

Title: Systematics of the *Antimima* clade (Aizoaceae, Ruschioideae).

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University for registration: University of the Western Cape

Level: Masters or Doctoral

Additional information:

The genus *Antimima* is listed as a high priority genus for taxonomic research in the Strategy for Plant Taxonomic Research of South Africa published in 2015. A complete revision for the genus *Antimima* has never been completed and as a consequence descriptions, distribution maps and identification keys for many of the species are not available. This lack of data is clear from the high proportion of data deficient species in the genus, i.e. 25%, for which no conservation assessments can be completed. Recent phylogenetic studies of the Ruschieae indicated that the genus *Antimima* may not be monophyletic, with smaller genera embedded within the genus. Detailed studies of vegetative and reproductive morphology in combination with molecular and taxonomic studies are needed to clarify the generic circumscription of the genus and ultimately complete a revision of all the genera in the *Antimima* clade in the future.

This project aims to increase the molecular sampling in the *Antimima*-clade and complete a survey of leaf morphological and capsule characters using a sample of as many representatives as possible from the genera *Antimima*, *Braunsia*, *Esterhuysenia*, *Hammeria*, *Smicrostigma*, *Octopoma* and *Zeuktophyllum*. This sampling will also include anomalous species, such as *Ruschia mutata* and *Oscularia guthrieae* that have a possible affinity with genera in the *Antimima*-clade. A revision of a group of *Antimima* species, to be determined based on the phylogenetic studies, will also be completed.

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