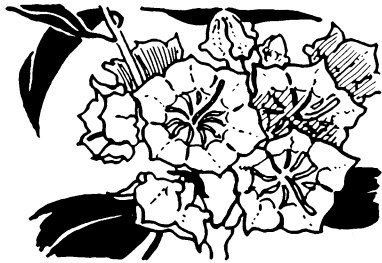


ECOLOGY  
**NATURE RAMBLINGS**  
by Frank Thone



"It's the Water"

**W**HEN you go into a strange part of the country for a more or less prolonged stay, you may find yourself uneasy and out of sorts for a while. People explain this maladjustment vaguely, because nobody understands it at all well as yet. If you do not sleep well, they say it's the change of air. If your digestion doesn't work quite right, they blame it on the change of water.

Presently you become acclimated and forget about it. If you don't, you pack up and leave, lest you should get seriously ill and maybe die.

Plants as well as people have to meet this complex of little-understood environmental conditions. Some plants, like some people, are very tolerant and easily adjustable, so that you will find them pretty much everywhere, either as native vegetation, introduced weeds or man-transported crops.

But most forms of plant life have limits to their ability to adjust themselves, and if they stray into surroundings where their requirements are not reasonably well met they just don't grow. They are unluckier than human beings or animals in that they cannot pack up and leave if they don't like a place; all they can do is protest by perishing. Their seeds either fail to germinate, or if they do they send up feeble and pindling sprouts that are soon pushed under in the scramble for

sunlight by more vigorous neighbors.

To take a concrete example, it is because of an apparent need for an acid soil that plants of the heath family, which includes blueberries, huckleberries, mountain laurel, rhododendron and many other fine small fruits and ornamental shrubs, will not grow in the Corn Belt states. The soil there is rich in limestone, and its water is neutral or slightly alkaline. Without their daily sip of acid the heath plants cannot survive. So Illinois and Iowa have to get along without rhododendrons, and must import the "makings" for blueberry pies.

*Science News Letter, April 4, 1936*

PHYSIOLOGY

**Vitamin B May Play Part In Body's Fat Production**

**A** NEW role for vitamin B, helping the body gain weight by building up fat, is suggested by experiments reported by Drs. Dorothy V. Whipple and Charles F. Church, of the University of Pennsylvania School of Medicine, at the meeting of the American Society of Biological Chemists.

Animals given diets that contained no fat but plenty of vitamin B were able to gain more weight than their mates on the same fat-free diet but without the vitamin. Comparing the average body composition of the animals, the Philadelphia investigators found that fat accounted for half the gain in weight made by the animals on the vitamin diet. Water accounted for the other half of the weight gain.

The figures, they reported, suggest the possibility that vitamin B plays a role in the building up of fat in the animal body.

Vitamin B is found in moderate amounts in most natural foods, but its chief sources are wholemeal cereals, yeast, peas, beans, egg yolk, nuts, liver, kidney and heart. Lack of this vitamin causes beri-beri, a disease mostly found in the Orient, but which can occur anywhere if this vital food factor is omitted from the diet.

Consequently, fat persons cannot hope to lose weight by omitting vitamin B from their diet, even if the investigations reported today are confirmed and the vitamin is found actually to be important in weight-building. But thin persons wanting to gain weight may in the future be advised to add liberal amounts of the vitamin to their diet.

*Science News Letter, April 4, 1936*

**CHEMISTRY**  
**"OUT OF THE TEST TUBE"**

by **Dr. Harry N. Holmes**

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