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

Total length of dripperline rows (ft.) = Total emitters in plantation
Emitter spacing in ft.

OR

\[
180' \times 7 \text{ rows} = 1560 \text{ ft.} \quad \text{780 emitters}
\]

Emitters spacing in ft.

No. of emitters x flow/emitter (gal./hr.) = Total gal./hr. for plantation

OR

\[
780 \text{ emitters} \times 0.63 \text{ gal./hr./emitter} = 491.4 \text{ gal./hr. for plantation}
\]

\[
\frac{491.4 \text{ gal./hr.}}{60 \text{ min./hr.}} = 8.19 \text{ gal./min.}
\]

Simple Supply Riser

![Diagram of 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)

- Supply Manifold (Underground)
- Low Pressure Drain
- Risers

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

End Caps or Figure 8’s

16 mm Drip Tube 180’ Lines

Low Pressure Drain