

Questions & Answers

Q: Why do the roots of plants always grow downward while the stems grow upward?

A: This is an interesting question which may home gardeners do not stop to think about, but just take for granted. However, wouldn't you be surprised to find a plant that had its roots sprouting upwards? This is highly improbable, but let's take a look at what keeps this from happening. At the end or growing tip of each root we find tiny living cells. These cells control the direction of growth. They are able to perceive their position in relation to the gravity of the earth. Thus, if a root happens to be pointed upward, it will soon bend around until it is growing in a downward direction. Similar cells are located in the new growth of the stem thus making it grow upward.

Q: Can plants see?

A: As far as we know, plants cannot perceive images in the same manner that we can see. However, they are able to tell the difference between light and dark. In fact, many plants will turn their leaves or bend and grow up toward sunlight.

Q: Is it true that Century Plant blooms only once in every hundred years?

A: No. It blooms much more frequently than this. However, from 25 to 30 years have been known to pass between blooming periods.

Q: How do plants get food materials from the soil?

A: The complete answer to this question is quite involved and much too technical to explain the entire process here. However, this is basically what happens: One the roots of the plants are thousands of microscopic projections referred to as hair roots. These hair roots touch and cling to the many grains of soil which wets those grains of soil. This water is not pure. It contains many chemicals which it has dissolved off the surface and collected on the way down. Some of these chemicals are good others are bad. The hair roots absorb these chemicals and send them to the main root. Thus, one can easily see that plants given an overdose of chemical fertilizer can be burned. An extreme condition of alkali or acid around the hair roots of a plant can have an adverse reaction on the plant.

Q: Why are some soils more fertile than others?

A: This question is constantly coming up, but in a more local form. For example: "Why is it that plants grow well in one part of the yard, but not in the other?" ... or ... "Why is it that my neighbor has an easier time getting plants to grow than I?" We can generally say that lack of fertility is the problem area can be the reason for lack of growth. To begin with, it is partly a question of chemical composition, and partly a question of the hardness or looseness of the soil. A plant, in order to grow and flourish, must have access to certain nutrients (nitrogen, acid and potash). The soil must be able to supply the plant with these needs. If it can't, the plant will react in some adverse manner. This is when the gardener should step in and supply the food needed. Also, plant roots need a soil which is loose enough for growth, but not so loose as to dry out readily. Once again, if this basic soil combination is missing, the gardener must supply ample mulches to correct this deficiency.

From: National Fuchsia Society Fuchsia Fan of November 1966