

MEDICINE

Ants Are Suspected

Usually considered as a harmless pest of tropical regions, when they get into the sugar bowl or other food they probably spread dysentery, may endanger troops.

➤ ANTS that get into the sugar bowl or other food, usually considered a harmless pest of tropical regions, are now incriminated as villains that probably spread dysentery, one of the disease scourges of the tropics which are a special danger to Armies fighting in tropical regions.

Experiments in which ants actually did carry dysentery germs on their feet, leaving a 24-hour trail of the germs wherever they walked, are reported by Dr. Sophie Deller Griffiths, of the School of Tropical Medicine at San Juan, Puerto Rico (*Science*, Sept. 18).

The discovery of the probable role of the ant in spreading dysentery was made through one of those happy laboratory accidents. Ants had never before been incriminated as carriers of disease,

though flies and even cockroaches have been. As Dr. Griffiths points out, ants which abound in the tropics and semitropics are accepted as harmless invaders to be fought only on esthetic grounds.

"They are driven from sugar, candy or other foods which are then consumed with little thought of contamination," she observes.

In her laboratory, native food, rice and beans cooked together with onions and tomato sauce, was being investigated to see whether various strains of dysentery germs would grow in it and thus to learn whether or not the native food could be a source of the dysentery so common in Puerto Rico. Dysentery germs were inoculated into some of this food in flat, covered glass plates.

After 24-hour incubation, the plates were left inverted on the laboratory table until the next morning.

At that time Dr. Griffiths saw on the plates unusual colonies of germs growing "in a pattern similar to miniature rabbit tracks." A few ants were also seen on the table, leaving the plates.

More ants were then caught and in the course of experiments Dr. Griffiths found that the ants could carry dysentery germs on their feet at least 24 hours after walking across material containing the germs. They could thus spread the disease by carrying the germs to food which people eat.

The ants in the experiments were identified by M. R. Smith, of the U. S. Bureau of Entomology, as tropical fire ants, *Solenopsis geminata*, a species very common in Puerto Rico and found in practically every kind of environment.

These ants are found in the tropics, in the West Indies and in extreme southern United States but not as far north as the vicinity of Washington, D. C. Other species of ants such as those found in more northern regions may also be able to carry dysentery germs, although Dr. Griffiths does not report any experiments with other species.

Science News Letter, September 26, 1942



A NEW GUN for parachute troopers is this Reising Submachine gun which has pistol grip and steel-frame stock that fold out of the way when not in use. This type deadly .45 calibre weapon was reportedly employed in the Solomon Islands attack. The photograph, which was taken in training at a Marine Corps Base, is an official photograph of the U. S. Marine Corps.

AGRICULTURE

Help Chinese Fight Erosion And Grow More Food

➤ TO HELP unoccupied China grow more food for its millions, a scientific mission is setting forth from the U. S. Department of Agriculture at the request of the Chinese government.

Dr. W. C. Lowdermilk, veteran soil scientist who has studied soil problems in all parts of the world, heads the U. S. party that has just left Washington. Dr. T. Dykstra, plant breeder in corn and potatoes, is accompanying Dr. Lowdermilk and later an animal breeder and hydraulic engineers will join them in Chungking.

The need for food in China has been increased by the 60,000,000 refugees who fled inland as a result of the Japanese invasion. Cultivation was pushed up the slopes of the hills and mountains. Crops such as potatoes and corn were more generally grown.

Chinese farmers have been troubled with erosion on the slopes of the hills and this is one of the problems that the American scientists and their Chinese colleagues will attempt to solve.