

LIST OF TABLES

Table No.	Title of the Table	Page No.
1.1	Brief description of the meteorological centers	6
1.2	Crop details and period of data collected	7
2.1	Mean daily maximum duration of bright sunshine hours (N) for different months and latitudes	15
2.2	Daily extraterrestrial radiation (R_a) for different altitudes for the 15 th day of the month	
2.3	Climatic data requirements for different methods	20
3.1	Percentage deviations in the ET_0 values estimated by temperature based methods with reference to Penman-Monteith method	46
3.2	Percentage deviations in the ET_0 values estimated by radiation based methods with reference to Penman- Monteith method	50
3.3	Percentage deviations in the ET_0 values estimated by Modified Penman method with reference to Penman-Monteith method	54
3.4	Percentage deviations in the ET_0 values estimated by pan evaporation based methods with reference to Penman-Monteith method	58
3.5	Performance indicators of temperature based methods with reference to Penman-Monteith method	66
3.6	Performance indicators of radiation based methods with reference to Penman-Monteith method	71
3.7	Performance indicators of modified Penman method with reference to Penman-Monteith method	74
3.8	Performance indicators of pan evaporation based methods with reference to Penman-Monteith method	78
3.9	ET_0 estimation equations	79

3.10	Recalibrated temperature based ET_0 equations	81
3.11	Performance indices of recalibrated temperature based ET_0 methods	82
3.12	Recalibrated radiation based ET_0 equations	90
3.13	Performance indices of recalibrated radiation based ET_0 methods	91
3.14	Recalibrated Modified Penman equation	99
3.15	Performance indices of recalibrated Modified Penman ET_0 method	100
3.16	Recalibrated pan evaporation based equations	106
3.17	Performance indices of recalibrated pan evaporation based ET_0 methods	107
4.1	Multiple correlation coefficients	116
4.2	Partial correlation coefficients	116
4.3	Linear regression ET_0 models	118
4.4	Performance indices of Linear Regression (LR) models	125
4.5	Performance indices of daily ET_0 ANN models	128
4.6	Performance indices of weekly average ET_0 ANN models	129
4.7	Performance indices of monthly average ET_0 ANN models	129
4.8	Performance evaluation of LR and ANN ET_0 models during testing period	136
5.1	Polynomial regression K_c models	156
5.2	Performance indicators of ET_c models	169
