

LIST OF TABLES		
Table No.	Title	Page No.
1.1	Non-insulin agents available for treatment of Diabetes	10
2.1	Ingredients of Aavarai Kudineer Formulation (AKF)	17
7.1	Preparation of Aavarai Kudineer Formulation (AKF)	53
7.2	Microwave parameters for determination of Lead	67
7.3	Temperature programming for determination of Lead	67
7.4	Microwave parameter for determination of Cadmium	71
7.5	Temperature programming for determination of Cadmium	71
7.6	Microwave parameters for determination of Mercury	75
7.7	FIAS programming for determination of Mercury	76
7.8	Pesticides with acceptance limit	81
7.9	Standard stock solution A and B for Organophosphorus insecticides	86
7.10	Standard stock solution A and B for Organochlorine and pyrethroid insecticides	89
7.11	Standard stock solution A and B for carbophenothion	91
7.12	Treatment protocol for hypoglycemic activity of AKF in normal rats	113
7.13	Experimental protocol for anti-hyperglycemic properties in STZ induced diabetic rats (single dose, short term study)	115
7.14	Experimental protocol for anti-hyperglycemic properties in STZ induced diabetic rats (multiple dose, long term study)	116
7.15	Product Formulation First batch (Batch No.FD/200/15)	134
7.16	Product Formulation Second batch (Batch No.FD/201/15)	135
7.17	Product Formulation Third batch (Batch No.FD/202/15)	136
7.18	Product Formulation First batch (Batch No.FD/203/15)	139

7.19	Product Formulation Second batch (Batch No.FD/204/15)	140
7.20	Product Formulation Third batch (Batch No.FD/205/15)	141
8.1	Results of Exo-Morphological Studies of AKF	151
8.2	Fluorescence analysis of <i>C.auriculata</i>	166
8.3	Fluorescence analysis of <i>C.fistula</i>	166
8.4	Fluorescence analysis of <i>S.cumini</i>	167
8.5	Fluorescence analysis of <i>S.chinensis</i>	167
8.6	Fluorescence analysis of <i>C.speciosus</i>	167
8.7	Fluorescence analysis of <i>C.rotundus</i>	168
8.8	Fluorescence analysis of <i>T.arjuna</i>	168
8.9	Fluorescence analysis of AKF	168
8.10	Determination Total ash vale, Acid insoluble ash & Water soluble ash	169
8.11	Determination of Extractive value	169
8.12	Determination of Loss on drying of AKF	170
8.13	Results of microbial contamination of AKF	170
8.14	Results for heavy metal contamination of AKF	171
8.15	Results for Organophosphorus insecticides	172
8.16	Results of organochlorine and pyrethroid insecticides in Aavarai Kudineer Formulation	173
8.17	Preliminary phytochemical screening of ingredients of AKF extract	174
8.18	TLC identification of <i>C. auriculata</i>	175
8.19	TLC identification of <i>C. fistula</i>	176
8.20	TLC identification of <i>S.cumini</i>	176

8.21	TLC identification of <i>S.chinensis</i>	177
8.22	TLC identification of <i>C.speciosus</i>	177
8.23	TLC identification of <i>C.rotundus</i>	178
8.24	TLC identification of <i>T.arjuna</i>	178
8.25	Optimised mobile phase and saturation time	179
8.26	Identification of Ellagic acid in <i>S.cumini</i>	180
8.27	Identification of Quercetin in <i>S. cumini</i>	182
8.28	Identification of Cyperene in <i>C. rotundus</i>	184
8.29	Identification of Gallic acid in <i>T.arjuna</i>	186
8.30	GC-MS analysis of AKF formulation	194
8.31	Effect of Aavarai kudineer formulation on blood glucose level in normal fasted rats	201
8.32	Effect of Aavarai kudineer formulation on blood glucose level in glucose over loaded rats (Oral Glucose Tolerance Test)	202
8.33	Effect of Aavarai kudineer formulation on blood glucose level in Streptozotocin-induced diabetic rats (single dose, short term study)	203
8.34	Effect of Aavarai kudineer formulation on blood glucose level in Streptozotocin-induced diabetic rats (multiple doses, long term study of 28 days)	204
8.35	Effect of Aavarai kudineer formulation on body weight in Normal and Streptozotocin induced diabetic rats.	205
8.36	Effect of Aavarai kudineer formulation on biochemical parameters in Streptozotocin induced diabetic rats.	206
8.37	Effect of Aavarai kudineer formulation on Total Cholesterol (TC), Triglycerides (TG), Insulin (I), Hemoglobin (Hb) and Glycosylated hemoglobin (HbA _{1C}) levels in diabetic rats.	208
8.38	α -Glucosidase inhibitory activity of aqueous extract of AKF	214
8.39	α -Amylase inhibitory activity of aqueous extract of AKF	216
8.40	DPPH scavenging activity of aqueous extract of AKF	218
8.41	Nitric oxide scavenging activity of aqueous extract of AKF	220

8.42	Pre-formulation studies of AKF	222
8.43	Quality control parameters of prepared tablets-Batch 1	223
8.44	Quality control parameters of prepared tablets-Batch 2	224
8.45	Quality control parameters of prepared tablets-Batch 3	225
8.46	Stability Studies of Tablets Batch - 1	226
8.47	Stability Studies of Tablets Batch - 2	227
8.48	Stability Studies of Tablets Batch - 3	228
8.49	Quality control parameters of prepared capsules – Batch 1	229
8.50	Quality control parameters of prepared capsules – Batch 2	230
8.51	Quality control parameters of prepared capsules – Batch 3	231
8.52	Stability study of capsule Batch - 1	232
8.53	Stability study of capsule Batch - 2	233
8.54	Stability study of capsule Batch - 3	234