

thing new, because the boys have inspected these fields in which that volunteer rye is growing, rather carefully in the past." A few mirid nymphs and damaged rye leaves also were received with the letter.

The above fields were carefully checked on May 18, 1946, with large numbers of adult and fewer nymphal *Miris ferrugatus* Fallen being present in several areas of Lake Point on volunteer rye, and on the edges of some rye fields at Erda and northwest of Tooele. Smaller numbers of this species, which was the one sent in by Dr. Hill, generally were present on rye, giant ryegrass, and on certain of the other grasses on nearby uncultivated range land. Leaf blotching, such as was present on samples sent in by Dr. Hill, was common wherever this rather large mirid bug was present. It appeared that the damage was due to this pest which seemed to have some tendency to be gregarious. The bleached out spots tended to become elongate, giving a broken-up blotched appearance to seriously affected leaves.

A smaller mirid, *Trigonotylus ruficornis* (Geoff.) was taken in moderate abundance in several places where insect net sweepings were made to collect the larger bug. In addition, one specimen of *Melanotrichus coagulatus* (Uhler), and several *Dikraneura carneola* (Stal) leafhoppers were taken in these Lake Point collections.

Miris ferrugatus has been collected by the writer on grass in many localities throughout much of Utah, often in moderate abundance. At times it has been encountered on native and introduced range grasses in considerable numbers, as a rule being abundant only on restricted areas, associated with the above broken-spotted leaf condition. This bug has been collected in Utah on wheat, barley and oats, and apparently feeds on a large number of species of the grass family, including the common small grains.—1-5-47.

The Little Fire Ant as a House Pest

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Apparently almost nothing has been published about the little fire ant, *Wasmannia auropunctata* (Roger) ant as a pest in houses. It has become rather serious however in connection with citrus trees as it is often very abundant on them feeding on the honeydew produced on them by aphids and whiteflies and stinging the pickers who gather the fruit. This condition has been quite fully described by Spencer¹ who states that fruit pickers often object to working where the ants are abundant because they sting them so freely.

This ant was first reported from the United States in 1929 in Southern Florida. Since then it has gradually spread northward until it is now present in nearly all of the peninsular portion of the state.

Spencer states that honeydew is probably the most important food of the ants but feeding tests indicate that they will also eat dry sugar, sweet syrups and show a special fondness for cooked fat meats and vegetable oils.

In houses the writer has not found the ants interested in sweet materials but are attracted to most fats, peanut butter and to other fatty or oily material, not visiting sweet substances. To

¹ Spencer, Herbert, 1941. The small fire ant *Wasmannia* in Citrus groves—A preliminary report, Florida Entomologist, 24 (1): 6-14.

reach such materials they will often travel more than 20 feet. A small bit of mutton fat placed at an inner corner of a desk which extended 4 feet to a window sill was found covered with the ants only 3 hours after it was placed there. Tracing their line of march back it followed the length of the desk to its other end, then crossed the space between the desk and a window sill by means of a telephone cord, a distance of about 6 inches, then trailed along the sill about 2 feet to the corner of a window under which the trail continued to the outer edge of the sill, down and around this to the outside boarding of the house, then down nearly four feet to a place where there was a tiny crevice between the end of a clapboard and a brick chimney. Here the ants entered and were lost to sight, the whole length of the trail being about 17 feet. Lines of ants coming and going were quite continuous and remained so all one afternoon and evening at least. The following morning however the procession had ended.

On many occasions one end of a porcelain sink became so densely covered with the ants that almost no trace of the white porcelain could be seen soon after dark and remained so nearly all night with trails to and from the sink plainly evident. Elsewhere in the house a few ants might be found at almost any time—probably scouts seeking food. Fortunately during the summers none appeared in the beds.

These ants are sensitive to cold and do not appear in spring until the weather has become quite warm, even at night, and disappear with the first touch of cool weather in the fall though if this is followed by a brief period of warm weather they may reappear for a short time.

The worker ants are very tiny—not more than about one sixteenth of an inch long—and the general color of a group is dark gray, though under a lens the red of the body becomes evident. They do not seem to form definite nests underground but clusters of them may sometimes be found under bricks and stones partly covered by earth or grass. More often these clusters occur in cracks or crevices; under pieces of wood or even under dead leaves or rubbish on the ground. Such clusters often appear to be connected with others near by and these conditions seem to imply a colony divided into two or more foci.

The queens are about one-fourth of an inch long (Spencer). The writer himself has never chanced to see a queen although he has examined large numbers of workers gathered for feeding and on the trails between their food and their foci.

Control of this pest in houses is a different problem from that with most ants. With no definite nests where the queens are located there is no central area to attack and it does not appear that supplying the workers with poisoned food to take to the queens is very effective. The workers themselves can be destroyed easily by spraying them and the paths they travel with DDT in such strength as is available at the stores, or by spraying these places with kerosene, *Flit* or numerous other such materials. But after about 10 days to 3 weeks following such a treatment the ants return and resume their visits to any fatty material which may be placed there or still may be present. Constant watchfulness and treatment to destroy the workers when they appear, often using fatty baits to draw them there seems at present to be the only control method available.—1-3-47.

Control of Black Commercial

L. BOURNE AND F. COLLETT

The black scale, *Saissetia oleae*, a subtropical region pest of citrus fruits, is also present in northern areas, it is also a pest of citrus fruits.

This scale is so prolific on citrus plants upon which it is a dangerous pest and proved very difficult to control. It has been estimated that in some areas more than 2000 scales occur over several months. Repeated application of insecticides is a common type of control during the period when citrus trees are in blossom. In some instances the cost of control is very heavy. In spite of his best efforts because of the efficiency of the sprays.

Aside from the direct damage to the trees, honeydew excreted by the scale is an excellent medium for the growth of black, sooty fungus which causes a depreciation in value of the fruit and a reduction of bloom.

On September 16, 1946, a serious infestation of black scale was observed in a commercial citrus grove. The total of 60,000 scales was estimated. In the second year of growth the first season of full production was present. The heaviest attack was on the branches of the east side of the grove and the foliage was coated with honeydew.

DATE

Sept. 16

Sept. 19

Sept. 23

Oct. 1

¹ Applied Sept. 16.
² Applied Sept. 23.
³ Applied Sept. 24.