List of Figures

1.1	Geographical distribution of <i>Mentha longifolia</i> subspecies <i>polyadena</i> in
	South Africa3
1.2	Mentha longifolia subspecies polyadena during the flowering season
1.3	Scanning electron micrograph of the leaf surface of <i>Mentha longifolia</i> subspecies <i>polyadena</i> showing one of many oil glands
1.4	Scanning electron micrograph of the abaxial leaf surface of <i>Mentha</i> longifolia subspecies polyadena showing one of many multi-cellular oil glands after removal of the outer cuticle layer
1.5	(A) name plate describing some of the medicinal uses of <i>Mentha longifolia</i> for the treatment of respiratory ailments; (B) name plate describing the use of <i>Mentha longifolia</i> in the management of headaches and colds (Kirstenbosch Botanical Garden, Cape Town)
2.1	Air-dried plant material was cut up and the essential oil was isolated by hydrodistillation
2.2	Diagram representing a 96 well micro-titre plate used to measure the minimum inhibitory concentration of the samples tested

3.1	Graph showing the relative amounts (%), of selected essential oil	
	compounds from different populations	23
3.2	Dendrogram obtained from the cluster analysis performed on the essential	
	oil composition (Table 3.2), using the unweighted pair-group method with arithmetic average (UPGMA)	24
3.3	HPLC profiles for the solvent extracts of <i>Mentha longifolia</i> subspecies <i>polyadena</i> of the eight populations	27
3.4	Dendrogram obtained from cluster analysis of the microbiological data as presented in Table 3.2 (essential oils only)	37