



Winter Company

➤ GERANIUMS, begonias, umbrella-plants, rubber-plants, oleanders, cacti—indeed, practically all of the most popular and easily raised houseplants—really represent a survival of the toughest. They have to be, to put up with indoor conditions which modern civilized man considers comfortable. Most of our living rooms and apartments are overheated

and under-ventilated, and practically without exception the air is kept too dry. We demand that our houseplants put up with the kind of atmosphere we like, and what we like, physiologically speaking, is desert air.

That is bad enough for the leafy tops of our plants. What their roots often have to put up with is worse still: too-small pots, soil with too much clay in it so that it puddles when over-watered (which it almost invariably is), and either so little of it that the plants half-starve or so much that water poured on top of the soil runs off and makes a muddy mess underneath.

Here are a few simple suggestions for making life more nearly bearable for your houseplants:

When you first pot them up, use flowerpots that look much too large for the plants as they are at the moment. Remember, they want to grow, and you want them to grow, and they will grow best if their roots have room, and enough soil to supply at least a minimum of mineral nutrients.

Put a piece of broken flowerpot, or a large pebble, over the hole in the bottom of the pot. Then cover the bottom of the

pot with an inch or so of coarse gravel. That is to make for better drainage, and to permit a little ventilation at the bottom of the pot. Roots of most plants need air, quite as much as do their leaves.

Then fill in partly with the soil you are going to use. It should be the best and richest soil your garden affords, with leaf-mold added. If it is a bit on the heavy side, a judicious admixture of fine sand is in order. Firm down gently, but don't pack it tight.

Set your plant on the soil surface, with its roots well spread, and fill in the rest of the soil around it. Don't skimp, but don't overfill. A half-inch below the pot brim is good. Firm the soil down, but again don't push too hard. Trim the oldest, lowermost leaves off, to reduce evaporation surface until the roots have recovered from the transplantation shock.

Set the pot in water, to about a third its height, let the soil absorb for a few minutes, then remove and let stand in the sink for a half-hour or so, to drain. Finally, set the pot on its saucer in the sunniest window you have. Don't fuss over your plants too much. Plants, like children, grow best when they are not being over-closely watched.

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PHYSIOLOGY-CHEMISTRY

Study Bee for Long Life

➤ SOLOMON advised seekers after wisdom to go to the ant. Modern chemistry directs seekers after long life to go to her relative, the bee. Vitamins in royal jelly, the infant food on which the hive's queen-mother is reared, account for her extraordinarily long life expectancy—five years, as compared with the workers' three months—Dr. Thomas S. Gardner, industrial chemist of Nutley, N. J., told the American Chemical Society at its meeting in New York.

Four vitamins have been identified in royal jelly, Dr. Gardner stated. They are pantothenic acid, pyridoxin, sodium yeast nucleate and biotin. While each alone has more or less effect in prolonging insect life, their interactive effect when taken together seems to be much greater than the simple sum of their separate effects.

Chemists are still far from making Methusalehs out of ordinary short-lived mortals by feeding them queen-bee pabulum. Dr. Gardner has departed from the royal nursery in the hive only to the extent of feeding various combinations of the four royal-jelly vitamins to fruit-flies, those special pets of geneticists.

Greatest extension of the fruit-fly life-span thus far achieved has been 46%.

Chemicals Make Soil Firm

➤ FLOOD-EROSION effects on soils can be prevented by radical chemical treatments that will give them greater clay-like tenacity and thereby increase their resistance to washing, it was suggested by Prof. Ernst A. Hauser of the Massachusetts Institute of Technology and Dr. D. S. LeBeau of the Midwest Rubber Reclaiming Company.

The treatments proposed would be aimed at the silica content of soils, which is their mineral backbone. The general idea is to increase the proportion of silica colloids, giving the soils firmer consistency and greater cohesiveness, or "stick-together power." The speakers also suggested the desirability of mixing fertilizers with clay before spreading, instead of applying them directly to the topsoil. This renders the nutrient salts more easily available to the plant roots, thereby making for greater economy in fertilizer use.

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