

Contents



Sr. no.	Contents	Page no.
1	Introduction	1-100
1.1	Human skin	
1.2	Psoriasis	
1.3	Eczema	
1.4	Acne	
1.5	Alternative approaches (Ayurved, Siddha and Naturopahty) to treat psoriasis, eczema and acne	
1.6	Mud	
	References	
2.0	Aims & Objectives	101-102
3.0	Collection of mud	103-104
4.0	Physicochemical properties of soil	105-128
	References	
5.0	Chemical composition	129-184
5.1	FTIR characterization	
5.2	Chemical composition by SEM-EDS	
5.3	CHNS analysis	
5.4	Organic carbon content (chemical digestion method)	
5.5	Organic carbon content of soil particulate fractions	
5.6	Chemical composition by AAS	
5.7	Chemical composition by ICP-AES	
5.8	Humic acid content of soil	
5.9	Microbial Examination	
5.10	Antimicrobial activity	
	References	
6.0	In-vitro diffusion study	185-200
6.1	In vitro diffusion of elements through human skin	
6.2	In vitro diffusion of humic acid through human skin	

	References	
7.0	Preliminary clinical studies	201-294
7.1	Protocol	
7.2	CHNS analysis (MAP)	
7.3	Chemical digestion method (MAP)	
7.4	Atomic Absorption spectrometry (MAP)	
7.5	Scanning Electron Microscopy and Energy Dispersive Spectrometry (MAP)	
7.6	Clinical Observations	
7.7	FTIR spectroscopy (MAP)	
	References	
8.0	Formulation design , development and evaluation	295-338
8.1	Paste	
8.2	Lotions	
8.3	Mud Compress	
8.4	Powder	
8.5	Spray	
8.6	Clinical studies (formulations)	
	References	
9.0	Summary and Conclusions	339-355
	References	