

## Medflies aren't new pest

WASHINGTON, D.C. — The Mediterranean fruit fly, commonly known as the Medfly, may be causing a commotion in California, but the fact is—the little winged bug is nothing new. It was first found in West Africa in the early 1800s, reports National Wildlife Federation, and since then has spread throughout most of the world.

Not a traveler by nature—the insect can fly only a mile or so on its own—the medfly's extensive excursions could only have taken place with the help of people. Hitching rides with man as he crossed continents, the pest has reached all parts of the globe, except Canada, most of Asia, and the arctic zones.

The National Wildlife Federation explains that despite quarantines, sterilization campaigns, and insecticide spraying, the Medfly's cream-colored larvae, or maggots, continue to destroy the insides of more than 250 kinds of fruit and vegetables, including apples, apricots, most citrus, coffee berries, mangoes, nectarines, peaches, plums, and tomatoes.

How can one tiny insect smaller than a housefly cause so much havoc? The Medfly makes up in reproduction powers what it lacks in size. And the hotter the climate, the faster it procreates. In sunny Hawaii it produces 12 or 13 generations a year.

About a week after they become mature, male Medflies gather in groups on host fruits or nearby leaves. Females are attracted by the male's scent and characteristic buzz. After mating the female uses her sharp-pointed ovipositor, or egg-laying apparatus, to puncture the skin of a just-ripening fruit, and she deposits about a dozen whitish glistening eggs in the hole she made. A single Medfly female in the wild can lay up to 500 eggs during her adult reproductive lifetime of about a month.

Her eggs hatch after a day or two and the soft-bodied larvae feed on the fruit, which fall to the ground prematurely and rot. After a week or two, the mature larvae—now about one-third of an inch long—crawl out. Each one burrows into the soil and forms a brown, seedlike pupa. After about nine days, it emerges as a fly to begin the cycle again.

How is this prolific and damaging pest controlled? In most Mediterranean countries it isn't. The pest is simply too widespread, and some nations report up to 100 percent infestation of soft fruits and a few vegetables.

Australia, however, has fought a winning battle against the

Medfly, which is confined to the southwest corner of the country. In Adelaide, the capital of South Australia, residents have been trained to recognize the rather pretty fly with its yellow abdomen and brown bands on its two clear, drooping wings, and they report sightings immediately. This method of early detection has helped eradicate the fly each time it has appeared.

Another method of early detection involves setting up traps which

look like cardboard pup tents. The traps are baited with a sex lure which attracts the flies. The insects are then captured inside the trap by a sticky substance on the tent's floor.

Both Israel and California spray an insecticide-plus-bait to combat the Medfly. The protein bait attracts the flies, which are then killed by the insecticide, usually malathion. Other weapons used against the Medfly include stripping of host fruits, release of sterile

flies, and biological control by means of parasites.

Malathion, the most effective tool for combating large Medfly outbreaks, is regarded by most scientists as a safe pesticide, but as Jorge Manning, a toxicologist with the National Wildlife Federation explains, "If it's economically possible, we always prefer to avoid use of any pesticide. Perhaps it's time we considered such land use techniques as alternating acres of fruit with other crops. That way you set up a biological barrier to both the Medfly and other damaging insects."

## Rabbit course

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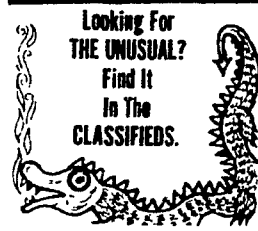
Through better management, nutrition, and genetic selection, some individuals who complete the course say they can double their net income from rabbits.

A conscientious manager can earn money from commercial production of rabbits if a good market is available. Herb Jordan, in his Correspondence Course on Rabbit Production, gives instructions on breed selection, housing, equipment, feeding, care, and breeding of rabbits for meat. Special attention is given to killing, skinning and marketing.

For the novice pet enthusiast,

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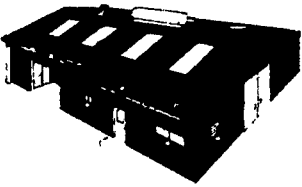
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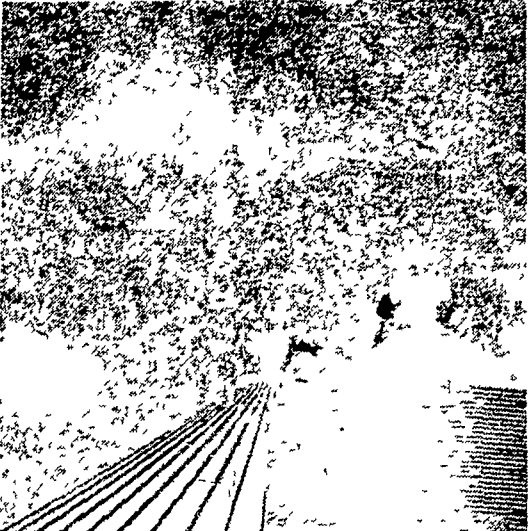
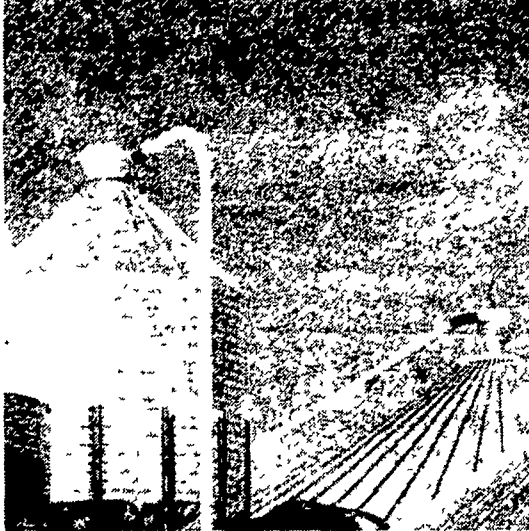
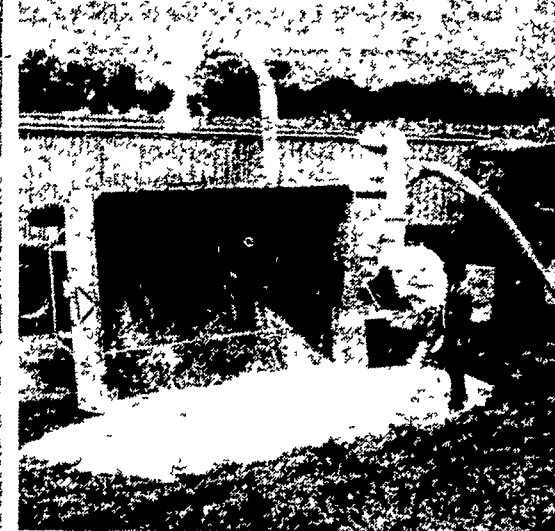
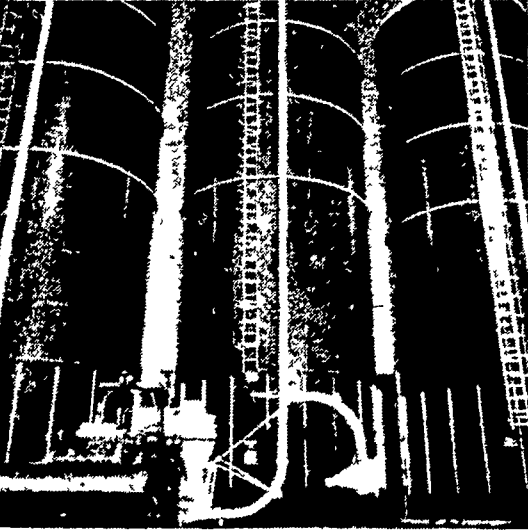
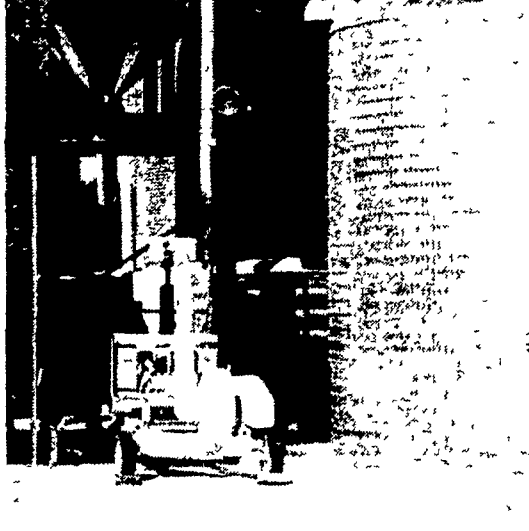
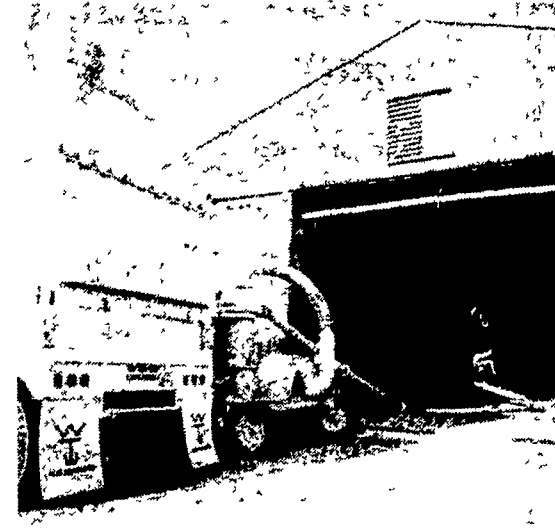
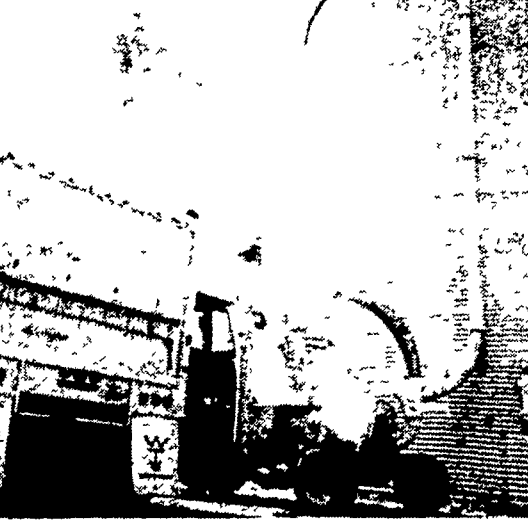
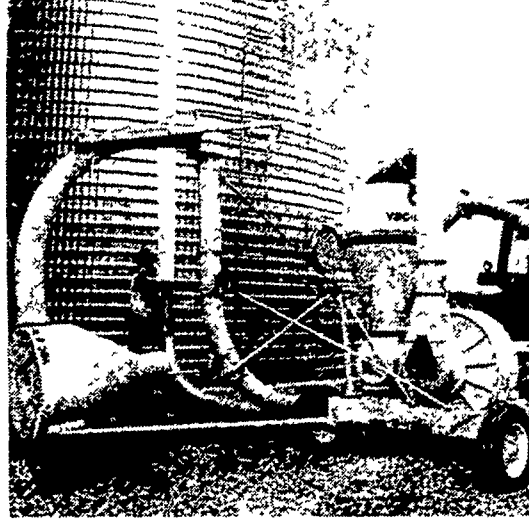

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