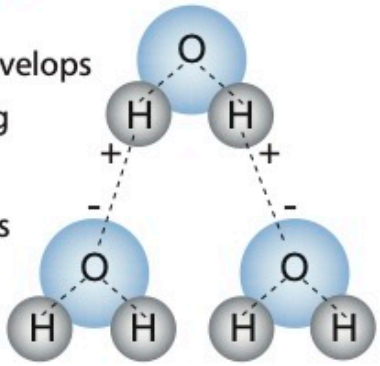
How it Works

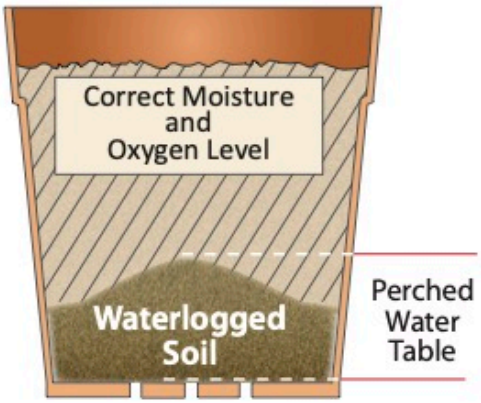
The Hi-Brix Root Warrior prevents Waterlogged Soils

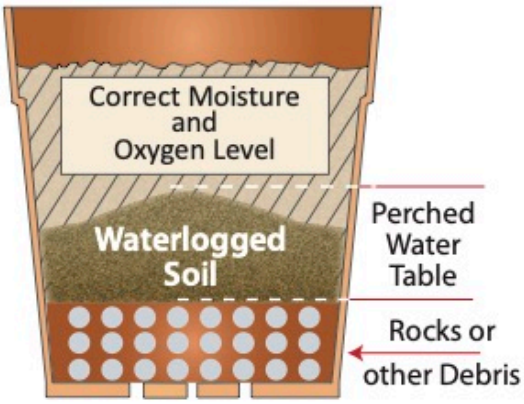


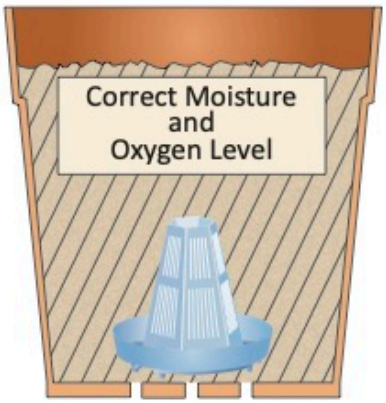
- All containers restrict oxygen in their interior core forming an anoxic zone that develops anerobic bacteria that attack the root system. There are garden myths suggesting rocks, broken pottery, or other debris to improve drainage. However, due to the intermolecular forces of adhesion, cohesion, and surface tension, water moleclues will not readily flow from one material (soil) to another (rocks or other debris). Debris only raises the perched water table and the soil remains waterlogged.

The soil in a container is not only a medium in which terrestrial plants grow, it is also a living ecosystem made up of numerous *microorganisms*—living cells that cannot survive without oxygen. Oxygen is essential for generating energy rich components through biological processes. Anaerobic, waterlogged soil drastically reduces the roots ability to absorb adequate quantities of minerals and nutrients.

The Root Warrior technology works by introducing a cavity (an aeration chamber) inside the container where drainage is optimized and gas exhange between the soil and atmosphere can quickly take place. The aeration chamber completely eliminates the anoxic (dead) zone preventing bacteria formation.







Why Waterlogged Soils are so dangerous to Plant Health

- Plants lack a functioning digestive system, so they must rely on soil microbes to pre-digest minerals and nutrients. Waterlogged soil can drown nematodes, protozoa, mycorrhizae, and a host of other symbiotic microbes that the plant relies on. The Root Warrior maintains a perfect air and water balance to encourage the symbiotic relationship between microorganisms and root systems. As a result, the Root Warrior enables the plant to achieve higher nutrient and mineral density, technically stated as *% Brix values*.