

# Why the only sustainable economy for rooibos and honeybush is *green*

Dr Rhoda Malgas

Department of Conservation Ecology and Entomology  
Stellenbosch University  
South Africa

African Biotrade Conference: Sandton,  
Johannesburg  
15 September 2023



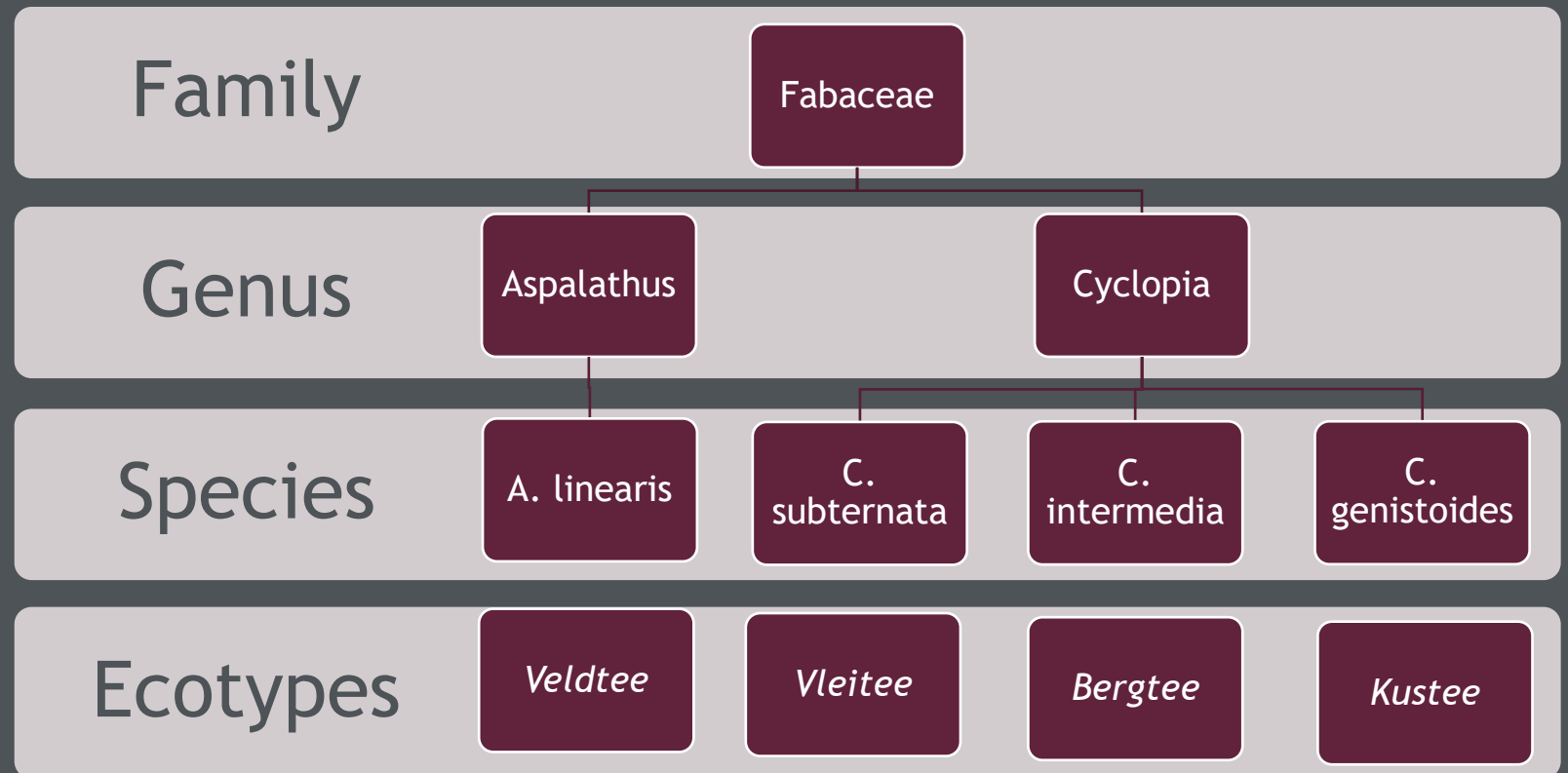


# Rooibos and honeybush are relatives, so they are ecologically similar.

Local harvesters distinguish species with local names.

Local plant names reflect differences in plant ecology

Ecotypes = habitats



# Wild rooibos and honeybush are relatives of cultivated plants traded in international markets.

Wild plant habitats  
are important for  
cultivation.

Looking after the  
natural environment  
supports wild plants.

80% HB and >1% RB is still wild  
harvested

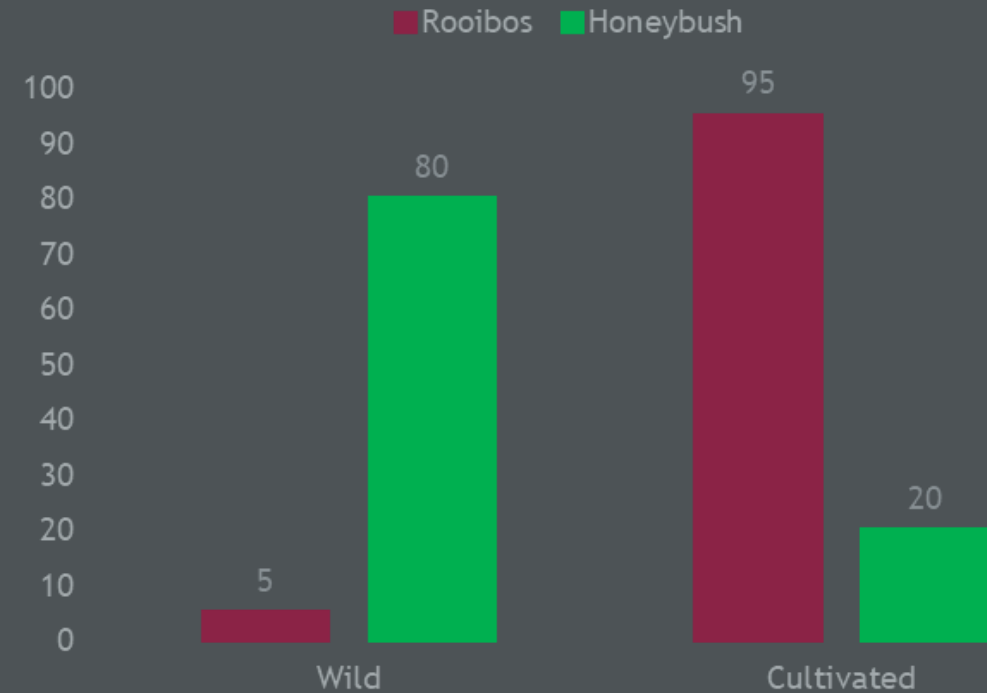
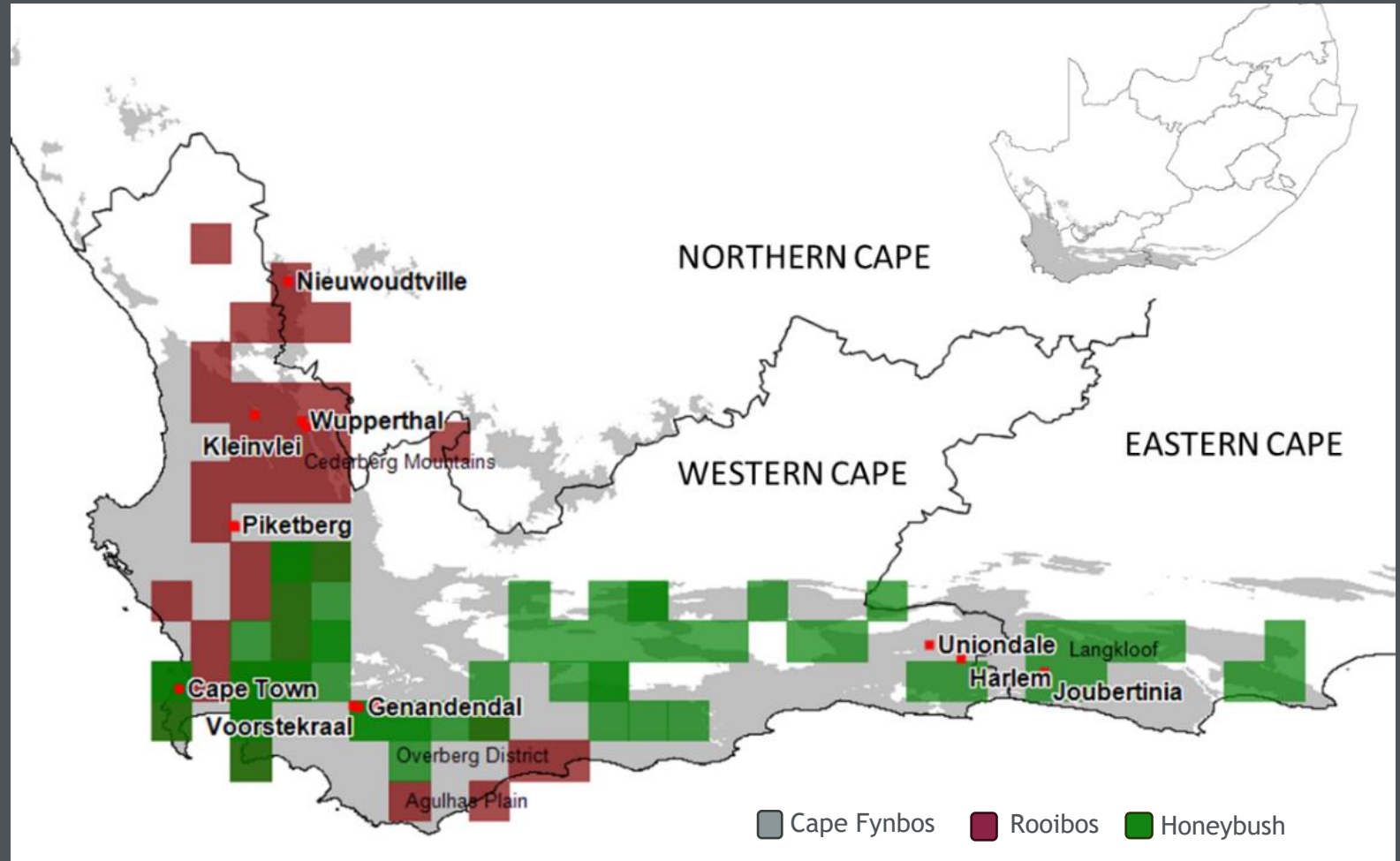


Figure 1.2: Proportion (%) of wild vs cultivated rooibos and honeybush

# Fynbos - the home of rooibos and honeybush tea, unique to South Africa

- Size of CFR = 90 000 km<sup>2</sup>
- No. plant species = 9 500
- Endemism = 70%
- Most mega-diverse of 6 Mediterranean Type Ecosystems in the World.

- Hot, dry summers; cold, wet winters
- Poor-nutrient, high pH sandstone soils (low in N and P)
- Fire as a natural disturbance (10-25 year cycles)



# Rooibos (*Aspalathus linearis*) and Honeybush (*Cyclopia spp.*) - ecophysiological adaptations

Limit transpiration with rolled leaves, sunken stomata

Dormancy to conserve energy during wet, cold winter months.

Form symbiotic relationships for N-fixation

P acquisition with cluster roots

Quick precipitation uptake with adventitious roots close to surface

Tap into subsurface water with a long taproot

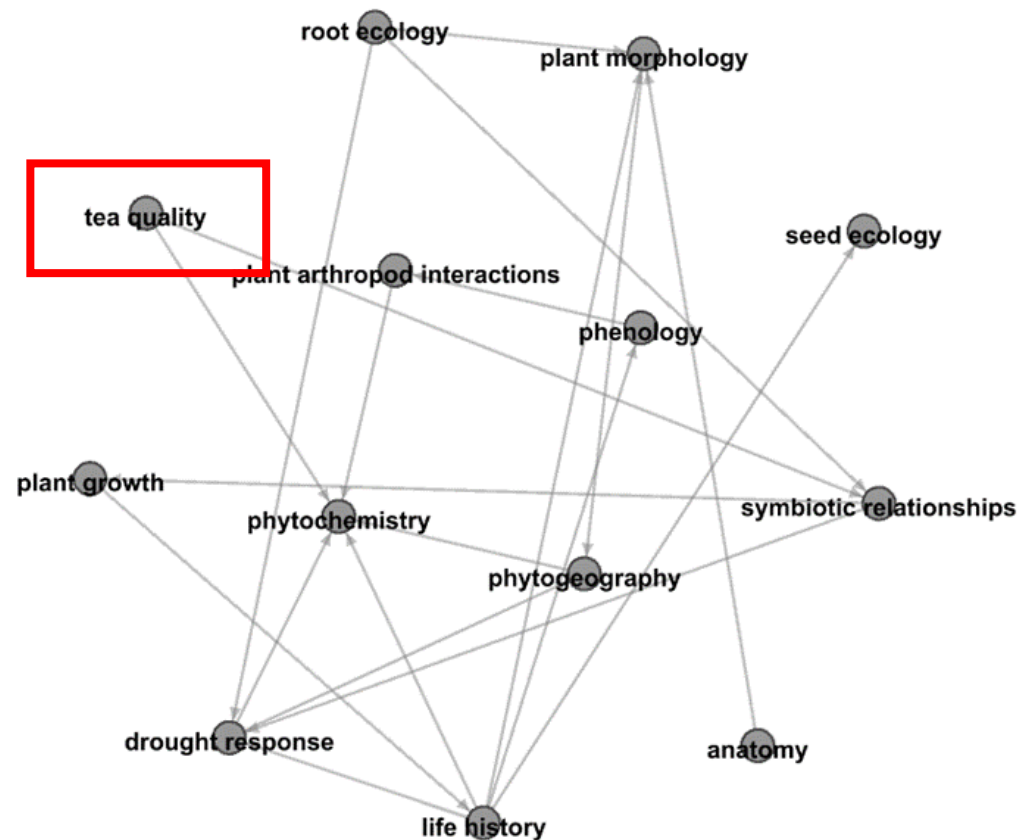


Reseed - regeneration from seed

Resprout - lignotuber development



# Ecophysiological characteristics drive plant growth, health and tea quality... *and* harvest sustainability!



Wild rooibos lignotuber

## What does “sustainability” mean for Fynbos sectors?



- Sustainability is posited as outcomes in wild-harvesting and agricultural production of rooibos and honeybush that:
  - ***ensure the ecological integrity*** of production landscapes;
  - ***enhance the dignity and collective choice action of all local actors***, and
  - ***sustain livelihood options of the harvesters directly dependent on the resource***; they are the custodians, knowledge-bearers, and their families directly dependent on the resource.



## What does “sustainability” mean for Fynbos sectors?

- Source product with tea producers who adhere to best practice
- Support producers in their efforts to fulfill certification obligations and best practice
- Become familiar with the sector as a combination of people, plants and place





# Dankie. Thank you. Nkosi.



Dr Rhoda Malgas  
Department of Conservation Ecology and Entomology  
Stellenbosch University  
South Africa  
[rmalgas@sun.ac.za](mailto:rmalgas@sun.ac.za)  
0826722750

