithium Project, located approximately 100 kilometres south-south-east of the townsite of Southern Cross, Western Australia.

The area of the Earl Grey Lithium Project and surrounds contain numerous flora taxa classified by the State Department of Biodiversity, Conservation and Attractions (DBCA) as 'Priority'.

Of the recorded flora taxa, the flora taxon *Microcorys elatoides* (Priority 1) has come to my attention as potentially requiring reclassification as a result of more recent biological survey information on its broader distribution and abundance. From review of its distribution and abundance, and of the DBCA's listing criteria, it would seem appropriate for DBCA to consider a revision of the conservation listing of *Microcorys elatoides* would be more appropriately classified at a 'Priority 2' listing.

I have prepared a brief consolidated review of *Microcorys elatoides*, which follows.

Your consideration of this matter would be greatly appreciated.

Yours Sincerely

Geoff Cockerton

Background

Microcorys elatoides is a long lived lignotuberous, geosporous, perennial shrub to 1m in height with terete linear bright green leaves to 25mm in length and white flowers in mid to late Spring, Appendix 1.

Microcorys elatoides occurs on shallow aeolian sand over laterite pizolitic gravely hills and is endemic to the Mt Holland area, some 112 km SSE of Southern Cross. Its distribution is wholly contained within the western fringe of the Southern Cross subregion of the Coolgardie biogeographic region, Figure 1, with proportions of the currently known population within the Jilbadgi Nature Reserve as well as in Unallocated Crown Land.

Figure 1. Mt Holland and Biogeographic Regions

Description and Listing of *Microcorys elatoides*

Microcorys elatoides was described in October 2020 by Wilson & Hislop from specimens initially collected by D. Angus (Oct 2016) and subsequently re-collected by Davis & Hislop in October 2018.

It is currently listed as a Priority 1 species by the Department of Biodiversity, Conservation and Attractions (DBCA). It is understood the Priority 1 this was based upon *Microcorys elatoides* being a newly discovered flora taxon with a restricted distribution and < 11,000 individuals recorded regionally (with a projected estimate of < 45,000 individuals).

Known Populations - DBCA Data

WA Herbarium Data available through the Florabase website shows 13 specimens are vouchered from the Mt Holland area. Of these, one lies within the Jilbadji Nature Reserve and the remainder are located closer to Mt Holland. Where population sizes are mentioned, these are annotated variously as 'large population', 'locally common', '2 to 5 plants', '6 to 10 plants', '10 in 10m diameter'. It the authors experience, this is typical of the distribution of the species where it can occur in small numbers or in very large populations of many hundreds of mature individuals.

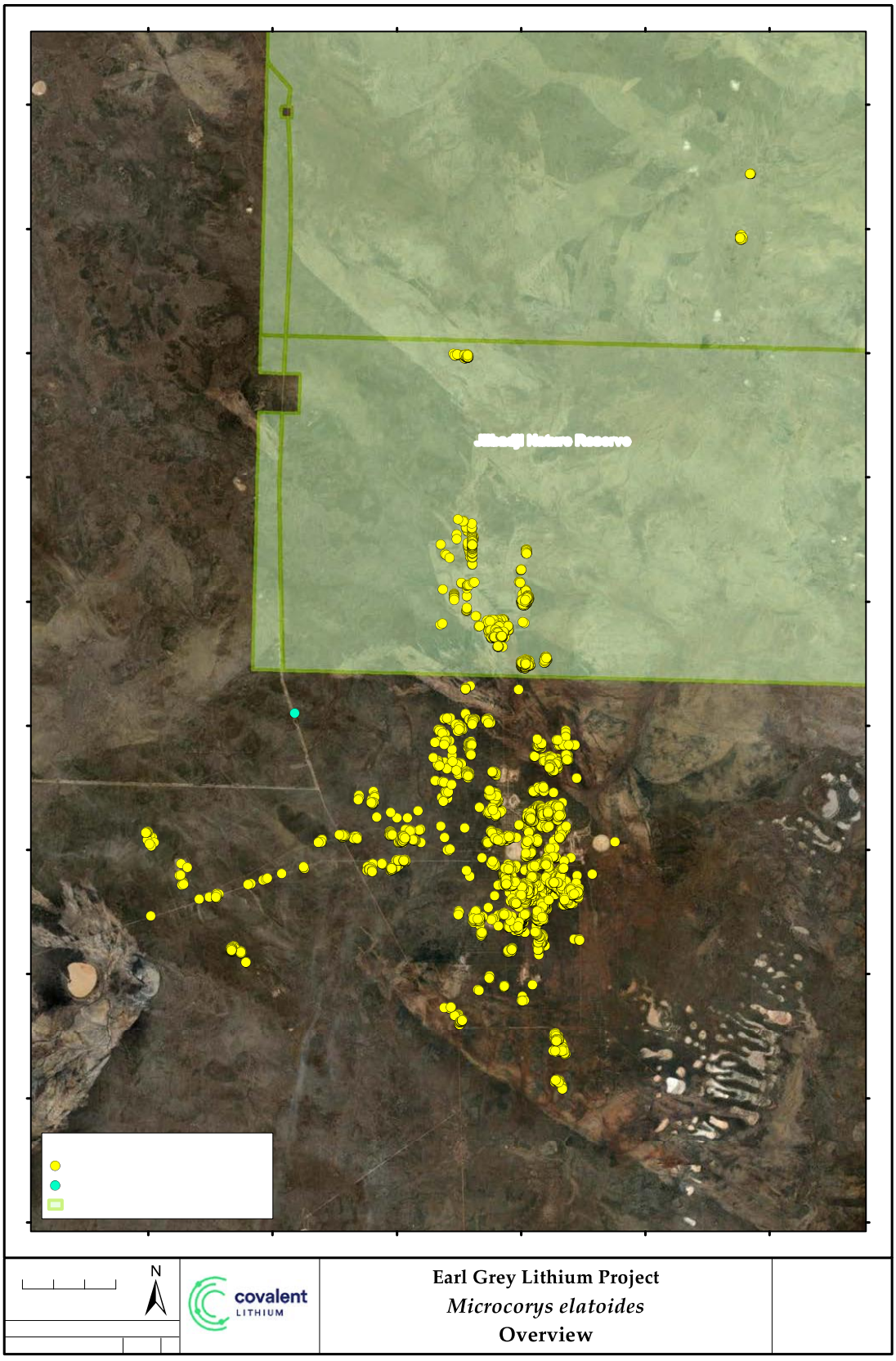
Known Populations – Mattiske Consulting and Western Botanical Flora Surveys

Relatively recent studies conducted by Mattiske Consulting and Western Botanical (for Covalent Lithium) in support of their development proposals at the former Bounty Gold Mine at Mt Holland have recorded significant numbers of *M. elatoides* both within UCL in and around the current mining operations and also within the Jilbadji Nature Reserve, Table 1. A minimum of 87,559 individuals are now known (near double the original estimated abundance), of which approximately 27 % (23,708 individuals) occur within the Jilbadji Nature Reserve, Figure 3.

Table 1. Numbers of *Microcorys elatoides* recorded by Mattiske Consulting and Western Botanical:

Taxon & Cons_Code	Within Jilbadji Nature Reserve	Outside Jilbadji Nature Reserve (UCL/VCL)	Total Numbers Known
Microcorys elatoides P1	23,708	63,851	87,559
Proportion of Known Population	27 %	73 %	100%

Figure 2. *Microcorys elatoides* known distribution and Conservation Reserves



Western Botanical

Potential Further Numbers

While extensive and detailed Targeted Surveys for *Microcorys elatoides* have been undertaken in recent years by Covalent, not all populations recorded have been well quantified. In particular, those on the Forrestania – Marvel Loch Road and those west of the Forrestania – Marvel Loch Road have not been fully enumerated and the range of the species in these areas may increase numbers and known distribution within suitable habitat.

During targeted flora surveys at Mt Holland in October 2021, *Microcorys elatoides* was observed to regenerate (i) from the lignotuber with dozens of aerial stems as well as (ii) abundantly from soil stored seedsAppendix 1. Western Botanical (2022) Review of *Microcorys elatoides* (P1) Conservation Listing..

Criteria for Conservation Listing

The DBCA's criteria for listing of poorly known species as Priority Species in Western Australia in presented in **Error! Reference source not found.**.

In summary, these are can be briefly described as:

Priority 1. Poorly known species which are known from one to five populations, *all occurring outside conservation reserves*, usually small in area or low numbers, some or all of which may be at risk.

Priority 2. Poorly known species which are known from one to five populations, *some of which occur within conservation reserves*, usually small in area or low numbers, some or all of which may be at risk.

Priority 3. Poorly known species which are known from one to five populations, some of which are on lands managed for nature conservation with secure tenure for conservation.

Priority 4. Poorly known species which are known from several locations and the species does not appear to be under threat. These may have few but widespread populations with either large population size or significant areas of suitable habitat much of which is not under imminent threat.

Summary

Utilising the data collected by Covalent on the abundance and distribution of *Microcorys elatoides*, and using the DBCA criteria for conservation listing of Priority Species, *Microcorys elatoides* clearly falls within the DBCA's Priority 2 category. The number of individuals of *Microcorys elatoides* within the Jilbadji Nature Reserve is substantial (> 27,000 individuals), such that the conservation of this taxon is considered to be secure. It is suggested therefore that the listing of *Microcorys elatoides* be reviewed by DBCA to the appropriate Priority 2 status at a minimum. Further, given the geographical distribution of *M. elatoides* within a 20 km radius of the EGLP in northerly, western and south-western directions; the distribution of populations and sub-populations within this region and the relatively large Extent of Occurrence and Area of Occupancy; and considering the proposed impacts to the species by the EGLP LOM proposal and the overall cumulative impacts to the species by the EGLP, *M. elatoides* could be considered a Priority 4 species (Rare, adequately surveyed and that are considered not currently threatened…).

References

Covalent Lithium Pty Ltd (May 2022) COV*_s38_20210826_Composite_Flora*. Data provided by Covalent Lithium Pty Ltd via Cad Resources Pty Ltd.

Department of Biodiversity, Conservation and Attractions. *Conservation Codes For Western Australian Flora and Fauna. 3rd January 2019.* Available from https://www.google.com/search?client=firefox-b-d&q=dbca+conservation+codes.

Western Australian Herbarium (1998–). Florabase—the Western Australian Flora. Department of Biodiversity, Conservation and Attractions https://florabase.dpaw.wa.gov.au/browse/profile/50147 (Accessed 17 May 2022).

Western Botanical (2025) *Microcorys elatoides Pilot Demographic Study.* Consultant's report prepared for Covalent Lithium Pty Ltd. Report Ref: WB1055.

Images of Microcorys elatoides

Plate 1. Mature plant of *Microcorys elatoides*, regrowing approximately 3 years after fire, north of Mt Holland, Sept 2020.

Plate 2. Base of same mature plant of *Microcorys elatoides*, showing multiple stems arising from lignotuber.

Plate 3. Young plant of *Microcorys elatoides*, assumed growing from seed, approximately 25 cm tall.

Plate 4. Flowers of *Microcorys elatoides*

DBCA's Criteria for Conservation Listing, Priority Species (DBCA, 2019)

Priority Species

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

Priority 1: Poorly-known species

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

Priority 2: Poorly-known species

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

Priority 3: Poorly-known species

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

Priority 4: Rare, Near Threatened and other species in need of monitoring

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

Appendix 2. IUCN Red Book Categories and Criteria

Insert IUCN Red Book (2013) as PDF

Western Botanical

E info@westernbotanical.com.au
www.westernbotanical.com.au