

ENTOMOLOGY

Hit Flies With Poison Bait

Poisoned cornmeal or sweet syrups can be used to eliminate flies. However, sanitary measures to clean up the pests' breeding places is still only sound basis for fly control.

► THE MODERN WAY to handle flies when they get too obstreperous and plentiful is to feed them cornmeal—poisoned.

Poisoned bait and residual sprays between them have made the fly swatter almost as obsolete as the buggy whip.

Of course, fly control in the home and on the farm begins, as it always has, with sanitary measures to eliminate fly breeding places. This means keeping garbage and other refuse under cover and disposing of garbage frequently. It also means, on the farm, proper disposal of manure.

Screens on windows and doors are another aid in fly control.

In spite of all these measures, however, flies do get around, creating not merely a nuisance but a health danger as well. They can spread typhoid fever, dysentery and diarrhea, to mention just a few diseases that have been traced to flies.

However, the fly is not the trouble it used to be, thanks to modern insecticides and modern ways of using them, such as the poisoned baits and the residual sprays.

Poisoned baits have given "spectacular" results, controlling flies in some situations where sprays fail. Luckily, no resistance to the poison in the baits has yet developed, so the poisoned baits work equally well against resistant and non-resistant flies.

Black-strap molasses, cane or corn syrup and sugar may be used for bait as well as cornmeal. The cornmeal does not decompose as fast as the sweet baits. Over a million pounds of cornmeal was used last summer in poison baiting of flies.

Generally speaking, the one that is most readily available and cheapest in a given locality is the one to use.

For poison, malathion has proved very effective in baits. This is an organic-phosphorus insecticide. Two other effective poisons for the baits are diazinon and one known as L 13/59. These also are phosphorus insecticides.

Malathion and diazinon are also in the residual sprays, which are reported giving good results in some parts of the country.

Residual sprays are also known as surface sprays. Their effect lasts several weeks because flies are killed whenever they come in contact with the residue on the sprayed surface. These sprays are used on garbage cans, screens, porches, door and window frames, edges of arches and other places where flies gather.

For use inside the home, a space spray is easier. These are the kind that release a mist from a hand sprayer or an aerosol bomb. The insecticides in them may be DDT, methoxychlor, lindane, pyrethrins, and the synergists such as piperonyl bu-

toxide, n-propyl isome and sesame oil. The synergists are important because they increase the effectiveness of the pyrethrins.

The U. S. Department of Agriculture has two leaflets giving details on making and using poisoned baits and sprays for fly control. They are Leaflet No. 390, available from the Government Printing Office, Washington 25, D. C., for five cents, and EC-29, Fly Control With Poisoned Bait, free from the Department of Agriculture, Washington 25, D. C.

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NUTRITION

Create "Reference Man" For Figuring Calories

► A "REFERENCE MAN" and a "reference woman" have been created by Food and Agriculture Organization scientists.

Creation of this hypothetical couple is intended to help nutritionists in countries throughout the world estimate calorie needs for flesh and blood men and women.

The man is 25 years old, free from disease and physically fit for active work. He weighs 143 pounds, lives in a mean annual temperature of 50 degrees Fahrenheit, consumes an adequate, well-balanced diet and neither gains nor loses weight.

He works an eight-hour day at a job that, although not sedentary, does not involve more than occasional periods of hard physical labor. When not at work, he is sedentary for about four hours and may walk for up to one and one-half hours. He spends about an hour and a half at active recreation and "household work," says FAO. His food needs on an average for the entire year are assumed to be 3,200 calories daily.

His female counterpart is also 25 years old. She weighs 121 pounds, lives in the same environment and may be engaged in general household activities or light industry.

Her daily activities include walking about three miles a day and one hour of active recreation such as gardening, playing with children or non-strenuous sport. Her average daily food consumption over a year is assumed to be about 2,300 calories.

If she is nursing a baby, she may need an extra 800 to 1,000 calories per day for six months. Increased calorie requirements when expecting a baby are estimated at 40,000 per pregnancy.

This is the second reference man and woman created by FAO. The first were created in 1950. Since then, new knowledge has required revision of the figures.

The studies deal with calorie requirements, not with desirable composition of diets. A diet may meet the calorie requirements without being satisfactory for good health and nutrition.

FAO also points out that race of itself does not influence calorie requirements. On this its report states: "As far as present knowledge goes, individuals of the same size living in the same environment and having the same mode of living will have the same calorie requirements whatever their race."

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