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15. The bat made slight head movements of a centimeter or two during the discrimination trials. These head movements altered the distance to each target by a few millimeters from one trial to another. The movements were recorded, and the envelope of the autocorrelation function was corrected to compensate for such small variations in target range after the time scale of the autocorrelation function was converted into an equivalent distance scale based on the travel time of the echoes.
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Infectious Goiter

The usual hypothesis given for the etiology of goiter in man is that the enlargement of the thyroid gland is a consequence of dietary iodine deficiency. Studies of iodine intake of goitrous and nongoitrous persons living in the same environment have not shown significant differences (1). The hypothesis that goiter is caused by, or is associated with, infection has not been rejected nor has it been adequately tested. Endemic goiter occurs, in general, among populations living in rural areas and belonging to lower socioeconomic groups. Several studies have shown that the drinking water of such populations is polluted with bacteria. Since shallow wells are more likely to be polluted than either deep wells or public water supplies we made the hypothesis that goiter is associated with drinking water obtained from shallow wells. In 1965 and 1966 we tested this hypothesis among people living in Richmond County in the tidewater area of Virginia. We found that there was an increased prevalence of goiter among persons from households supplied with water from shallow wells

compared with people who received their water from the public supply (2).

Now Werner *et al.* report that IgM levels are elevated in persons with goiter as compared with appropriate nongoitrous controls (3). It seems to us that, although other interpretations are also possible, these data provide additional support for the infectious hypothesis (which does not exclude the iodine hypothesis) are warranted.

W. THOMAS LONDON

*Institute for Cancer Research,
Fox Chase,
Philadelphia, Pennsylvania 19111*

ROBERT L. VOUGHT

*National Institute of Arthritis and
Metabolic Diseases, Bethesda, Maryland*

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Phenylthioacetate as a Stain for Cholinesterase

Booth and Metcalf (1) suggest the substitution of phenylthioacetate (PT) for acetylthiocholine (ATCh) as a histochemical stain for detection of cholinesterase. In the adult summer form but not the winter form of the female spider mite (*Tetranychus urticae*), PT was specific for the walls of the midgut and insensitive to $1 \times 10^{-7}M$ paraoxon; ATCh was specific for the synaptic area of the brain and the surface of nerves in formalin-fixed tissue (2). The cholinesterase sensitivity to paraoxon was found to vary in different strains of spider mites (3). Differences in histochemical staining of PT and ATCh can be expected among arthropods.

W. D. MCENROE

*Waltham Field Station,
Waltham, Massachusetts 02154*

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Pesticide Concentration in Seawater

The assumption of Blanchard and Syzdek (1) that DDT might be concentrated in natural surface films of seawater should not be left to speculation for the readers of *Science*. Apparently these and other authors (2) are unaware that we have reported concentration factors of up to 10^5 for chlorinated pesticides in sea slicks (3). Their expectation that slicks would be areas of high biologic activity was similarly confirmed (3). It has been our express concern that this phenomenon may lead to much more rapid concentration of these toxicants in marine food chains than would be anticipated if dilution were homogeneous.

DOUGLAS B. SEBA

E. F. CORCORAN

*Rosenstiel School of Marine and
Atmospheric Science, University of
Miami, Miami, Florida 33149*

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