HYDROPONICS

Hydroponics is the term used to describe the process of growing plants without soil. An "inert" medium is used to which is added a nutrient solution containing all the essential elements needed by the plant for growth.

Methods of hydroponics

* Water culture is a method used in hydroponics, this is where seedlings are set in the growth medium composed of a porous material such as wood fiber or peat. The medium is supported in a wire framework centimeters above the surface of the nutrient solution with the roots of the seedling in the solution.
* Using sand and gravel is another method of hydroponics, this method the nutrient solution is applied from above and drains through the growing medium or pumped into the bottom of the medium and then allowed to drain. the growing medium used is one in which the gravel is fine enough to hold sufficient moisture but coarse enough to allow excess solution to drain.

Some advantages of Hydroponics are:

* Hydroponics can be used where agriculture is impossible such areas the soil is infertile.
* Hydroponics also allow intensive food production in a limited area. In this type of farming there is no competition for nutrients because nutrients is always available.
* In Hydroponics there is no soil borne diseases.
* In Hydroponics plants mature more quickly so there is no long waiting periods.
* In Hydroponics crops may be grown out if season.

Some disadvantages of hydroponics are:

* Hydroponics requires a large amount of money to maintain. It requires tanks, pumps, reservoirs ans sometimes glass houses. It also requi