



Catering to Pests

WITH how much labor has man provided for the insect pests whose depredations are the subjects of his loudest complaints!

Pests that have slipped into this country as unwanted immigrants have received so much attention that we are prone to think of all harmful insects as foreigners. However, this is not the case; some of our worst pests are native species that only awaited the coming of cultivation to provide them with easy livings on a scale to which they had never before been accustomed.

There is the common potato-bug, for example — incidentally, it is really a beetle and not a bug. It apparently originated on the Mexican plateau. Until a couple of generations ago, it was a rather commonplace sort of insect, feeding on the leaves of some of the wild relatives of the potato-tomato-tobacco family. It was not even especially numerous.

Then the white potato, transplanted from South America to Europe, and thence re-introduced into the northern part of the New World, began to be cultivated on a large scale in Colorado, which was within the fringe of the striped beetle's range. Here was an abundance of a new and excellent food, brought to the insect's own feeding ground; and the potato beetle did not hesitate to take advantage of it. In a few years the insect, now dignified with the really unfair designation of Colorado potato beetle, was all over North America, and its possible advent in Europe watched for with dread by agriculturists and entomologists there.

Or again, there is the chinch bug, during the past few years at a destructive maximum in the great central grain-raising area. Like the potato beetle, the

chinch bug has lived a rather innocuous and inconspicuous life as a feeder on wild grasses. Its principal home was in the southern Plains region, though specimens were first reported by early entomologists as far east as the Ohio valley.

Then came the conquest of the Prai-

ries and the Plains, and the large-scale introduction of grain farming, with wheat, oats and other small-grain crops from Europe and corn from the eastern United States. At once, the chinch bug began to figure as a major crop menace, adopting an entirely new life cycle.

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GENETICS

Heredity May be Responsible For Much Sinus Trouble

THE unfortunate child who suffers from sinus disease may have to blame it on his ancestors, it appears from a study by Dr. Hector Mortimer of McGill University, Montreal.

An underlying factor in certain cases of sinus disease was traced to the pituitary gland in studies reported by Dr. Mortimer. This tiny gland buried in the center of the head plays the role of nature's sculptor in moulding the shape of the face and skull, the Canadian scientist found. The size and shape of the sinuses therefore depend on pituitary function, and they are inherited in accordance with the Mendelian laws of heredity, Dr. Mortimer has discovered.

But inheritance is not the only factor determining the size of the sinuses. Pituitary function may become disturbed after birth so that a child born with a pre-disposition to normal-sized sinuses may fail to develop them because his pituitary gland was not sufficiently active while he was growing up. On the other hand, his sinuses may become too large because of over-activity of the gland, and this may give such a form to the sinuses that if they become subsequently infected drainage may be more difficult than normal.

Poisonous substances and diseases oc-

curing during the growing-up period may also interfere with normal growth of the head bones and consequently with sinus development as well as with growth and development elsewhere in the body, Dr. Mortimer pointed out. Diet, environment and natural selection acting through the pituitary are three factors, which Dr. Mortimer said, affect the bone growth and sinus development.

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AGRICULTURE

Selenium in Soil Delayed In Its Action on Livestock

LIVESTOCK poisoned by selenium, a toxic chemical element in some Western soils that is taken up by plants and thus eaten by the animals, do not always show the injurious effects at once, Prof. O. A. Beath of the University of Wyoming reports (*Science*, June 21). Sometimes the action of the poison is delayed for many months; then the cattle and sheep suddenly and for no apparent reason "go off their feed" and become seriously sick. A selenium-poisoned animal may escape death, but it seldom recovers full health.

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