

## ENTOMOLOGY

# Fire Ants Set Blaze

The problem of controlling the current invasion of the imported fire ant, a pest that is disrupting farming activities throughout the South, is being studied intensively.

► THE FIRE ANT is setting conservationists, farmers and health officers ablaze.

These recent developments point up the fire ant problem that now involves nine southern states and more than 20,000,000 acres:

1. Conservationists charge that treatment of infested areas with the insecticide, heptachlor, is causing widespread death to wildlife and may very well endanger humans.

2. Fire ant bites are becoming a major health concern. The U. S. Public Health Service is planning to assign a biologist to the problem. At the same time, Tulane University scientists have undertaken a special study of the medical aspects of the fire ant.

3. The U. S. Fish and Wildlife Service is preparing a preliminary report on the effects of the insecticide war on wildlife populations.

The fire ant gained notoriety last year when the small pest with the big bite set the nation's legislators aflame. It is an undesirable alien from South America that jumped ship in Mobile, Ala., 28 years ago and has spread throughout the southlands since.

The fire ant is capable of killing small farm animals and making life generally miserable for farm workers and others. When it bites, it feeds irritating fluid into the wound that causes festering sores. Persons can also react more violently to the bite.

The problem is not only a rural one. In New Orleans, for example, there are an estimated 1,000 fire ant bite cases reported each summer day.

In November, 1957, the U. S. Department of Agriculture embarked on a control program. Since that time slightly more than 200,000 acres of infested land have been sprayed with either heptachlor or dieldrin, both of which have been effective in curbing the fire ant.

According to conservationists, however, heptachlor has also been effective in killing wildlife. Alabama conservationists report treated areas are literally rank with the stench of small game and birds dead from insecticide poisoning. They point out that humans who eat animals raised in areas where the insecticide has been used might also be endangered.

The conservationists are also worried about the residual effect of the insecticide sprays. They are concerned about the cumulative effect upon future wildlife populations.

The U. S. Fish and Wildlife Service is worried too. The Government conservationists have information on some cage tests, but little on field operations. They report they are aware of the threat to wild-

life and are currently working with USDA to resolve the problem.

Still to be determined, they note, is what effect insecticide treatment of infested lands will have on the reproductive rate of wildlife. Laboratory tests show that some insecticides will cut down reproduction or result in crippled animals.

The U. S. Public Health Service is interested because heptachlor and dieldrin are highly toxic to fish and aquatic life.

Farmers are up in arms about the fire ant because it causes damage to their crops and livestock. Farm machinery often becomes damaged when passing over fire ant mounds and farm workers rebel when it comes to working in infested fields where they run the risk of being bitten by the pesky little ant.

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## AGRICULTURE

## Rust-Resistant Wheats Created for 100 Years

► A RUST-RESISTANT WHEAT has been created by scientists at Brookhaven National Laboratory, Upton, N. Y.

The scientists have also outguessed rust diseases that could attack wheat for the next 100 years, Sen. Clinton P. Anderson (D.-N. Mex.), vice-chairman of the Joint Committee on Atomic Energy, revealed during a speech at the National Press Club in Washington.

In answer to a question on how atomic energy has thus far affected agriculture, Sen. Anderson disclosed that Brookhaven atomic scientists have bred "wheat that will not rust at any time."

They have gone one step farther, he said, and perfected new varieties of possible future rusts and then created new rust-resistant seeds. In effect, the scientists have been able to outmaneuver future wheat diseases today.

Science News Letter, May 31, 1958

## SURGERY

## Doctors Plan Standards For Surgical Implants

► A LEGAL ORGANIZATION to establish mechanical and biological standards for the metal plates, screws, nails and pins used within the human body is being planned.

At the present time, there are no Federal or other standards regulating the quality of these surgical materials, Dr. Joseph S. Barr, orthopedic surgeon from the Massachusetts General Hospital in Boston, said.

The six leading manufacturers, although they have done their best, have not all

produced uniform materials that can withstand intense stress and still remain biologically harmless, he told a meeting of the Orthopedic Associations of the English-Speaking World.

More research on the qualifications of such surgical implants is needed, he said. Neither individual doctors nor manufacturers have the funds to carry on such a program, he pointed out.

The proposed organization is called the American Surgical Materials Association. It is sponsored by the American Medical Association, American Hospital Association, American College of Surgeons and the American Academy of Orthopedic Surgeons.

The charter for the organization is before the Justice Department, awaiting legal interpretation, Dr. Barr said.

Metal plates and similar devices have been used since 1917 or thereabouts. However, it was not until after World War II that replacements of whole hip joints was accomplished.

Stainless steel was introduced as a stable material for the latter purpose at that time. Nevertheless, doctors believe that ten years is too short a time to test the adequacy of stainless steel.

In addition, Dr. Barr said, none of the materials, including those used since 1917, has been tested for a satisfactory number of years. Therefore, to insure safety and uniformity of materials, the doctors expressed a desire for regulated controls of all materials used for surgical implants.

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## SURGERY

## Summer Tonsillectomies No Worse Than Others

► TONSILS can be removed any season of the year, even summer. Postponing the operation until the cooler months has not resulted in fewer cases of polio as was expected.

Reviewing the polio cases of the 1940's, when tonsillectomies were performed during the peak summer months, Dr. Max Unger points out the relatively low incidence of polio cases.

In the summer-tonsillectomy years between 1943 and 1949, 151,027 cases of polio were reported. During the years between 1950 and 1956 when summer tonsillectomies were not performed, there were 238,093 cases of polio, Dr. Unger reports in the *Eye, Ear, Nose and Throat Monthly* (April).

"Definitely, the cessation of tonsillectomies during the summer months did not reduce the number of polio cases," he declares. Thus, he urges that tonsillectomies be concentrated in the summer months.

A large and increasing pool of untonsillectomized children has been developing in the past two decades. The increase in polio cases that has occurred in the past 20 to 25 years may be directly related to this increase in untonsillectomized children.

Evidence indicates that tonsillectomies do not predispose children to the development of poliomyelitis, the doctor concludes.

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