Great Escarpment Biodiversity Research Programme data mobilisation

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The Great Escarpment Biodiversity Research Programme (GEBP) seeks to generate biodiversity knowledge and mobilise existing data to address information gaps along the Great Escarpment, South Africa's primary water producer. The poorly studied southern Great Escarpment has been a focus area for botanical exploration since 2005, generating some 12,550 novel botanical records and c.20 peerreviewed publications. These botanical records are currently housed in the Selmar Schonland Herbarium (GRA), Albany Museum, as both voucher specimens and as incomplete digital records. The data represent c.4,000-6,000 taxa; 15 novel species; 6 rediscoveries of endemics (mostly collected over a century ago); new collections of 19 poorly known taxa; 62 range extensions >100 km (notably of Cape Floristic Region & Drakensberg Alpine Centre taxa); a large number of specimens without suitable identifications (due to lack of suitable comparative material, keys, taxonomic revisions or taxonomic expertise); and specimens of ambiguous taxonomic affinities. These records are not easily accessible to an increasing number of interested taxonomists, State policy-makers and NGOs working on taxonomically complex plant groups, protected area expansion policies and general montane conservation activities in the region. The project aims to consolidate and mobilise the dataset into a virtual herbarium for the southern Escarpment (complete with images of the specimens, c.1,000 field photographs, and digital copies of the 26 field collecting-books) using the Botanical Research and Herbarium Management System (BRAHMS) online platform, so that the data can be used by a variety of end-users to support sustainable upper catchment management. The end product also forms the basis for generating incremental data as GEBP research expands to other poorly studied sections of the endemic- and biodiversity rich Great Escarpment.