ZOOLOGY

Rats' Ways Observed

➤ AN "operation rathole" that produced results of value both scientifically and practically was carried on by Dr. Rocci G. Pisano of San Jose State College and Dr. Tracy I. Storer of the University of California. They literally looked into numerous ratholes, to find out how the rats built and used them, with the ultimate objective of making more effective war on the rodents.

The ratholes were in a series of poultry pens at the state experiment station at Davis, Calif. The rats fed on grass and weeds while the pens were unused, then stole part of the feed when turkeys were kept in them. A rathole is a good deal more than a simple hole, the two zoologists found; there is a central den, with at least two entrance tunnels, and usually a bolt-hole lightly plugged with earth at its outer end through which the rat may make an emergency escape if necessary. In at least one of the ratholes there was a blind-end tunnel partly stuffed with food debris.

Drs. Pisano and Storer also placed captured rats in observation cages with glass sides, to study the animals' digging methods. A rat, they found, digs with its front feet, shoving the loose soil back under its belly and kicking it farther back with powerful strokes of its hind feet. Then it will turn around and push the soil along with the forepart of its body.

When a rat gathers grain for food, they observed, it will pick up a mouthful, then scurry back to the safer neighborhood of its burrow to eat it. Sitting on its hindquarters, it will hold each grain in its forepaws and strip off the outer hull with its teeth. As a rule, each animal has one or more preferred spots where it prepares grain in this way. These spots, identifiable by the pile of discarded hulls, the zoologists named "shucking stations".

Rats, they found, make considerable use of their teeth in digging operations. They chisel through roots and remove stones with them, and employ them as scrapers when the soil is too hard to scoop with their paws.

Science News Letter, April 16, 1949

COSMETOLOGY

Treatment for Dandruff

➤ DAILY gentle massage of the scalp followed by brushing and frequent shampoos make up the anti-dandruff treatment advised by the American Medical Association.

These measures "faithfully executed will be of considerable value" in controlling dandruff, the AMA committee on cosmetics states in the association's JOURNAL (March 26).

Hair tonics and other preparations and treatments for hair and scalp, including treatments for baldness, are debunked in the report which indicates they are a waste of money.

"Fees in amounts equivalent to that of a major surgical operation are paid by thousands of persons yearly for futile hair-saving or dandruff-curing treatments or remedies," the committee states.

With the debunking of the preparations goes a warning that some preparations may make matters worse, may cause scalp irritation and sensitization, and may have even more serious results.

Injections of vitamins into the scalp "can have disastrous results" and injection of any substance into the scalp is, the committee warns, "a highly questionable and risky procedure."

Ultraviolet light treatments may have "some usefulness" but the committee warns that "only those whose scientific background makes them capable of understanding the limited available data and the potential health hazards should undertake the supervision of such treatments."

The oldest medical prescription on record is for baldness but medical science does not yet know much about the cause of this condition nor does it know any cure for it. "Before and after" pictures advertising baldness cures may, if genuine, be of persons who lost hair because of prolonged severe illness, nervous shock or injuries and who would have grown new hair without any treatment.

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ENTOMOLOGY

British To Raise Locusts Because of Roach Shortage

➤ BRITISH scientists are going to learn how to raise locusts, due to a shortage of cockroaches.

Here's the tale of the good wind that blew somebody ill. The all-too-plentiful cockroach has in the past been a favorite for zoologists to study, and it wasn't hard to find cockroaches. But now modern insecticides have made it difficult to get "adequate supplies of cockroaches," a note in the British journal, NATURE (Feb. 12), laments.

One answer seems to be to use locusts in place of cockroaches in scientific laboratories. Locusts, it is explained, are larger than cockroaches, easy to raise and have a rapid life-cycle, about seven weeks.

For British scientists who want to raise laboratory locusts, instructions on breeding and rearing locusts have been prepared by, of all people, an organization called the Anti-Locust Research Centre.

Science News Letter, April 16, 1949

Science Service Radio

➤ LISTEN in to a discussion on "Genetics in the Atomic Age" on "Adventures in Science" over the Columbia Broadcasting System at 3:15 p.m. EST, Saturday, April 23. Dr. H. J. Muller, professor of genetics at Indiana University and Nobel prize winner in medicine, will be a guest of Watson Davis, director of Science Service. Dr. Muller will discuss the disturbing possibilities that human heredity may be quite unfavorably influenced not only by atomic radiations but by ordinary X-rays in certain medical uses.

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