## Mosiuoa Bereng explores Maloti Drakensberg on horseback, compiling botanical survey of the area By Leonie Bolleur

cannot fully describe the beauty of the Namahadi cutback. Majestic mountains with streams cascading down from their high peaks, and the sheer cliffs on the edge of the escarpment are truly magnificent."

These are the words of Mosiuoa Bereng, a PhD student in Environmental Geography affiliated with the university's Afromontane Research Unit. He spent more than two weeks in the Namahadi cutback, exploring the northern parts of the Maloti Drakensberg and collecting plant specimens.

Bereng, who obtained his Bachelor of Science in Agriculture from the University of Lesotho in 2004 and his master's in Environmental Ecology from the University of Pretoria's Centre for Environmental Studies in 2014, is also a curator at the Katse Botanical Gardens in the Lesotho highlands.

## Botanical survey of the northern Maloti Drakensberg

His research, which focuses on the botanical survey of the northern Maloti Drakensberg (M-D), aims to contribute to the floristic knowledge of this area. "This will be achieved by conducting botanical exploration of the poorly known section of the M-D, namely the northern M-D, covering the Namahadi cutback as the core area and extending westward along the range to the Monantsa border," he says.

Sharing his experience in the remote Namahadi cutback, far from any human settlement and only accessible on foot or on

horseback due to the terrain, Bereng explains that he needs to spend a minimum of two weeks deep in the mountains to make significant collections per trip. "This means that I must pack enough dry food to last me for that time. I use horses to carry my food and all my camping equipment. The horses are also helpful in hauling my plant presses after collecting plant specimens from the study area, because they are very heavy."

According to him, accessibility to the Namahadi cutback could be considered the reason for targeting it, because people do not normally reach it. "The place is a very deep and magnificent cutback in the Qwaqwa Maloti. Its orientation also makes one eager to observe what it holds botanically. It is in a high rainfall area and experiences orographic rainfall. Unlike other sections of the M-D that have been explored botanically, it experiences more sunlight, making its surface warmer. This condition can make it host some unique flora compared to the rest of the M-D."

His work in the mountains included the compilation of an inventory of the plant species of the Qwaqwa Maloti, producing quality herbarium specimens and documenting the flora in the region. This included the endemic and near-endemic species. He also assessed the phytogeographical linkage with the rest of the M-D to see if there are any floristic similarities.

"The most interesting finding so far has been the recording of *Massonia saniensis* in the alpine area. A small, green-leafed plant with scattered, minute papilla on top of the leaves and white flowers from the centre of the two opposite leaves on the ground – growing on the wet gravel area in the alpine. The plant has only been recorded in the interior of the M-D, being part of Lesotho," he remarks.



Bereng is of the opinion that conducting more inventories of plant species will result in the recording of narrow-range plant species that have never been documented before in the M-D or in botanical knowledge. According to him, this will be a valuable addition to the flora of the M-D, with the findings contributing to a broader understanding of the poorly known flora of the region. He states that the Qwaqwa Maloti could be an important area for conservation; it could serve as a strategic conservation area of Witsieshoek, connecting the Golden Gate National Park in the Eastern Free State with the Royal Natal National Park in KwaZulu-Natal.

## Prospects of discovering new species

"The Namahadi cutback holds the prospect of discovering new species to be described, which would be the most rewarding of all. Some species that were previously unknown are likely to be unveiled to the botanical society, potentially sparking further research in the area as well as on individual species," he comments.

In the Eastern Cape, Bereng participated in the Custodians of Rare and Endangered Wildflowers (CREW) Bioblitz,, which he describes as a very exciting and educational event. Among the many species he recorded are the *Huttonaea grandiflora* and *Disa nivea*. Additionally, he also found Massonia species in the Eastern Cape that were different from the ones he found in the Qwaqwa mountains, the *Massonia wittebergensis*. Some of the species Bereng recorded were seen by him for the first time. "I found that conducting more fieldwork in the M-D was very helpful, as I was able to distinguish different species between the Qwaqwa Maloti and the Eastern Cape M-D," he says.





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