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Pine voles have always been a problem in a few orchards in Eastern New York. In the past the vole population was controlled with Endrin, and damage to trees, although significant, was tolerable. From 1970 to 1972 more and more complaints were heard from growers concerning Pine vole damage to apple trees. Apparently as vole populations increased and damage became more serious, the word spread among growers and an awareness within the fruit growing community concerning the pine vole problem was generated. It is interesting to note that during this period when pine voles population seem to increase, Endrin was placed on the New York State Restricted use list, and the use of lead arsenic, a pesticide that seems to be toxic to these pests, was terminated.

Generally speaking the range of pine voles in Eastern New York is limited to the Hudson Valley which includes about 18,000 acres of orchard land. Apparently the winter months are too cold for vole survival in areas north of the Hudson Valley which is at the southern limits of the Eastern New York fruit belt.

It is very difficult to estimate the number of acres that are actually infested by pine voles. A recent survey by Karen Pearson, who will be speaking here today gave us the best handle on the problem we have had to date. Her survey showed that 37% of an estimated 4410 acres of apples that were included in her work are infested with pine voles in Ulster County, the major fruit County in Eastern New York. This survey included about 1/3 of the fruit acreage in this County.

The impact of this damage due to lost revenue from reduced fruit yield, lower fruit quality plus the added expenses included in replanting or repairing damaged trees and the cost of control is tremendous. Mrs. Pearson, I believe, will also be, discussing in more detail these cost figures.

In the Hudson Valley we do have a serious, a very serious, pine vole control problem and it is costing the industry a substantial amount of money. What makes the problem so much more serious than other pest control problems is that we do not have a really effective, practical, economical control practice to use in infested orchards. That is, we can not be certain that if our current recommendations are followed, which are costly and require alot of capable manpower, that all the pine voles will be eliminated and that no damage will result. This fact is very evident in orchards that we have been called to inspect within recent days.

Our current control recommendation include ground sprays with Rozol (Chlorophacinone) and hand baiting with either Rozol Pellets or Ramick Brown Pellets (Diphacinone). In the case of hand baiting we recommend establishing baiting stations and baiting at least two times with 20-40 days between applications. Control following these recommendations varies considerably due to numerous factors of which some we understand and others we do not.

It would seem that an effective, economical ground spray should be the immediate goal of our research efforts. In the future more exotic biological methods might be sort.

Whatever the ultimate control method is, every effort should be made now to provide a suitable tool for growers to use to stop the feeding and girdling of apple trees by pine voles, the most serious orchard pest in the Hudson Valley.