

MSc bursary in Systematic Botany

Compton Herbarium, Kirstenbosch Research Centre

TAXONOMIC AND PHYLOGENETIC STUDIES OF *HERTIA* (ASTERACEAE, TRIBE SENECEONEAE)

The study forms part of more general taxonomic studies in the southern African Asteraceae by Drs J. Manning and A.R. Magee (SANBI) and Dr J.S. Boatwright (University of the Western Cape). The student will be based at the Kirstenbosch Research Centre and the molecular systematic laboratory work will be done with Dr Boatwright at the University of the Western Cape.

Background information: Phylogenetic relationships in the large tribe Senecioneae are the focus of extensive study worldwide and several preliminary papers on the molecular phylogeny of the group have recently been published. These provide a framework for future detailed studies within the group. Published results demonstrate that several of the larger genera are not monophyletic, and changes to the generic taxonomy in the tribe are ongoing. Three subtribes are currently recognised. Of these, subtribe Othonninae with about half a dozen genera is the smallest and is primarily southern African in distribution. *Hertia* Less.(± 10 spp) is one of the smaller genera of Othonninae, and is split between southern Africa and southwest Asia. The African species were last treated in 1891, and those from Namibia in 1967. Three species are recorded from the Greater Cape Floristic Region and preliminary investigation indicates that one of them is undescribed. This study will investigate the phylogenetic relationships of *Hertia*, with an emphasis on the southern African species, resulting in a complete taxonomic revision of the southern African species.

The objectives of this study are to:

- Investigate the phylogenetic relationships and monophyly of *Hertia*, particularly in relation to the allied genera *Lopholaena*, *Euryops* and *Othonna*.
- Investigate and document morphological characters in the genus *Hertia*
- Revise the taxonomy of the southern African species of *Hertia*

Requirements: Candidates must be South African citizens, preferably in possession of a driver's license and have a BSc Honours in Botany (with relevant coursework or projects). Preference will be given to suitable candidates from the designated groups.

Duration of project: January 2014 - December 2015

Bursary value (to cover living expenses and university fees): R105 000,00/year for 2 years

Application procedure: Each application is to be accompanied by a standard bursary application cover sheet (available at www.sanbi.org.za/jobs/current-vacancies). Applications are to include a full CV; certified copies of ID, academic record and driver's licence; two letters of reference; one page statement of motivation. Send all documents to students@sanbi.org.za with "SANBI MSc Systematic Botany" in the subject line.

Enquiries: Dr John Manning J.Manning@sanbi.org.za

SANBI reserves the right not to fill this bursary.

If no response has been received within 21 days of the closing date, candidates may assume that their applications were unsuccessful.

Applications close: 29 November 2013