

Aphids kept at summer temperatures produced males as soon as the days grew short in autumn, but when the days in the laboratory were artificially lengthened with electric light the fatherless female generations succeeded each other, even though the temperature was allowed to fall to a low point.

An immediate practical application of his discovery is suggested by Mr. Marcovitch. The saving of orchards from severe damage depends on inducing the first broods in the spring to migrate from the trees to the other plants on which they feed. Mr. Marcovitch suggests that orchards be artificially lighted, just as they are now frequently heated, thereby inducing the winged generations to appear early and "move on" promptly. It might also be worth while to keep up the illumination in the fall, preventing the development of males, and thereby also preventing the production of fertilized eggs, which alone are able to live over winter.

DROUGHT-CRAZED JACKRABBITS OVERRUNNING BIDAHO RANGES

Hordes of jack-rabbits are attacking farms on the south bank of the Snake river in Idaho, with the condition so serious that some ranches have lately been abandoned for the year.

Residents have observed rabbits hurling themselves into the river and swimming seventy-five yards to gain the north bank, where forage is more plentiful. The rabbits come across in hundreds, going into the river above upper Salmon falls and coming down stream below the falls. The low water makes the plunge through the falls possible.

Water holes in the Bruneau desert, on the south side of the Snake river, have gone dry, and the jack-rabbits have come down in droves to the junction of the Salmon and Snake rivers, hunting water. They have eaten everything green, and even the roots of the alfalfa and parts of the hay stacks.

Fences intended to be rabbit-proof are of little aid, as the animals, crazed for food, have dug under the barriers. Cases are evident, also, where they have even broken through poultry netting placed below the ground. The north side of the river, where fences are better and there are fewer rabbits, has escaped without great damage.

Several drives have been made and large numbers of the rabbits killed, but neither drives nor poisons have materially offset the present situation.

DESERT INSECTS HAVE A HOT TIME

Toleration of heat to a most astonishing degree by insects that live in deserts is indicated by the results of researches published in the Proceedings of the Royal Society by P. A. Buxton.

Observing insects in the deserts of Palestine, he found some species quite active and cheerful when the midsummer sun raised the temperature of the sand to 140 degrees Fahrenheit. Temperatures of the insects themselves were also measured, and were found to be lower than might have been expected, due probably

to evaporation of water - though how the insects get the water to replace evaporation losses still remains a question. Mr. Buxton also found that the color of the insects had considerable influence on the body temperature; dark specimens were frequently eight or ten degrees warmer than their lighter-colored brethren.

One possible source of water in the desert is suggested in the same research. The scanty plant growth in these regions has high powers of absorption through the leaves and stems, and can thus gather in much water from the dews that fall at night even in the desert. Fragments of plant material with their absorbed water are eaten by the insects, which in turn become a source not only of food, but also of water for birds, lizards and other animals.

PHILIPPINOS MAKE SAUERKRAUT OF FISH

Sauerkraut is an ancient and wholesome if odoriferous way of putting up vegetable food for a season when it would not otherwise be available. Sauerkraut was the result of racial experience in a cold climate, and it is curious to note that the same principle was utilized long ago by the Malays in preserving fish when plentiful for a time of scarcity.

In the Philippines enormous schools of very tiny young fish, a half inch to an inch and a half in length, enter the mouths of rivers during the months from September to March. They are especially abundant in the rivers of Northern Luzon, and the Ilokanos catch "ipon", as it is called, by thousands of tons.

Ipon fried in oil and eaten fresh is delicious, but most of the catch is used to make "bagoong". In a huge crock eighteen inches to two feet or even more in diameter is placed a layer of salt, then a layer of "ipon", and more layers of salt and fish alternately until the jar is filled. A weight is then put on, and a banana leaf tied tightly over the top to keep out flies and dirt and the jar put away. Bacterial fermentation begins and continues until arrested by its own waste products, just as in sauerkraut.

After a month the "bagoong" is ready to use and forms a piquant and much needed addition to the rice which is the chief article of Philippino diet. The liquor is also poured off and used as sauce or flavoring. Much of the bagoong not needed for home use is packed in five gallon oil cans for shipment.

"Ipon" are the young of half a dozen species of gobies which live in the rivers of the interior, even in the remotest mountain streams. By means of their sucking disks gobies are able to ascend streams impassable to most fishes. When mature, the gobies go down to the sea and spawn not far from land. Such vast quantities of "ipon" are caught, especially at the mouths of the Cagayan and Abra rivers, that more than half a million pesos worth of "bagoong" is made, much of it being shipped to other parts of Luzon.

"Bagoong", if clean and well made, is wholesome and nutritious, and smells no worse than sauerkraut or many kinds of cheese. It is merely different, that's all.
