Figuring Water Demand for 1 Acre of Chestnut Trees Using 16 mm Drip Tubing with 24" O.C. Emitters

$$\frac{\text{Total length of dripperline rows (ft.)}}{\text{Emitter spacing in ft.}} \quad = \quad \text{Total emitters in plantation}$$

OR

$$\frac{180' \times 7 \text{ rows} = 1560 \text{ ft.}}{2 \text{ ft.}} \quad = \quad 780 \text{ emitters}$$
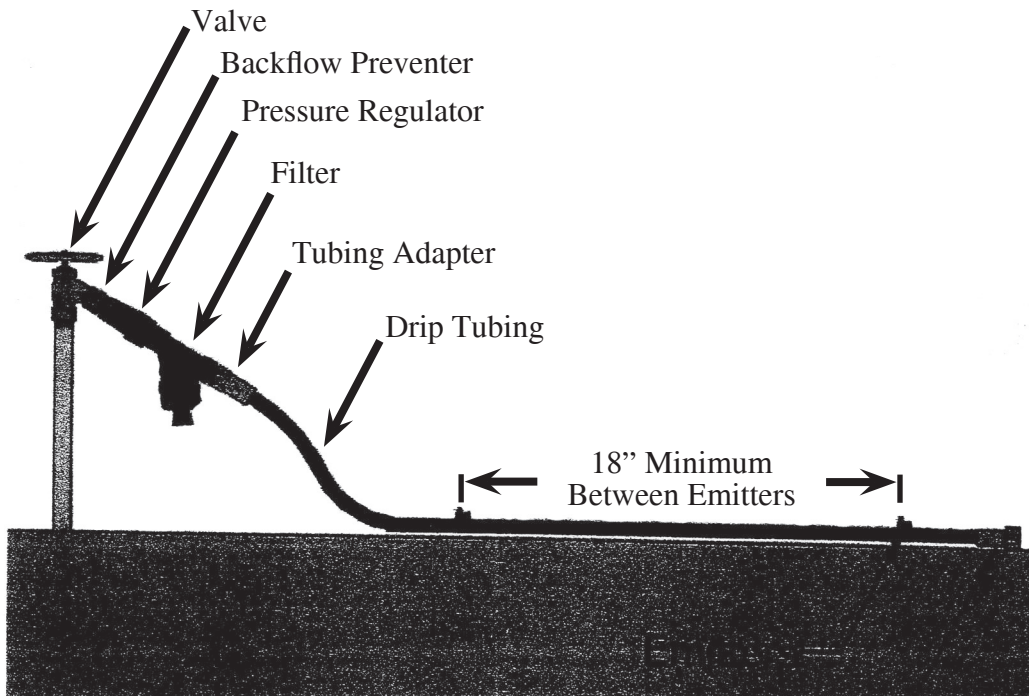
$$\text{No. of emitters} \times \text{flow/emitter (gal./hr.)} \quad = \quad \text{Total gal./hr. for plantation}$$

OR

$$780 \text{ emitters} \times .63 \text{ gal./hr./emitter} \quad = \quad 491.4 \text{ gal./hr. for plantation}$$

$$\frac{491.4 \text{ gal./hr.}}{60 \text{ min./hr.}} \quad = \quad 8.19 \text{ gal./min.}$$

Simple Supply Riser

Valve
Backflow Preventer
Pressure Regulator
Filter
Tubing Adapter
Drip Tubing
18" Minimum Between Emitters

Irrigation for 1 Acre of Chestnut Trees
(49 Trees 30' x 30' Spacing)

Main Water Supply (Underground)
Shutoff Valve
Backflow Preventer
Pressure Regulator
Filter
Air Vent

Supply Manifold
(Underground)

Risers

Low Pressure
Drain

Low Pressure
Drain

16 mm
Drip
Tube
180'
Lines

End Caps or Figure 8's