DEPARTMENT of the INTERIOR

FISH AND WILDLIFE SERVICE

news release

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BIRD REPELLENT DEVELOPED FOR USE ON FRUIT CROPS

The Interior Department's U.S. Fish and Wildlife Service researchers have developed a bird repellent for use on sweet cherry crops that allows growers to raise cherries successfully and have birds in their orchards, too. If its use is registered with the Environmental Protection Agency, and scientists think it will be, it would be the first time a chemical has been approved for protection of fruit from bird damage. Its use on other crops also looks promising.

The chemical, methiocarb, is a short-lived carbamate that breaks down rapidly in sunlight. The compound is a potent emetic, and when birds eat a few cherries they soon learn to associate its taste with its effects. The effect is temporary, however, and birds recover completely. In 10 years of field testing at practical repellent use levels, no birds have been found whose death was attributed to methiocarb. No chronic effects have been observed and reproduction is normal. The treatment appears to work on every major species of bird which attacks orchards.

Nationwide, over $70 million worth of sweet cherries are grown annually and orchards are easy targets for birds which can and do inflict considerable damage on the ripening fruit. Damage in some orchards is presently kept in check by scaring methods--gunfire, gas-powered exploders,

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use of shell crackers, broadcasting recorded distress and alarm calls of birds, or by trapping if starlings are causing the damage. However, in many cases, these methods require more time and effort than a grower can devote to abate damage and local residents sometimes complain about the noise.

In the most recent tests conducted by biologists from the Fish and Wildlife Service's Denver Wildlife Research Center, methiocarb was sprayed on sweet cherry orchards in California and Washington. In each State six orchards with early maturing varieties--highly susceptible to bird damage--were selected for treatment and six were left untreated. Methiocarb provided protection in each State. In California untreated orchards received 3.2 times the amount of damage to fruit as the treated orchards, and in Washington untreated orchards had 7.5 times as much. Bird counts supported the damage findings. Untreated orchards had about twice as many birds as treated orchards in California and three times as many in Washington. In descending order of populations, robins, waxwings, and house finches were most common in California orchards and house finches, robins, and starlings in Washington.

Fish and Wildlife Service biologists believe that data from their experiments will lead to a bird repellency label for methiocarb on sweet cherries and probably will be the beginning of a series of registrations for other fruit crops. Each use of a chemical on fruit crops must be registered with EPA as required by the Federal Insecticide, Fungicide, and Rodenticide Act, as amended.

Methiocarb has been used for several years as a snail and slug bait on flowers and shrubs, but prior to this year it was not registered for use on food crops. Experiments conducted by Service biologists over the last several years led to a registration of methiocarb this spring for use as a corn seed protectant against blackbirds. In many Eastern and Midwestern States blackbirds cause heavy damage to newly planted cornfields by eating the seeds shortly after they sprout. Methiocarb seems to be an effective solution to this problem, too. Also this spring, methiocarb was registered for use as an insecticide on cherry and peach crops with a distinctly high permissible residue tolerance of 25 parts per million on cherries and 15 parts per million on peaches.

Initial data from other experiments conducted by Fish and Wildlife Service biologists show that methiocarb also looks promising as a bird repellent on blueberries, grapes, grain sorghum, and sprouting rice.

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