

Title: Phylogeny and taxonomy of the Cape daisy genus *Osteospermum*

Description: The Cape-centred daisy genus *Osteospermum* comprises between 60 and 100 species, depending on circumscription. *Osteospermum* harbours a large range of variation in growth form, vegetative and reproductive morphology, and pollination biology. Many species are important in terms of economic potential, horticultural impact, invasive impact, medicinal use and conservation concern, and the genus is in urgent need of taxonomic revision (SANBI Biosystematics Strategy 2013 - 2018). However, there is controversy surrounding the delimitation of *Osteospermum* in relation to other genera. Before a full taxonomic revision can be undertaken, the circumscription of these genera needs to be tested via a well-sampled species-level hypothesis generated from multiple genetic loci. While field collection for this project will underpin future revisionary work, the project aims to use field-collected leaf material to generate a phylogenetic tree based on best available genetic data. The incumbent will need to possess undergraduate training in systematics and evolutionary biology; proficiency in basic statistics and in the R environment; and some experience of phylogenetic analysis. Also required for this project are the ability to conduct fieldwork independently, and a valid driver's licence (for fieldwork and due to supervisors and facilities being in different institutions).

Field: Taxonomy

Supervisors: Prof T Verboom (UCT), Prof A Ellis (SU), Dr N Bergh (SANBI), Prof J Manning (SANBI)

University for registration: University of Cape Town

Level: PhD