

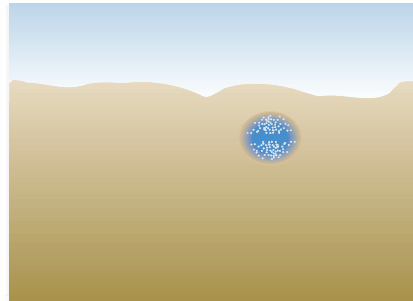


MAZZEI AIRJECTION® IRRIGATION

Improves crop
yields and water
use efficiency.



- Above-ground Water Supply Line
- Above-ground Mazzei® Injectors



- Buried Water Supply Line
- Buried Air Line
- Buried Mazzei® Injectors



- Buried Water Supply Line
- Buried Mazzei® Injectors With Snorkles for Air Suction

Typical Installations

All installations must have subsurface drip irrigation, be level to moderately sloped terrain, and must have 25 PSI (1.76 Kg/cm²) minimum pressure available at the inlet of the injectors [when drip tape inlet pressure is 10 PSI (0.70 Kg/cm²)].

Test Results

California State University Fresno and the Center for Irrigation Technology have conducted numerous trials since 2000. Data from university-led trials and grower installations has shown that AirJection® Irrigation achieves increases of 13% – 35% and greater results over water-only irrigation.



Benefits

- ▶ **Significant Increases In:**
 - Root Mass
 - Crop Yield
 - Fruit Density
 - Sugar Content
 - Germination Rate
- ▶ **Improves Water Use Efficiency**
- ▶ **Early Maturation**
- ▶ **Increases Plant's Salinity Tolerance**
- ▶ **Improves Late Season Production**

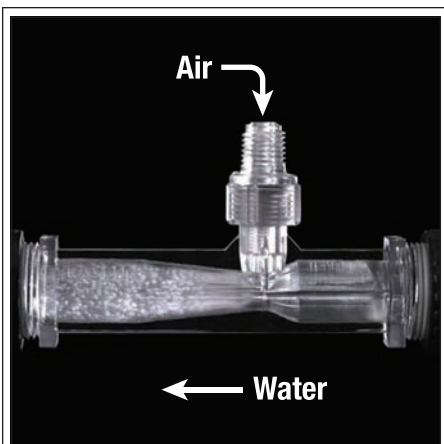
University and Grower Observations

- ▶ **Reduced Water Use**
- ▶ **Irrigation Rate and Duration**
- ▶ **Microbial Activity in Soils**
 - DNA Discoveries
 - Aerobic Improvements
 - Nitrogen Fixing Bacteria Influence
- ▶ **Reduced Fertilizer Use**

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Specialized Mazzei® Injectors efficiently inject and mix micro air bubbles into the water.



AirJection® Irrigation delivers both water and air to the root zone of the plant.



Root mass is significantly increased in bell pepper plants with **AirJection® Irrigation** (right) in comparison to water-only irrigation (left).

Information Needed for Mazzei AirJection® Irrigation System Design

1. Tape run length (bed length): _____
2. Number of lines per bed: _____
3. Tape Specifications
 - a. Manufacturer: _____
 - b. Model number: _____
 - c. Flow rate: _____ gpm/100 feet or gph/emitter (Lpm/100 meters or Lph/emitter)
 - d. Emitter spacing: _____
 - e. Tape operating pressure at head end: _____
4. Irrigation Layout
 - a. Number of tape lines per control valve: _____
 - b. Type of distribution/submain piping (circle one):
 layflat oval hose PVC aluminum other: _____
 - c. Water pressure available in the field: _____

Guidelines for Using Mazzei AirJection® Irrigation

- ▶ Tape should be subsurface or under plastic mulch.
- ▶ The field should be level or may have a uniform slope, not having undulating hills.
- ▶ Generally, the irrigation system should be able to supply at least 25 PSI (1.76 Kg/cm²) of water pressure to the injector inlet [with 10 PSI (0.70 Kg/cm²) tape inlet pressure].
- ▶ System components prior to where the injector is installed should also be able to handle at least 25 PSI (1.76 Kg/cm²) of water pressure (more or less may be required, depending on desired tape operating pressure).

