

Quest for the grassland jewels

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Introduction

- South Africa 3rd biodiverse country
- 23 000 plant species
- Grassland biome 2nd largest



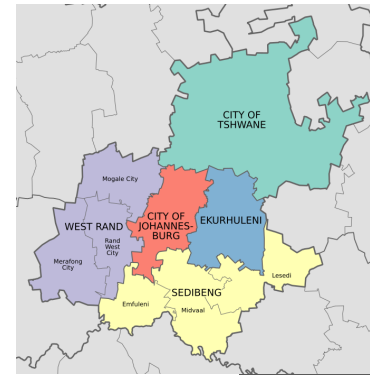
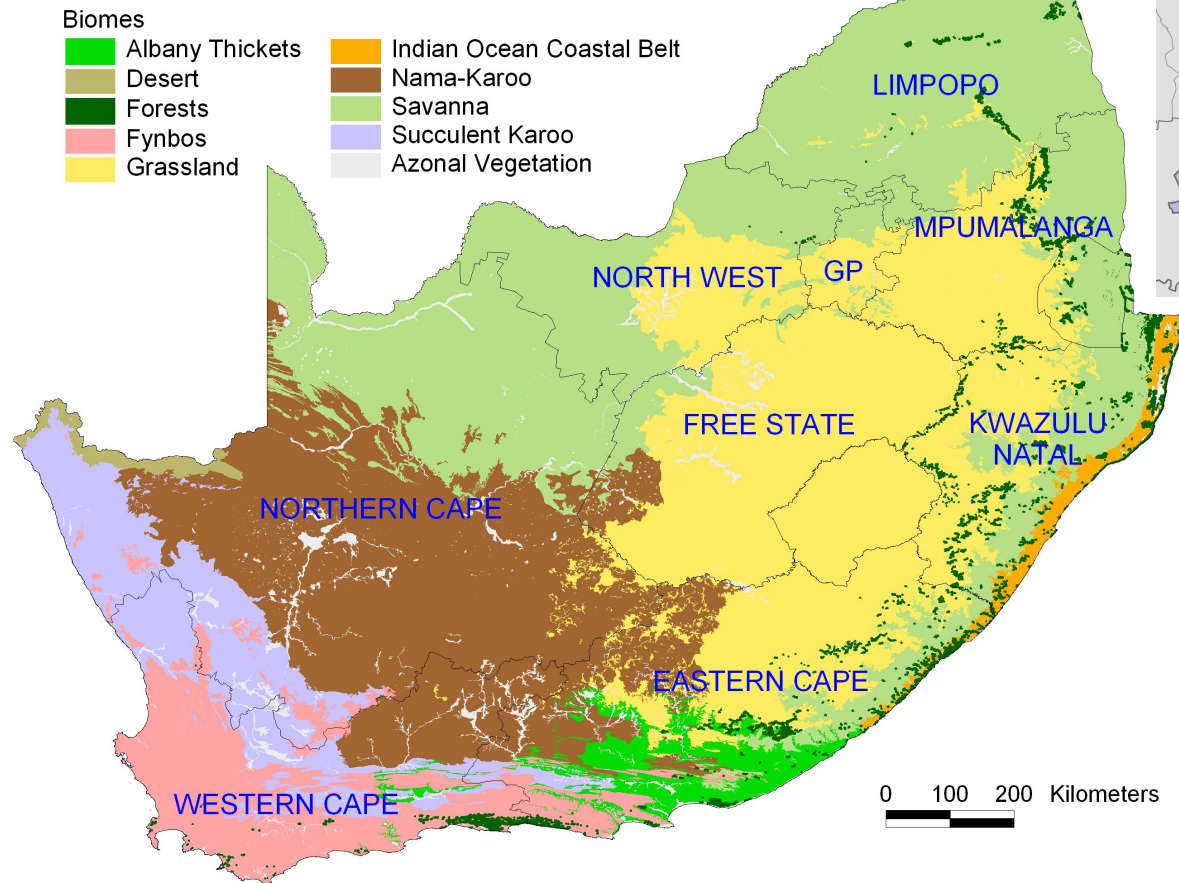
Aim and objectives

Aim:

Establish an Ornamental Horticulture research team

Objectives:

- Identify indigenous grassland plant species with suitable traits and characteristics
- Investigate optimal propagation and cultivation methods and conditions
- Ensure the survival of these species
- Commercialisation



Grassland Biome:

- Soweto Highveld Grassland
- Egoli Granite Grassland
- Rand Highveld Grassland
- Biodiversity 2nd to that of Fynbos
- Highveld region 4000 plant species
- Only 900 species cultivated
- Adapted and resilient

Study area

Threads

Gauteng

- Economic hub
- Densely populated
- Urbanisation
- Diminishing habitats
- Over exploitation
- Unsustainable harvested





Identified indigenous
grassland plant species

Adapted for the climatic
conditions

Water wise

Desired traits

Literature Review

Rothea hirsuta (Hochst.) R. Fern



Clematopsis scabiosifolia (DC.) Hutch.



Macledium zeyheri (Sond.) S. Oritz



Chironia palustris Burch.



Pentanisia prunelloides (Klotzsch ex Eckl. & Zeyh.) Walp



Pachycarpus schinzianus (Schltr.) N.E.Br.



Bedding plants



Dicoma anamala Sond.



Euphorbia clavaroides Boiss. var. *truncata* (NE.Br) White, Dyer & Sloane

Ground covers



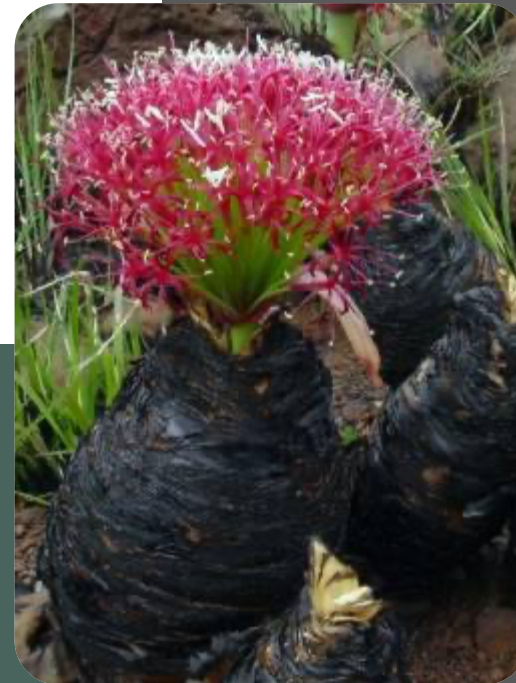
Helichrysum caespititium (DC.) Harv

Scadoxus puniceus (L.) Friis & Nordal



Crinum bulbispermum (Burm.f.) Milne-Redh. & Schweick.

Geophytes



Boophone disticha (L.f.) Herb.



Methodology

Pilot studies

Collection of plant material

Cuttings

Seed germination

Tissue culture

Way forward

MSc studies

- I Mudau
- Q Bersiks
- M Botete

Phd

- A Swart





Thank You!