
Glossary

Allowable Depletion

The percentage of moisture the plant can extract from the soil before the next irrigation. The maximum allowable depletion is equal to the availability coefficient.

Application Efficiency

A ratio of the net amount of water applied to the gross amount delivered by the irrigation system.

Application Uniformity

The variance in flow from the emitter discharging the lowest flow rate to the emitter with the highest flow rate.

Availability Coefficient

The maximum fraction of available water storage capacity in the soil to be removed before irrigation is required.

Available Water Storage Capacity

The amount of soil water retained in the soil between field capacity and the permanent wilting point.

Backflow Preventor

A device that prevents water from reversing its flow in a pipeline and thereby protects the water supply system from possible contamination.

Chemigation

A term used to describe the application of chemicals through an irrigation system.

Crop Coefficient Factor (K)

Used in calculating the plant water requirement for design purposes this is an adjustment for canopy, root area, plant shape and spacing.

Crop Coefficient Factor (Kc)

Also called a “pan adjustment factor” this factor adjusts ET data collected in the field with an evaporimeter to determine crop ET.

Climatic Moisture Deficit

The difference between annual crop water requirement and precipitation for a specific location.

Effective Rooting Depth

That depth in the soil above which the roots obtain 90% or more of their water between irrigations.

Effective Soil Water Storage Capacity

The amount of water stored in the soil that is available for crop use.

Emitter

A device used in trickle irrigation for pressure dissipation to obtain a desired low flow rate.

Equivalence

An equivalent weight is the weight in grams of an atom or radical divided by the valence of the atom or radical. (Equivalence is the weight of a substance which combines with or replaces one gram-atomic weight of hydrogen.) A milliequivalence is 1/1000th of an equivalent.

Evapotranspiration

The total of water transpired by plants and evaporated from the soil surface.

Fertigation

A term used to describe the application of fertilizers through an irrigation system.

Filtration

The process of removing particles from the irrigation water.

Header Line

Also called a submain, this line supplies water to the lateral lines.

Irrigation Interval

The length of time between irrigations as determined by the amount of water applied by the irrigation system and the ET rate during this time period.

Irrigation Scheduling

Applying irrigation in the correct amount to the right place at the right time.

Lateral Line

Pipe used to supply water to the emitters.

Mainline

Pipes used to supply water to the lateral lines.

Peak Flow Rate

The amount of flow required by an irrigation system during peak conditions.

Root Area

The lateral area occupied by the root system of a plant.

Total dynamic Head

The energy exerted by the pump which is equal to the sum of static lift, friction head, static discharge head and pressure head.

Zone

A portion of an irrigation system that is controlled by one valve.