

LIST OF TABLES

Table No.	Table title	Page no.
1.1	Parts of plants providing essential oils	32
3.1	Formulation and process parameters	84
4.1	Preservative practices followed by the Museums	100
4.2	Bacterial load on nutrient agar for the three fabrics	107
4.3	Colony appearance of the non-identical bacteria isolated from cotton fabric	108
4.4	Colony appearance of the non-identical bacteria isolated from silk fabric	109
4.5	Colony appearance of the non-identical bacteria isolated from wool fabric	109
4.6	Biochemical characteristics of bacteria's isolated from cotton fabric	111
4.7	Biochemical characteristics of bacteria's isolated from Wool fabric	112
4.8	Biochemical characteristics of bacteria's isolated from Silk fabric	112
4.9	Screening of Chitosan for Neem oil nanoparticles	115
4.10	Screening of the two Surfactants for Neem oil nanoparticles	115
4.11	Screening of Chitosan: Oil for Neem oil nanoparticles	116
4.12	Screening of Cross-linking agent for Neem oil nanoparticles	116
4.13	Screening of type of method and RPM used for Neem oil nanoparticles	117
4.14	Screening of Chitosan for Cinnamon oil nanoparticles	117
4.15	Screening of Surfactants for Cinnamon oil nanoparticles	117
4.16	Screening of Cross-linking agent for Cinnamon oil nanoparticles	117
4.17	Screening of Chitosan: Oil for Cinnamon oil nanoparticles	118
4.18	Screening of type of method and RPM used for Cinnamon oil nanoparticles	118
4.19	Screening of Chitosan for Clove oil nanoparticles	119
4.20	Screening of Chitosan: Oil for Clove oil nanoparticles	119
4.21	Screening of Surfactants for Clove oil nanoparticles	120
4.22	Screening of Cross-linking agent for Clove oil nanoparticles	120

4.23	Screening of type of method and RPM used for Clove oil nanoparticles	120
4.24	Screening of Chitosan for Carom oil nanoparticles	121
4.25	Screening of Chitosan: Oil for Carom oil nanoparticles	121
4.26	Screening of Surfactants for Carom oil nanoparticles	122
4.27	Screening of Cross-linking agent for Carom oil nanoparticles	122
4.28	Screening of type of method and RPM used for Carom oil nanoparticles	122
4.29	Optimized conditions of the nanoparticles selected under the study	136
4.30	MIC of nanoparticles against <i>Bacillus cereus</i>	144
4.31	MIC of nanoparticles against <i>Staphylococcus aureus</i>	145
4.32	MIC of nanoparticles against <i>Pseudomonas</i>	146
4.33	MIC of nanoparticles against <i>Escherichia coli</i>	146
4.34	MIC of nanoparticles against <i>Aspergillus fumigatus</i>	153
4.35	Preliminary data of the selected fabric	150
4.36	Zone of inhibition of the nanoparticle treated cotton and polyester fabric against <i>Bacillus cereus</i>	153
4.37	Zone of inhibition of the nanoparticle treated cotton and polyester fabric against <i>Staphylococcus aureus</i>	155
4.38	Zone of inhibition of the nanoparticle treated cotton and polyester fabric against <i>Pseudomonas</i>	156
4.39	Zone of inhibition of the nanoparticle treated cotton and polyester fabric against <i>Escherichia coli</i>	158
4.40	% retention of oil of covered samples in a petri dish	170
4.41	% retention of oil for Uncovered samples (exposed to room temperature)	171
5.1	Optimized conditions of the final nanoparticles	188