

## **Taxonomy and Candidatus Liberibacter status of South African buchu plants**

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In this proposal we intend doing a survey amongst replicates of species of fynbos members of the Rutaceae (citrus family) generally known as buchus for the presence of a pathogenic/near-pathogenic endogenous bacterial genus known as Candidatus Liberibacter. This is being done as it has been shown that tree and shrub specimens of the Rutaceae, indigenous to South Africa, are commonly infected by these bacteria, with each genus of plant appearing to have a unique species of bacteria. As the buchus are endemic and have among them plant species that are threatened, it is important to ascertain the ecological control that these bacteria may exert. In order to determine the host plant species in these notoriously difficult plants to identify, we intend sequencing three of the established barcoding genes used for plants. This additional data, will help provide abundance lists, distribution and locality of these plants, while the molecular means to identify the species, will be of significant use to various other scientific disciplines working with buchu (bioprospecting, medicinal plant usage, conservation, ecology, commercial utilization, entomology, and botany).