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Current and Future Status of Rodenticides and Predacides

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I appreciate the opportunity to convey the current and future status of rodenticides and predacides at this workshop. According to the computer, the Agency has 2,888 products classified as vertebrate control agents. The Federal Insecticide, Fungicide, and Rodenticide Act tends to clump all vertebrate pesticides as rodenticides. This includes fish toxicants such as TFM; bird toxicants and repellents such as Starlicide and Avitrol; dog repellents such as lemongrass oil; bat toxicants and repellents such as naphthalene; commensal rodent toxicants such as warfarin, diphacinone, bromadiolone, brodifacoum, and red squill; field use rodenticides for many species (e.g., prairie dogs, ground squirrels) using pesticides such as 1080, strychnine, zinc phosphide; predacides such as 1080 and sodium cyanide; and animal browsing repellents such as thiram and putrescent whole egg solids.

I will not attempt to list all the currently registered vertebrate toxicants as Ray Matheny accomplished this task in 1980 at the Ninth Vertebrate Pest Conference in Fresno, California. The only major changes to Ray Matheny's list are the deletion of DDT as a bat toxicant (voluntarily cancelled by the Centers for Disease Control in March 1967), and the addition of Bromathalin, alphachlorohydrin, bromadiolone, brodifacoum and cholecalciferol.

The status of Fumarin is uncertain at this time as the only manufacturer of technical Fumarin has declined to support the registration with the necessary generic data. Therefore, the generic data requirements will be the responsibility of the registrants of end-use products.

Approximately 200 of the Warfarin/Prolin registrants successfully satisfied the data call-in issued in October of 1981. At this writing there are two registrants who have satisfied the generic data requirements for Warfarin, and six more companies have repackaged these products.

In the next fiscal year there are no Registration Standards scheduled primarily for vertebrate pesticides. However, there are two Standards that have been issued recently that have some vertebrate claims on the label (Mesurol and Lindane).

PREDACIDES

At the present time the Agency has only one active experimental use permit (EUP) for a predacide. This is a 1080-treated single dose bait for the control of the Arctic Fox on Kiska Island, Alaska. The EUP allows for up to 50,000 1080-treated meat baits to be broadcast on the outer perimeter of the 69,000 acre island during the winter, when the fox is stressed for food. The artificially introduced fox is a predator of the Aleutian Canada Goose and has completely eradicated all of the geese from the Island. The Department of the Interior felt it could not reintroduce the goose until the fox was completely eliminated from the Island. The experiment apparently was a success, as during the January 1987 census there were no foxes detected. The EUP allowed for an additional 50,000 1080 baits to be applied if any foxes had been detected. When the EUP was proposed by Interior it was their expressed intention to use the information gleaned from this experiment to support a section 3 application for registration of a 1080 bait to control the Arctic fox on more than 30 other islands in the Aleutian chain.

The EUP for single dose 1080 baits for coyotes that prey on livestock has expired. A final report is due in May 1987.

The agency has three pending "me-too" registration applications for the Livestock Protection Collar (Montana Department of Livestock, Wyoming Department of Agriculture, and Rancher's Supply of Alpine, Texas). The Wyoming and Montana applications are pending completion of final administrative details. Rancher's Supply requires revised labels and a monitoring plan.

The administrative Law Judge has not issued a decision on the use of the M-44 on National Wildlife Refuges to protect endangered species. Since there was a restriction placed by an Administrative Law Judge against the use of M-44's on National Wildlife Refuges, a Subpart D hearing was required to modify that order. When the Judge makes a Recommended Decision, the final decision has to be made by the Administrator. Two State Conservation Departments have also expressed interest in using the M-44 to control coyotes that prey on game species. This use will also require a Subpart D hearing.

The Agency has pending applications for registration from the Montana Department of Livestock and the Wyoming Department of Agriculture for labels for strychnine-treated eggs to control rabid skunks. Since this is a cancelled use for strychnine, a Subpart D hearing was required.

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Before the Administrator will reconsider a cancellation order he must determine that (1) the applicant has submitted substantial new evidence that may materially affect the cancellation order which was not available to the Administrator at the time of cancellation, and (2) such evidence could not, through the exercise of due diligence, have been discovered by the parties to the cancellation or suspension proceeding prior to the issuance of the final order. The Administrator determined that Wyoming and Montana did submit substantial new evidence and hearings were held in Billings, Montana and Washington, DC. A decision has not yet been reached in that case.

Montana and Wyoming have also committed themselves to supply toxicology and wildlife safety data to the Agency to support their applications for registration.

FIELD USE RODENTICIDES

It is my perception that the people attending this workshop are very interested in the data call-ins on zinc phosphide, 1080, and strychnine, and I will quickly outline the status of these pesticides.

In June 1982, the Agency issued the Zinc Phosphide Registration Standard which also included a data call-in. In September 1984, the Agency suspended most of the section 3 registrations, including all those with prairie dog claims, for failure to satisfy the data requirements. It is important to note that at this time the Agency had suspended the use of strychnine for prairie dog control. Therefore, only Colorado had a vertebrate pesticide (1080) for prairie dog control. Through the administrative hearing process, the Agency lifted the zinc phosphide suspensions of products with "prairie dog use" only claims. Since that time many of the zinc phosphide end-use products have successfully completed all the data requirements and have been reregistered.

However, none of the technical zinc phosphide manufacturers have satisfied all the data requirements and are subject to suspension. The main problem has been the whole body residue test and acute toxicity to freshwater fish.

1080

In November 1985, the Agency issued a call-in of data for 1080 for all intrastate products and the one Oregon special local need product. California responded with 36 applications for registration and Colorado with two. The county of Klamath Falls was not required to submit a section 3 application but was required to commit to supplying the data. Klamath Falls County did agree to supply the data and submitted revised labels. Nevada declined to respond, and its intrastate products were administratively withdrawn.

In December 1986, both California and Colorado submitted data to support their pending registrations. At this writing the data are being reviewed, and a decision is pending completion of this data review.

STRYCHNINE

In October 1983, the agency issued notice that it was going to cancel many uses of strychnine, including Microtus and all species of prairie dogs. This notice (FR Vol. 48, No. 203) was mailed to all strychnine registrants and required many label modifications and served notice that ground squirrel data would be called in.

Several registrants and other persons felt they were adversely affected by the cancellation notice and requested a hearing. After a long protracted negotiated settlement, the Agency revised the prairie dog and Microtus cancellation. A notice of the revised cancellation notice and required label modifications was published in the Federal Register on March 4, 1987 (FR Vol. 52, No. 42). The Agency will mail a copy of this notice to all strychnine registrants in the near future. At this time the Agency is being sued by the Defenders of Wildlife, et al., to cancel all uses of strychnine. The major reason being offered for the lawsuit is that the Agency is not carefully following the mandates of the Endangered Species Act.

The Agency called in the strychnine wildlife safety-efficacy data in August 1984 and issued a general data call-in for all strychnine products in October 1986. In addition to requiring the general product chemistry, residue chemistry, environmental fate, and toxicology, the Agency requested considerable efficacy and wildlife safety data. It is hoped that much of the strychnine data being generated to support the registration of the pending applications for strychnine-treated eggs to control rabid skunks will be useful for some of the generic strychnine data. This is also dependent on whether the owners of these data will allow its use by other registrants.

As for the future, there are several new chemicals pending with the Agency which are slated for rodent control. While most of these new rodenticides are being proposed for commensal rodents and other vertebrate pests for use in and around homes, it is expected that they will eventually be used for field rodents. I cannot elaborate on the exact nature of these new chemicals as they do not have patents at this time and the manufacturers are entitled to confidentiality.