

ENTOMOLOGY

Grasshopper Infestation

Heat, drought and a later start are this year hindering the farmer's fight against grasshoppers. High temperatures have caused some insecticides to break down.

► HIGH TEMPERATURES in some parts of the Midwest broke down and rendered impotent the insecticides with which farmers were fighting widespread and serious infestations of grasshoppers, officials at the U. S. Department of Agriculture have found.

Most of the newer insecticides are unstable organic compounds that break down quickly in air and high heat. Included in this group are toxaphene, chlordane and benzene hexachloride.

Grasshopper control in western grasslands has been poorer this season than necessary, the officials report, because of a slow start caused by ranchers' delay in signing up for the program. Cost of the Ranchers-State-Federal program is shared equally by the three groups.

Drought and heat also dry up uncultivated areas more quickly than cultivated ones. Naturally the grasshoppers leave these poorer sections and settle on the farmers' crops.

Thus the weather has caused alarming buildups of the insect.

In western and central South Dakota, 40 to 50 grasshopper nymphs per square yard are common. Three to five nymphs in a square yard is considered a potential prob-

lem by the Department of Agriculture.

In Missouri, corn, soybeans, legumes and pastures have had serious injury. In two southern Montana counties, Stillwater and Golden Valley, the spraying of 40,000 acres has just been completed.

A second generation of grasshoppers has begun its destruction in Kansas. These hoppers are especially serious because Kansans plant winter wheat in the latter part of August and the tender shoots of wheat will not stand long against great numbers of hoppers.

In Texas, the large area south of Fort Worth is severely infested. Cotton pastures, corn, peanuts, sorghum and ornamentals have widespread infestations of the insects.

Lea County, New Mexico, has reported complete destruction of grasses. Northern irrigated farms in the state are hard hit, but good control on some 20,000 acres of land has been accomplished.

In Utah, 142,000 acres of land have been treated for grasshoppers and Mormon crickets.

Hopper damage has also been reported serious in Illinois, Maryland, Iowa, Tennessee and Colorado.

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HEMATOLOGY

Blood Groups Are Clue

► A LINK between blood groups and stomach cancer, peptic ulcer, toxemia of pregnancy and, perhaps, lung cancer has been discovered.

People with Rh negative blood might be a little less likely to develop lung cancer of the kind some authorities believe most closely related to cigarette smoking than Rh positives.

Blood group A is found more often in patients with stomach cancer than in the general population of the locality in which the patients live.

Blood group O, on the other hand, occurs much oftener in patients with peptic ulcer and in women who develop toxemia of pregnancy. Persons of blood group O are about 35% more likely to develop peptic ulcers than are persons of other blood groups.

These findings are announced in the *British Medical Journal* (Aug. 7) by three groups of scientists: Drs. Ian Aird, H. H. Bentall, J. A. Mehigan and J. A. Fraser Roberts of London, Drs. L. A. Pike and A. M. Dickins of Greenford, Eng., and

Drs. R. B. McConnell, C. A. Clarke and F. Downton of Liverpool.

In one kind of lung cancer, known as the "oat-cell" type, more blood group A and fewer group O persons were found. This is not the cancer believed associated with cigarette smoking. It may be that this cancer has different causes, possibly with an inherited factor associated with the A blood group.

Cancers of the breast, rectum and colon showed no significant association with any blood group.

The reason for these relations between certain blood groups and certain diseases is not known. The "simplest" explanation might be that group A substance is cancer causing for the stomach, while both A and B substance protect against peptic ulcer. Dr. Aird and associates, however, say that much more work must be done to find the true reason for the relations.

Blood groups may have some selective value for survival, but it is "surprising," the scientists state, to find relatively large blood group associations with diseases of

middle and late life that are diseases of distinctly low selective value.

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INVENTION

Propose Endless Typewriter Ribbon

► TYPEWRITER USERS will no longer have smudged fingers from changing ribbons if the invention of Robert Koreska of Vienna, Austria, is adopted. He received patent number 2,685,357 for his method of continuously circulating a typewriter ribbon to replace the reverse mechanism now in general use.

A box would hold the ribbon in zig-zag folds, and it would feed through the machine in the manner of an endless belt. Mr. Koreska estimates that the extra wear and tear on ribbons near the two ends is about 45% greater than near the middle. His invention would eliminate such extra wear.

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PSYCHOLOGY

11-Year-Old Delinquent Probably Not Too Bright

► WHEN AN 11-year-old boy repeatedly gets into trouble with the police, the chances are that he is a boy who is not too bright and is doing poorly in school, and who is running with a rough gang.

The kind of family he has and their economic and social standing is relatively less important than it is for delinquent older boys.

This was shown by study of police records of 334 boys in Detroit. The study, made by Dr. William W. Wattenberg of Wayne University, is reported in the *Journal of Genetic Psychology* (June).

"For some of the boys, the frustrations met in school may have led to hostile feelings which were vented in destruction of property or fighting," Dr. Wattenberg says.

"For others who failed in efforts to win social recognition in school, daring deeds of theft or other bravado may have been a compensation."

However, there is a possibility that the relation between poor school marks and delinquency may be the other way around, he points out.

"It is even possible that some of the boys given poor grades were doing good work but had been penalized for unruliness by teachers who gave them low grades to teach them a lesson."

Dr. Wattenberg indicates the need for follow up studies on young delinquents to find out how these same boys behave when they are older.

"We should especially like to know how many boys in trouble at eleven abandon delinquent patterns and during adolescence stay out of trouble," he says.

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Rutabagas are an excellent source of *vitamin C*.