HORTICULTURE

Put Roses on Liquid Diet For Health and Beauty

➤ A STEADY liquid diet is best for roses if you want healthier plants and more beautiful blossoms.

Dr. Harry Kohl of the University of California at Los Angeles said that studies have shown that roses, cymbidium orchids and carnations thrive on such a diet.

The liquid diet is prepared as follows: A concentrate is made consisting of three pounds of potassium nitrate, five pounds of ammonium nitrate and 12 pounds of calcium nitrate in 10 gallons of water. One gallon of the concentrate is added to every 400 gallons of water. Proportioners that attach to a water hose may be obtained commercially to dole the concentrate out automatically.

The "meal" should be "served" the flowers every time they are watered, Dr. Kohl said. This insures adequate nutrients for plants, furnishes an even concentration and automatically times "feeding." When plants need more water, as they often do in the summer, they also need additional food.

Science News Letter, July 16, 1955

VETERINARY MEDICINE

Contented Cow No Joke: Bossy Really Smiles

➤ HAPPY AND contented cows will always smile, according to Dr. W. E. Petersen, dairy expert at the University of Minnesota, who is visiting West Australia on behalf of the Australian Dairy Board.

Dr. Petersen, a world authority on dairy cow psychology and milking practices, said a cow's smile is not like a human's smile, but it is a smile just the same.

Human smiles are indicated by contraction of the facial muscles. The cow smiles when she cocks her ears forward and her eyes brighten.

Dr. Petersen said there was every counterpart of human behavior in the cow herd —good, bad and indifferent. His definition of "cow psychology" is understanding how cows react to humans and how they behave within their own society.

Dr. Petersen's work has been largely devoted to studying how care of dairy cattle affects their milk production.

Science News Letter, July 16, 1955

ENGINEERING

Computer Simulates Any Weather Conditions

➤ A FIVE-FOOT electronic "brain" that can simulate an igloo in the Arctic or a thatched-roof hut in Africa has been unveiled.

Developed to analyze any kind of weather, the "house analog," as it is called, reproduces the heat characteristics of a house while surrounding the building with any type of weather conditions desired. Research scientists of the Minneapolis-Honeywell Regulator Company, who made the computer, expect it to shorten heating, air-conditioning and building-material studies by as much as five years.

In operation, the device is fed pre-determined information about the house, such as storm windows, construction details and insulation, as well as weather conditions. One second of the analog's time is equivalent to 60 days of actual time, which means that it can compute a house's complete life-span in a matter of minutes.

"The house analog," explained Dr. Finn Larsen, Honneywell research director, "can, in effect, make weather stand still. Previously, we have had to wait for the right weather conditions to come along, perhaps months or even years, and even then the desired conditions might prevail only briefly."

The device stands five feet high and is two feet by one and one-half feet wide and is primarily concerned with measuring heat losses and gains. During an actual test, simulated storm windows, the type of insulation or other factors can be changed, by turning appropriate knobs.

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