The genus *Erica*

A paragon of diversity and mystery in the Cape Floristic Region



Dr Ren Hoekstra

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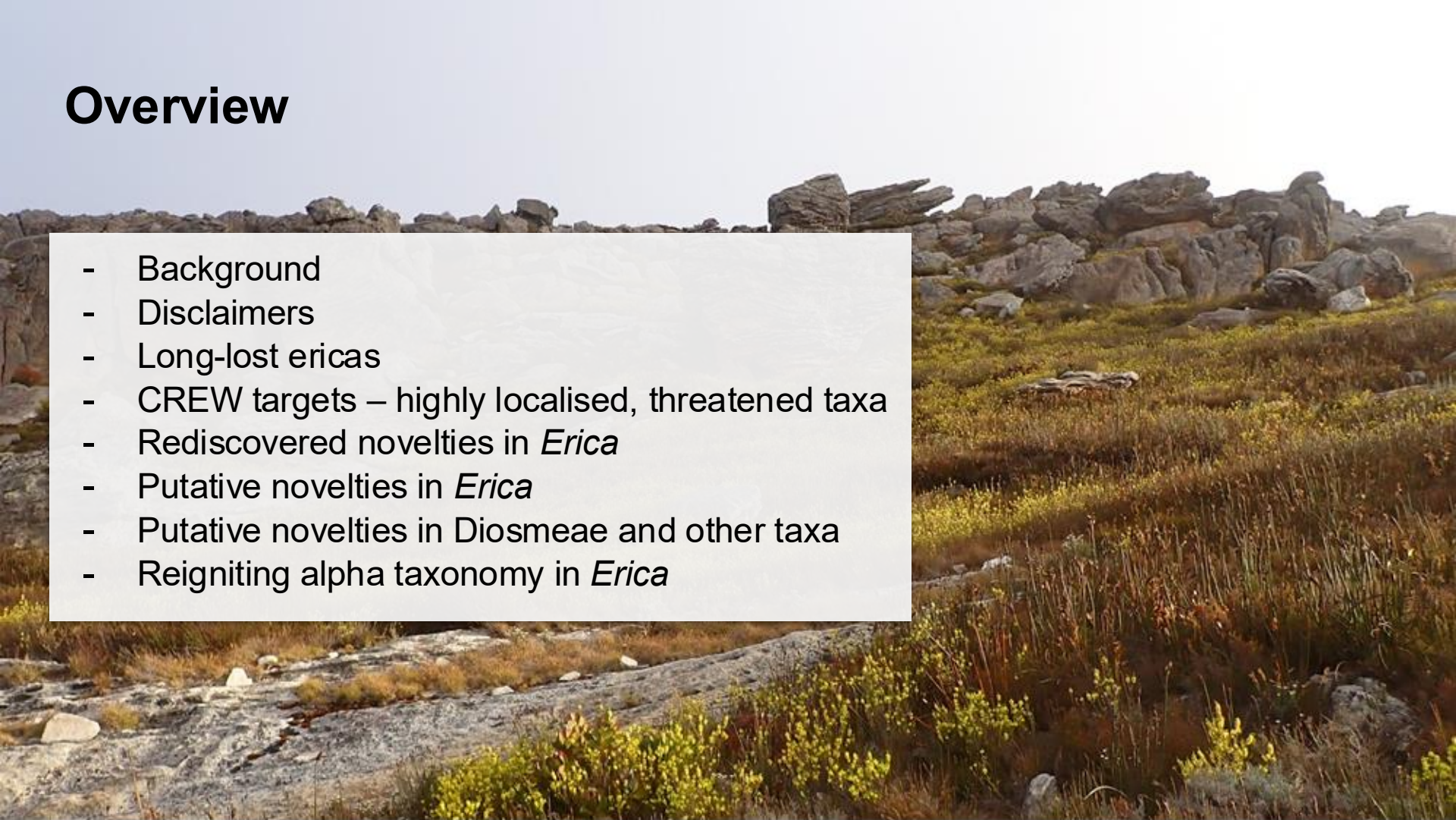
Overview



- Background
- Disclaimers
- Long-lost ericas
- CREW targets – highly localised, threatened taxa
- Rediscovered novelties in *Erica*
- Putative novelties in *Erica*
- Putative novelties in Diosmeae and other taxa
- Reigniting alpha taxonomy in *Erica*

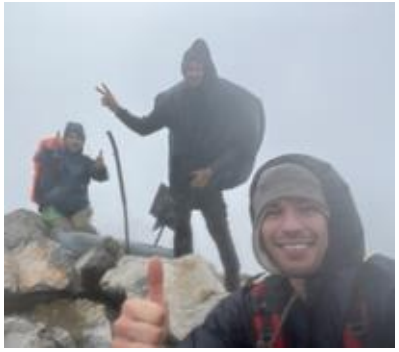
Background

Custodians of Rare and Endangered Wildflowers

Background

High altitude and taxon specialisation




Disclaimers

1. Dates and records for collections are to the best of my knowledge based on review of herbarium collections, consultation with taxon specialists, redlist data, iNaturalist and online databases (e.g. GBIF)
2. New species are **putative**:
    a. Many examples of indistinct species boundaries
    b. Often needing molecular corroboration
    c. False novelties
    d. Intraspecific variation
    e. Hybrids
3. Not exhaustive (time limit!)
4. Acknowledgements

SANBI Biodiversity for Life
South African National Biodiversity Institute
SOUTH AFRICAN JOURNAL OF BOTANY
An International Interdisciplinary Journal for Plant Sciences
JSTOR
Royal Botanic Gardens Kew | Plants of the World Online
GBIF Global Biodiversity Information Facility
WFO World Flora Online
iNaturalist
GOURITZ Cluster Biosphere Reserve

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Rare Erica species rediscovered after nearly four decades

23 Oct 2025

After an unsuccessful search in 2012, the rare Erica cunoniensis was feared extinct, but in September 2025, a team of conservationists made a rediscovery of this Endangered plant species, found for the first time in nearly four decades.

CapeNature staff, in partnership with members of the Custodians of Rare and Endangered Wildflowers (CREW), embarked on a challenging expedition to conduct threatened flora monitoring in the Kogelberg Nature Reserve.

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Rediscoveries: long-lost ericas

- *(Erica cunoniensis*)
- *Erica outeniquae*
- *Erica oophylla*
- *Erica langebergensis*
- *Erica crassisepala*
- *Erica comata*

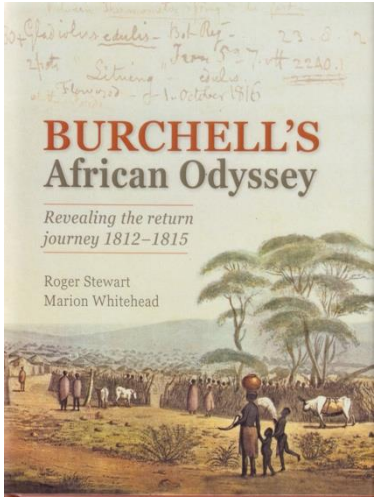
Erica outeniquae

A rare species, known from only four subpopulations.
Last recorded in 1992.
Finally found again in 2022.
Probably not threatened.

Erica oophylla

Last recorded in 1974.

Finally found again in 2023, recently a new subpopulation on Hermitage Peak. Encroaching pines.



On a week-long hike on 'Craggy Peak' above his Swellendam station, he slept out, as he had done on his first excursion from Klaarwater to Graaff-Reinet. His 'Craggy Peak' might have been Elfuurkop, or even Hermitage Peak, which both feature on today's hiking trails in the fynbos paradise of the Marloth Nature Reserve.

He must have been accompanied by at least one of his employees and possibly a Swellendam resident, because he collected 129 specimens during the hike. His botanical finds included a little wild orchid, the pink *Disa glandulosa*, and nine different ericas, including *Erica oophylla*, which had escaped the notice of other collectors despite its peculiar corolla-limb. Burchell's type specimen (CG7347; K000314091) of this rare, high-altitude endemic is now at Kew.

Erica langebergensis

Only known from one location (Leeuriviersberg), last recorded in 1973.

Now finally found again, with a new subpopulation on Misty Peak with 250-500 plants.
Encroaching pines.

Erica crassisepala

Burchell's 1815 collection "On summit of Craggy Peak on great mountain near Swellendam".

Last confirmed record 1894.

Found again in 2022, with a more recent range extension to the Kammanassie.

Erica comata - last seen in 1815

Only known from the type, collected in 1815 by William Burchell. The locality description provided by Burchell is frustratingly vague: "Summit of a mountain peak near Swellendam".

Now, more than 210 years later, finally rediscovered on Leeuriviersberg. Encroaching pines.

CREW targets - highly localised and threatened species

- *Erica vallis-aranearum*
- *Erica perplexa*
- *Erica orthiocola*
- *Erica cincta*
- *Brunia barnardii*
- *Anderbergia fallax*

Erica vallis-aranearum

A naturally rare species, well conserved within the Kogelberg Biosphere Reserve, but known from only one subpopulation that has 15 mature individuals. **Last record: 2013.**

Erica perplexa

Only one, very small, localized subpopulation of only 20 plants is known, but the area is protected and the population is not suspected to be declining. **Last record: 2012.**

Erica orthiocola

An extremely localized, high altitude habitat specialist. Only one small subpopulation of fewer than 200 plants is known. Threatened by alien pine invasion and too frequent fire

Erica cincta

Erica cincta is a highly localized endemic to the Kogelberg known from a single population of 250-500 plants around Kogelberg Peak. **Last record: 1998.**

Brunia barnardii

Known from one site only, suspected to comprise fewer than 250 individuals.

New subpopulation of approximately 500 plants from Suurbraak Peak.
Encroaching pines.

Anderbergia fallax

Until recently only known from a single collection by Elsie Esterhuysen from Misty Peak behind Swellendam. Earlier this year, Nick Helme extended the range to the high peaks in Boosmansbos behind Heidelberg.

Now, another significant range extension to Langeberg Peak in the eastern end of the range.
Abundant with approximately 500-1000 plants.
Encroaching pines.

Rediscovered novelties

- *Erica* sp. nov. “ophidia” (1972)
- *Erica* sp. nov. “helmeii” (1999)
- *Erica* sp. nov. “regulus” (1951)
- *Erica* sp. nov. “aranea” (1975)
- *Erica* sp. nov. “obscurata” (1990)

Erica sp. nov. “ophidia” (1972)

Alpine fynbos.
Misty Peak only.
Localised, rare.
Encroaching pines.

Erica sp. nov. “helmeii” (1999)

Alpine wetland fynbos.
Misty Peak only.
Very localised, rare.
Encroaching pines.

Erica sp. nov. “regulus” (1951)

In wet gullies below Mannetjiesberg, Kammanassie.
Localised, rare.
Not threatened.

Erica sp. nov. “aranea” (1975)

Known from a single overhang at the top of an immense gully between Towerkop and Koudveldberg, Klein Swartberg.
Web-like growth on walls and ceiling
Very rare and localised.
Probably not threatened.

Erica sp. nov. “obscurata” (1990)

Permanent shade under rocks.
Meiringspoort and Blesberg, Eastern Groot Swartberg.
Rare.
Probably not threatened.

Putative novelties in *Erica*

- *Erica* sp. nov. “altimontana” (first record 2025)
- *Erica* sp. nov. “nebulosa” (first record 2025)

Erica sp. nov. “altimontana” (2025)

Erica sp. nov. “nebulosa” (2025)

Further putative novelties

Euchaetis sp. nov. “petrophila” (Pakhuis)

Passerina sp. nov. “maculomontana” (Kolberg, Eastern Grootswartberg)

Agathosma sp. nov. (Rooiberg)

Agathosma sp. nov. (Matjiesvlei)

Agathosma sp. nov. (Kammanassie)

Agathosma sp. nov. (Antoniesberg)

Agathosma sp. nov. (Langeberg)

Euchaetis sp. nov. “petrophila”

Pakhuis Pass and Algeria,
Northern Cederberg.
Typical *Euchaetis* but with distinct virgate habit and ovate leaves.
Rare.
Probably not threatened.

Passerina sp. nov. “maculomontana”

High south-facing slopes.
Kolberg, Groot Swartberg.
Leaves distinctly hairy above.
Rare.
Probably not threatened.

Agathosma spp. novae







Describing new species – what it takes?

PhytoKeys 257: 95–117 (2025)
DOI: 10.3897/phytokeys.257.139457

Research Article

An integrative approach to alpha taxonomy in *Erica* L. (Ericaceae) with three new species from the Western Cape, South Africa

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Abstract

The megagenus *Erica* L. (Ericaceae) comprises 851 species across its global distribution, with an extraordinary focus of diversity in the Cape Floristic Region (CFR) of South Africa where almost 700 species are endemic. The genus is remarkable for both its morphological diversity and the large number of species and subspecific taxa occurring in small populations, often in specialised habitats, putting them at high risk of extinction. Despite significant taxonomic work over the past century, part of this diversity remains undescribed. The sheer size of the genus, its morphological, ecological and geographical variability, and the absence of a modern, consolidated revision make alpha taxonomy challenging. By combining traditional taxonomic methods, standard DNA sequencing methods building on openly available data matrices, and an openly available specialised taxonomic tool for the genus, we present an integrative, reproducible approach to alpha taxonomy in *Erica*. This approach provided support for the recognition of three new species from the Western Cape in South Africa and aided in ruling out two further putative new species, confirming one as a natural hybrid and the other as a morphological variation within an existing species. We describe the three new species *Erica arida* R.D.Hoekstra, *Erica hessequae* R.D.Hoekstra and *Erica inopina* J.H.J.Vlok.

Erica hessequae

Figure 5. *Erica hessequae* R.D.Hoekstra **A** multiple inflorescences **B** single inflorescence **C** calyx and pedicel **D** dissected flower showing androecium **E** dissected flower showing ovary **F** whole plant in situ. Voucher *R.D. Hoekstra 181* (NBG).

Critically Endangered D

Highly localised in specialist habitat.
Latest survey: no more than 50 individuals.
Invasive pines.

Erica arida

Critically Endangered B1ab(iii)

Estimate 100 individuals.
Localised to Doringrivier Catchment east of Barrydale.
Hakea sericea.

Figure 4. *Erica arida* R.D.Hoekstra **A** incomplete inflorescences **B** glandular pedicel, bracteoles and calyx **C** dissected flower showing parts of the androecium and gynoecium **D** whole plant in situ. Voucher *R.D. Hoekstra 218* (NBG).

Conserving fynbos – what it takes?

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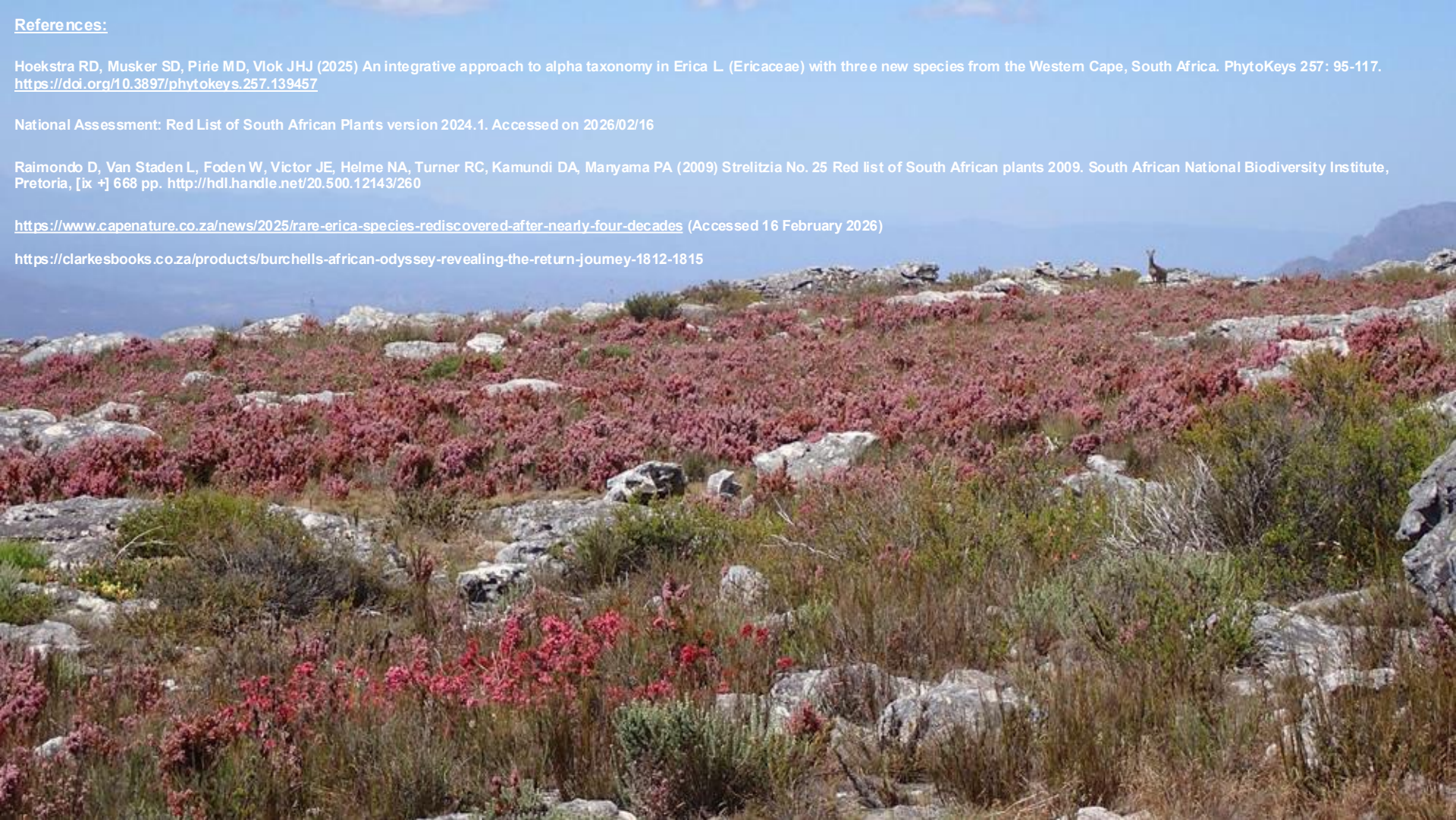

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THE END