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Bucket Drip Irrigation

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Bucket Drip Irrigation

- For Flower Crops
- For Vegetable Crops
- Can be constructed in any zone



**Water into bucket and
drips out of the drip
lines onto the plants**



**Water into bucket once or
twice a day. This depends on:**

- Type of plants
- Soils
- Temperature
- Recent Weather
- Wind





Photo from Chapin Living Waters Foundation



Bucket drip irrigation is simple irrigation:

- **Been Used Worldwide**
- **Not Expensive**
- **Low Pressure**
- **Saves Water**
- **Fertilizer Application**

***700 pounds of tomatoes
from one kit in one year
(100 plants)***



Chapin Bucket Drip Irrigation Kits

- Filter screen
- Water Supply Line
- Drip Line

Need to add:

- Bucket
- Stand
- Plants



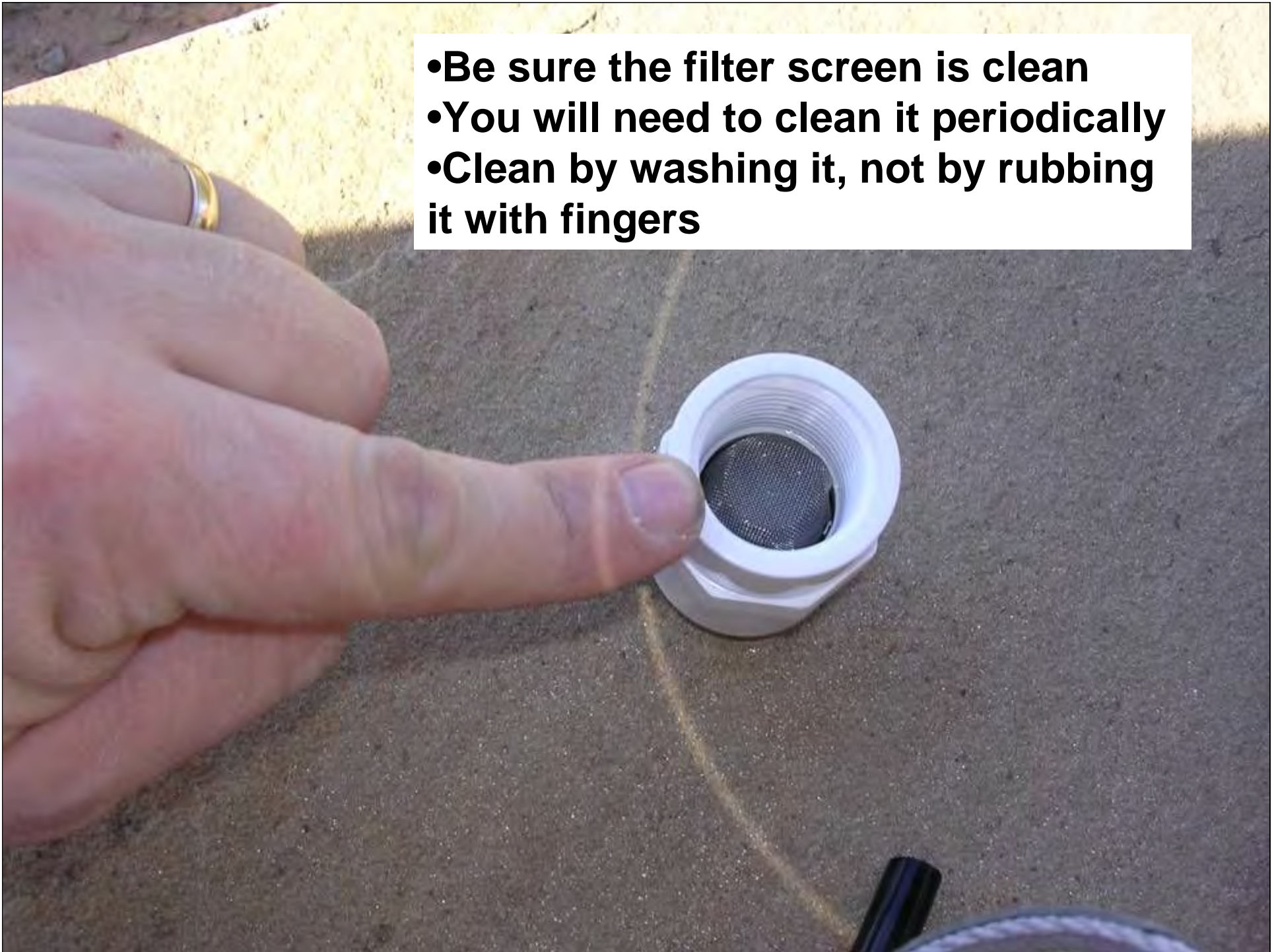
We will look at the steps to build and use a bucket drip

Remember the basics of irrigation

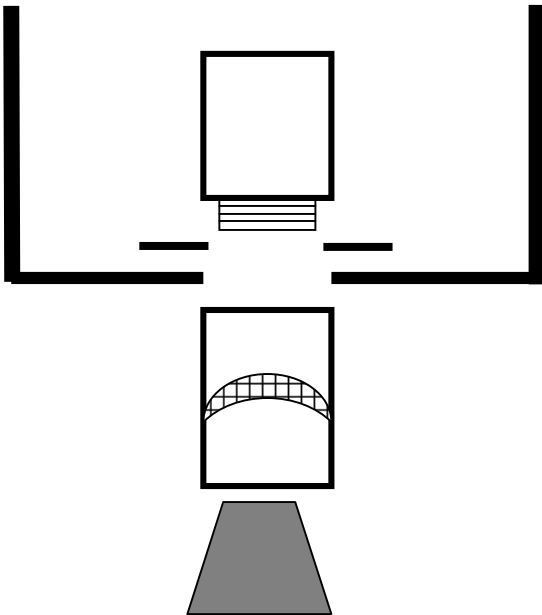
The first step is to drill a hole in the bottom of a clean bucket

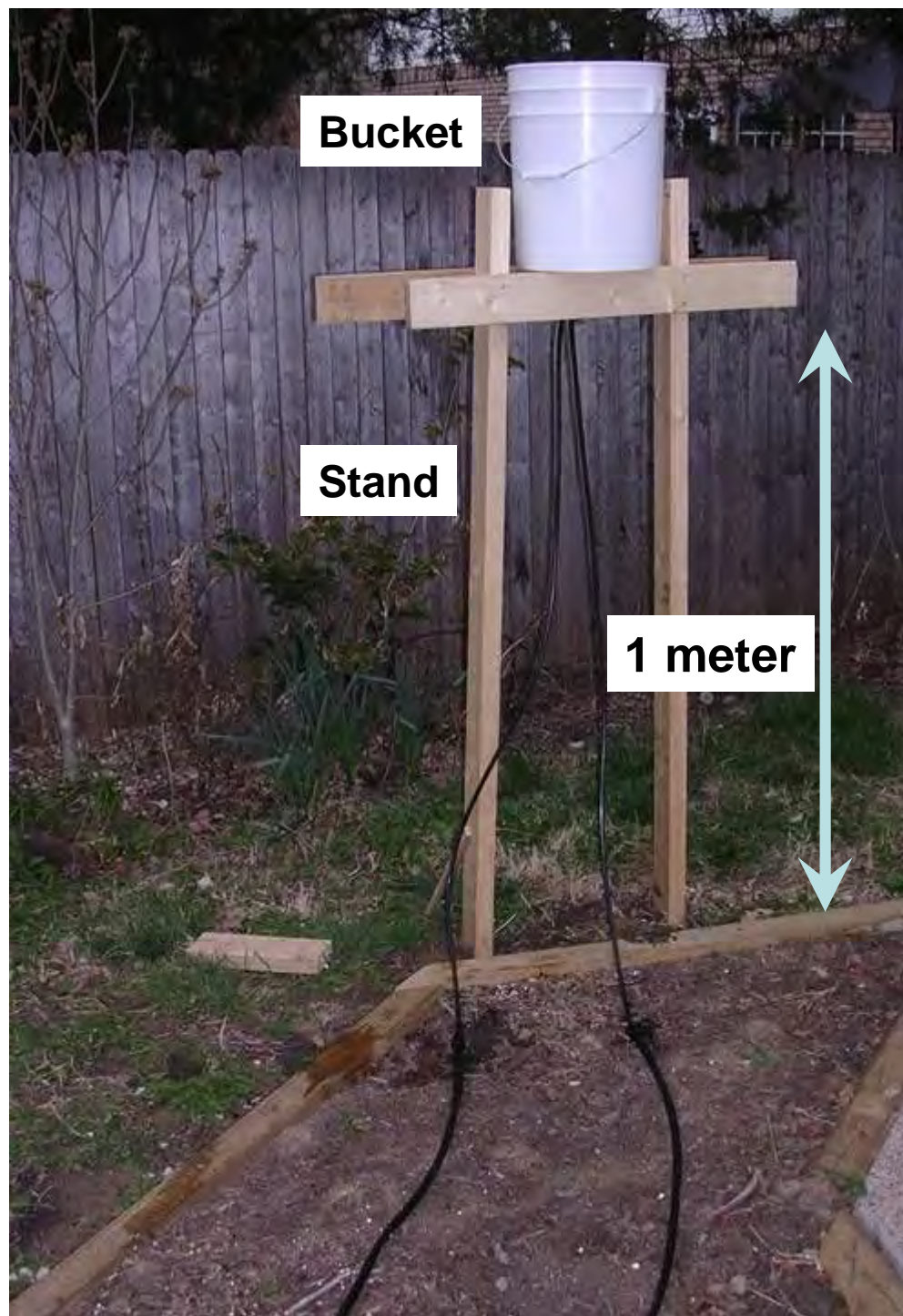


- Be sure the filter screen is clean
- You will need to clean it periodically
- Clean by washing it, not by rubbing it with fingers



- Examine the fittings
- Notice how they will be assembled into the bucket
- They must be tight





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- Bucket is placed on stand at highest end of garden
- The stand should be at least 1 meter high

The water supply lines go into the rubber stopper

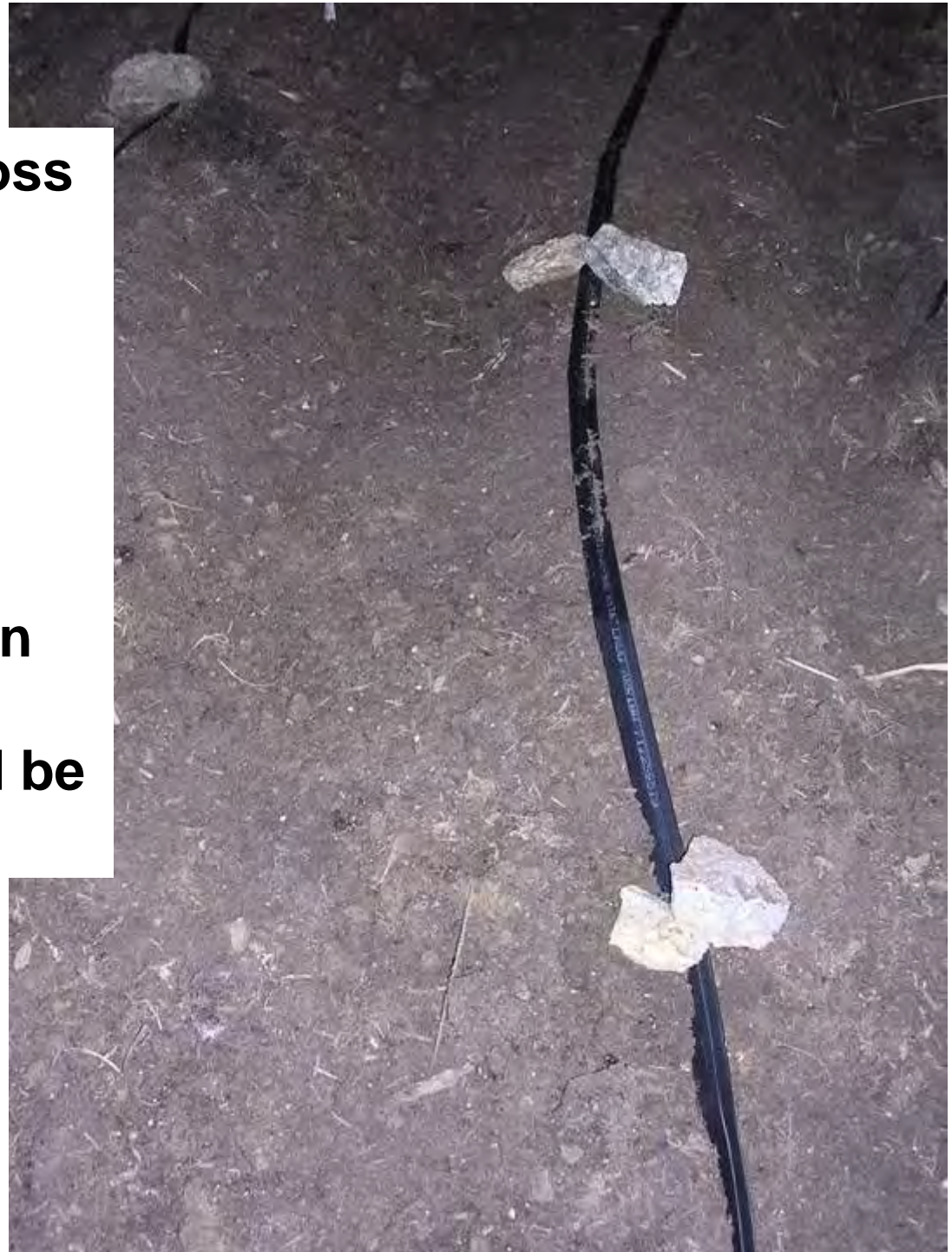




**Connect the water
supply line to the
drip line**



- Stretch the drip line across the garden
- Avoid folds or creases
- Do not vary elevation by more than 1 foot
- Drip line should be in contact with the soil
- Weight the drip line down with rocks
- The drip opening should be on top of the line





- Close end of drip line
- Fold over twice and put in sleeve
- Can also tie with string



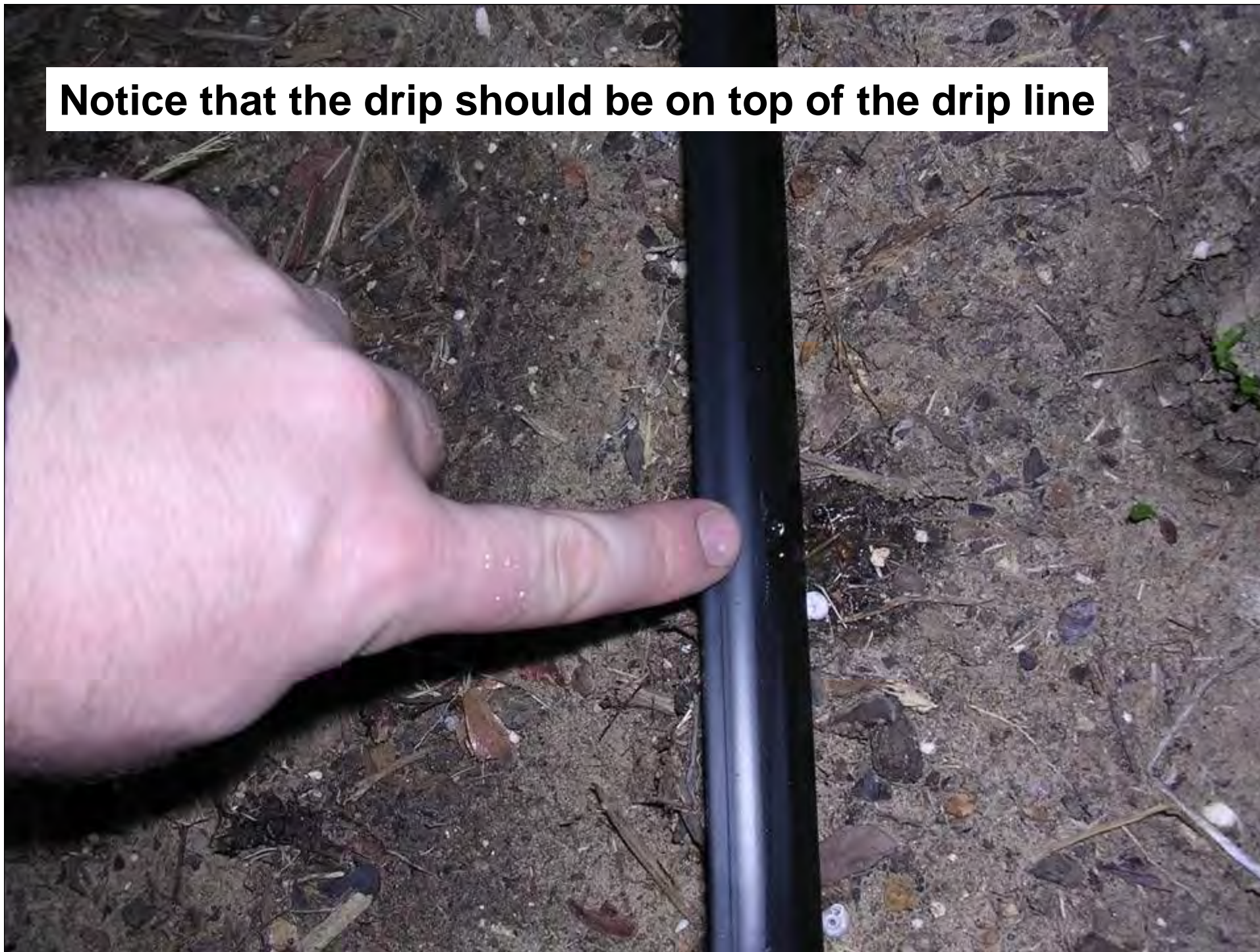


**Carefully pour clean
water into the
bucket**



- Look for wet spots
- Mark them
- Place plants where there is a drip

Notice that the drip should be on top of the drip line

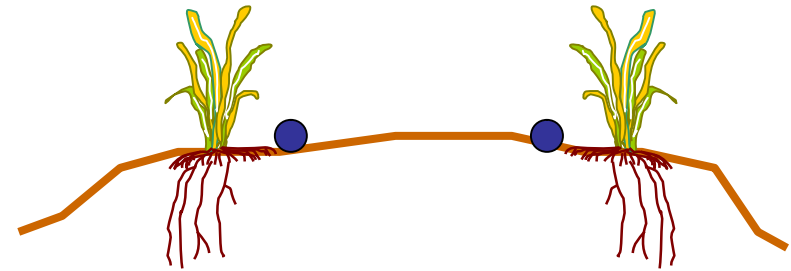


- Plants should go where the drip will be
- Try to avoid getting soil on the drip line
- Can place mulch over line to reduce evaporation loss of water





Plants should be down slope of the drip





Clogging can be a problem.

May need to cover the bucket top to keep dust and sand from blowing to bucket

If hole becomes blocked or the drip becomes slow:

- Do not use a pin to clear the hole
- Rub your finger across the hole and blow into it



A close-up photograph showing a person's hand holding a black plastic drip line. The drip line is being held over a garden bed filled with dark brown mulch and small green seedlings. A small puddle of water has formed on the mulch near the end of the drip line, indicating that water is being poured through it. The background is slightly out of focus, showing more of the garden bed and some larger green plants.

Can also flush the lines

This is done by opening the ends of the drip lines and pouring clean water through it.



Photo from John Tiedeman



**The Chapin bucket
drip irrigation kits
should last 5 to 7
years with proper care**



If stored

- **Flush clean water thru the opened drip lines.**
- **Clean the filter screen**
- **Carefully roll the drip lines**
- **Do not fold the drip lines**



- Can apply fertilizer to the irrigation water.
- The fertilizer will go straight to the plant



•If you are using a compost tea for fertilizer, be sure to pour it through a heavy cloth

A close-up photograph of a black plastic landscape edging line installed in a garden bed. The line is bent at a sharp 90-degree angle, forming an 'L' shape. The surrounding ground is covered with dark brown soil, dry leaves, and small white pebbles. Some small green weeds are visible at the bottom of the frame.

Test Time

What is wrong here?

Answer: line is bent



Test Time
What is wrong here?

Answer: line is not flat



Test Time

What is wrong here?

Hint: this is the inside of the drip bucket.

Answer: water is too dirty. The irrigation water needs to be cleaner. Dirty water can clog the openings



Questions?

