NOTATIONS

α_i	=	Effect of the i^{th} level of factor A
β_j	=	Effect of the j^{th} level of factor B
ν_k	=	Effect of the k^{th} level of factor C
y_{ijkl}	=	The yield obtained at the i^{th} level of irrigation method,mthe j^{th} level of row spacing, the k^{th} level of irrigation depth, in the i^{th} replicate, sums of the main effects (α's,β's and ν's)
$(\alpha\beta\nu)_{ijk}$	=	Interaction or joint effect of the i^{th} level of factor A ,the j^{th} level of factor B and the k^{th} level of factor C
ε_{ijkl}	=	Values of independent random variables having normal distributions with zero means & the common variance $\sigma 2$
σ^2	=	Variance
θ_{FC}	=	Soil water content at field capacity, m^3 (water)/ m^3 (soil)
θ_{WP}	=	Soil water content at wilting point, m^3 (water)/ m^3 (soil)
v	=	Kinematic viscosity(nu) , poise
ρ_i	=	Effect of the I^{th} replicate
a	=	Coefficient of inlet pressure P2
$B.D._i$	=	Bulk density of soil in i^{th}layer
B_1	=	Block for the row spacing, 0.60 m
B_2	=	Block for the row spacing, 0.45 m
b	=	Constant of the regression equation
CR	=	Capillary rise, mm/day
CU	=	Coefficient of Uniformity
CVm	=	Coefficient of manufacturer variation
Cc	=	Flow contraction coefficient
D	=	Discrepancy ratio
DP	=	Deep percolation, mm
DP_e	=	Deep percolation from the evaporation layer, mm
Dm	=	Diameter of manifold, m
Ds	=	Diameter of blind pipe(submain), m

D_e	=	Cumulative depth of evaporation (depletion) from the Soil surface layer, mm
D_i	=	Inner diameter of lateral, m
D_r	=	Cumulative depth of evapotranspiration (depletion)from the root zone, mm
dp_i	=	Diameter of polytube, mm
E	=	Evaporation, mm/day
EU	=	Emission Uniformity Coefficient
ETc	=	Crop evapotranspiration under standard conditions, mm/day
ETc_adj	=	Crop evapotranspiration under no soil water stress conditions, mm/day
ETc_dual	=	Crop evapotranspiration considering dual crop coefficient
ETo	=	Reference crop evapotranspiration, mm/day
Ea	=	Application efficiency, %
Ec	=	Crop water use efficiency, %
Er	=	Water requirement efficiency, %
Ew	=	Field water use efficiency, %
e	=	Equivalent surface roghness
F	=	Factor for multiple outlet pipes
$FC._i$	=	Moisture content at field capacity of ith soil layer
f	=	Friction factor of lateral
f_c	=	Fraction of soil surface covered by vegetation (as observed from overhead)
$1 - f_c$	=	Exposed soil fraction
f_{ew}	=	Fraction of soil that is both exposed and wetted by rain or irrigation (from which most evaporation occurs)
f_i	=	Friction factor for various length segments
f_w	=	Fraction of soil surface wetted by rain or irrigation
G	=	Correction factor for pipe lines with multiple equally spaced outlets with first outlet spacing from pipe inlet with/without downstream outflow.
H_L	=	Head Loss from source to plant, m
Ha	=	Average pressure in the lateral, mwc

Hf	=	Friction head loss along pipe without outlets, m
Hf_L	=	Friction head loss in the lateral, m
Hf_{Li}	=	Friction head loss of length segment of lateral, ml
Hf_{li}	=	Friction head loss of small segment near node or outlet, m
Hf_m	=	Friction head loss along multiple outlet pipe, m
h	=	Crop height, m
hf_i^*	=	Head loss at node or outlet on lateral, m
hp_i	=	Head loss through polytube, m
I	=	Irrigation depth, mm
i	=	Infiltration rate, mm/hr
K	=	friction coefficient at emitter insertion
K	=	fraction of the total frictional head loss
Kc	=	Crop coefficient
Kc_adj	=	Crop coefficient under no soil water stress conditions
Kcb	=	Basal crop coefficient
Kcb_{end}	=	Basal crop coefficient at end of the late season growth stage
Kcb_{ini}	=	Basal crop coefficient during the initial growth stage
Kcb_{mid}	=	Basal crop coefficient during the midseason growth stage
Kc_dual	=	Dual crop coefficient
Kc_{end}	=	Crop coefficient at end of the late season growth stage
Kc_{ini}	=	Crop coefficient during the initial growth stage
Kc_{max}	=	Maximum value of crop coefficient (following rain or irrigation)
Kc_{mid}	=	Crop coefficient during the mid-season growth stage
Kc_{min}	=	Minimum value of crop coefficient (dry soil with no ground cover)
Ke	=	Soil evaporation coefficient
K_r	=	Soil evaporation reduction coefficient
K_s	=	Water stress coefficient
k	=	Coefficient of geometry
L	=	Length of lateral, m
L_{dev}	=	Length of crop development growth stage, day

L_{ini}	=	Length of initial growth stage, day
L_{late}	=	Length of late season growth stage, day
L_m	=	Microtube length, m
L_{mid}	=	Length of mid-season growth stage, day
lp_j	=	Length of polytube, m
L_i	=	Length segment of lateral, m
l_e	=	Equivalent length, m
l_i	=	Distance between center of polytube and pressure transducer on lateral, m
l_W	=	Irrigation depth for that part of the surface wetted, mm
N	=	Number of outlet along the pipe
N_s	=	Number of soil layers
n	=	Velocity exponent for head loss computation
o_i	=	Observed data points
$\bar{o}$	=	Average of observed data points
P	=	Rainfall, mm
P1	=	Pressure gauge at manifold (downstream of screen filter), kg/cm2
P2	=	Pressure at inlet of lateral, kg/cm2
P3	=	Pressure at outlet of lateral, kg/cm2
p	=	Evapotranspiration depletion factor
p_i	=	Pressure measured on both sides of polytube (node) on lateral, mwc
p_i	=	Predicted data points
p(bar)	=	Average of predicted data points
po_i	=	Pressure at inlet and outlet of polytube, mwc
Q	=	Lateral discharge, m3/sec
Qin_i	=	Discharge obtained at the inlet of lateral for various discharge conditions, m3/sec
Qr	=	Residual outflow, m3/sec
Q_i	=	Discharge through various length segments of lateral, m3/sec
q	=	Emitter discharge for drip irrigation system, lph

q_i	=	Discharge measured at the end of micro tube in each set, m3/sec
R^2	=	Coefficient of multiple determination
RAW	=	Readily available soil water of the root zone, mm
REW	=	Readily evaporable water (i.e., maximum depth of water that can be evaporated from the soil surface layer without restriction during stage 1), mm
RH	=	Relative humidity, %
RO	=	Surface runoff, mm
RH_{max}	=	Daily maximum relative humidity, %
RH_{mean}	=	Daily mean relative humidity, %
RH_{min}	=	Daily minimum relative humidity, %
Re	=	Reynold's number
r	=	Obstruction ratio
r	=	Coefficient of correlation
Se	=	Emitter spacing, m
Sl	=	Lateral spacing, m
Sm	=	Microtube spacing, m
S_r	=	Deviations from fitting curve
S_t	=	Standard deviation
T	=	Operation time, hours
TAW	=	Total available soil water of the root zone, mm
TEW	=	Total evaporable water (i.e., maximum depth of water that can be evaporated from the soil surface layer), mm
T_1	=	75% of crop water requirement, mm
T_2	=	100% of crop water requirement, mm
T_3	=	125% of crop water requirement, mm
$T_{i.}$	=	Sum of the b observations for the ith treatment
T_j	=	Sum of the a observations in the jth block
$T_{..}$	=	Grand total of all the observations
T_{max}	=	Daily maximum air temperature, °C
T_{mean}	=	Daily mean air temperature, °C
T_{min}	=	Daily minimum air temperature, °C
t	=	Temperature , °C

tk	=	Thickness of pipe, mm
u_2	=	Wind speed at 2 m above ground surface, m/s
$W.P._i$	=	Moisture content at wilting point of ith layer
W_1	=	Weight of empty container , gm
W_2	=	Weight of wet soil + weight of empty container , gm
W_3	=	Weight of dry soil + weight of empty container , gm
x	=	Coefficient of flow regime
Y	=	Yield of crop, kg/ha
Z_e	=	Depth of surface soil layer subjected to drying by evaporation, m
Z_i	=	Soil depth of ith layer, m
Z_r	=	Rooting depth, m