

The Wyoming Mosquito

Welcome to the first issue of 1995. Please feel free to redistribute this newsletter to other parties that may be interested. Any mention of a specific control material is for educational purposes only and does not necessarily constitute a recommendation by the Wyoming Mosquito Management Association. The editors this year are Mike Brewer (University of Wyoming) and Bob Alexander (City of Sheridan). The University agrees to assist by mailing the newsletter. As such there will appear at the beginning and end of this document certain necessary University statements indicating that this is a joint effort of the WMMA and UW Cooperative Extension Service. Thanks to all the contributors and a special thanks to Krista Davis, University of Wyoming, who assisted in the composition and distribution of this newsletter. This year's editors encourage you to submit short articles. A major goal of the newsletter is to assist in communication among the members. Please send your contributions to Mike Brewer, Department of Plant, Soil, and Insect Sciences, University of Wyoming, P.O. Box 3354, Laramie, WY 82071.

This issue highlights a report of the annual meeting of the Association, information from the Attorney General's office about public notification, and several articles of past issues which may help you get ready for the "questions of the season."

Mosquito news throughout the state

1994 Annual meeting of the Wyoming Mosquito Management Association

Installation of new officers/volunteers:

At the business meeting, new officers/volunteers were installed as follows:

Officers:

Fred Lamming (President, 2 yr. term, 1995-1996)

Sollie Cadman (President-Elect, 2 yr. term, 1995-1996)

Kathy Holder (Treasurer/Secretary, 2 yr. term, 1995-1996)

Margo Spurrier (Executive Committee, Member-at-large, 2 yr. term, 1995-1996)

Volunteers:

Mike Brewer (Newsletter Co-editor, 1 yr term, 1995)

Bob Alexander (Newsletter Co-editor, 1 yr term, 1995)

Report of Treasurer Auditing Committee:

Margo Spurrier, Kathy Holder, and Ken Hoff inspected the books of Mike Willie and reported to the membership that the books were in order. The books were then transferred to Kathy Holder.

Changes to constitution:

At the business meeting, the membership voted to have a new committee member of the Executive Committee. This member will be the Member-at-large and will be elected by the membership at the same time as election of other officers. The Member-at-large will have responsibilities limited to those provided as a member of the Executive Committee.

Next year's meeting:

At the business meeting, tentative plans were made to hold next year's meeting in conjunction with the West Central Mosquito and Vector Control Association 1996 annual meeting. The tentative dates and times are February 14 and 15 in Greeley, Colorado (about a 40 minute drive from Cheyenne).

Truck rodeo for equipment calibration. Submitted by Fred Lamming, Teton County.

The aduicide truck equipment calibration is tentatively scheduled for mid-June. Once scheduled, the exact dates and times for "truck rodeos" at two locations will be provided to the membership through a separate mailing. The delay (our initial planning hoped for mid-May dates) was due to a problems in purchase of the calibration equipment. We thank Cornbelt and our Nebraska counterparts for their continued assistance in trying to get this event organized in Wyoming.

What are the requirements of those pursuing mosquito control programs within a governmental agency in regard to Section 14(b), of Chapter XXVIII, Rules of Wyoming Department of Agriculture, "Wyoming Applicator Certification"? Communicated to use by Jim Bigelow, Wyoming Department of Agriculture.

Section 14: Required Practices for Commercial Applicators and Private Applicators.

(b) Certified commercial applicators making a commercial application, shall prior to application, inform the customer of the following items:

- (i) Pesticide(s) applied
- (ii) Possible residue hazards
- (iii) Any restricted entry periods
- (iv) Any waiting periods prior to harvest
- (v) Application date(s) and time(s)
- (vi) Post-application label safety precautions
- (vii) Other applicable label requirements (e.g. posting, Worker Protection Standards)

The question as posed by Jim Bigelow to the Office of the Attorney General:

Whether political subdivisions are required to comply with Section 14(b), of Chapter XXVIII, Rules of Wyoming Department of Agriculture, "Wyoming Applicator Certification".

The response by Mary B. Guthrie, Deputy Attorney General, State of Wyoming.

You have inquired whether cities, counties and other political subdivisions are controlled by Section 14(b), which provides that "certified commercial applicators, making a commercial application, shall prior to application, inform the customer" about a variety of matters, including the pesticide to be applied and possible hazards. Up to now, the Department has taken the position that Section 14(b) is not applicable.

After reviewing the Environmental Pesticide Control Act, W.S. § 35-7-350 et seq., it is my view that even though the regulations do not expressly require political subdivisions to provide public notice that it is advisable that they do so. This is based on language in W.S. § 35-7-352 in which the purpose of the Act is set out. The salient portion of that statute is that "it is essential to the public health and welfare that they [pesticides] be regulated closely to prevent adverse effects on human life and the environment." Statutes take precedence over rules; therefore, if notifying persons that pesticides are to be applied would prevent health problems, the governmental entity should provide the appropriate notice.

This is not to say that personal notice should be given or that a lot of money needs to be spent. The affected government entities could provide notice of their intent to apply pesticides through newspapers, t.v. and radio.

University Report on Efficacy of *B.t.i.* for control of flood-water mosquito larvae. Submitted by Jack Lloyd, Rabinder Kumar, and Michael Brewer, Department of Plant, Soil and Insect Sciences, University of Wyoming.

A demonstration trial of the efficacy of *B.t.i.* (Acrobe formulation) was conducted by the University as requested by the EPA and Wyoming Department of Agriculture. Although the efficacy of *B.t.i.* is well known, it was felt that demonstration of efficacy within the habitat of an endangered species (Wyoming toad) may be of assistance in encouraging use of "toad-safe" products. This would be important information if the Wyoming toad is found in the rangeland mosquito control districts of Albany County. To date, toads have not been found, and it is very likely that a less expensive product, malathion, will continue to be used. For your information, we report the results of the efficacy trial conducted on a 300 acre flooded grass hay field in June, 1994.

Mosquito larval densities were counted pretreatment and 24, 48, and 72 hr. post treatment with Acrobe. For comparison, larval densities were taken at the same times on a adjacent and similar hay field that was not treated with product.

Formulation

Formulation: Acrobe® formulation *Bacillus thuringiensis israelensis*
1.2% a.i., 98.8% inert ingredients
1200 ITU/milligram
Product No. 24862
Lot No. 3039Y02QQ

Dilution: Equal parts of Acrobe and water
Volume of Spray: 20 fl. oz. per acre

Aerial Application

Flying Height: 30 to 40 ft.
Boom Width: 42 ft.
Nozzle Size: No. 6 disc, Delvin Raindrop, 46 flow plate.

Plots

Treated Plot

Plot size: 230 Acres
Transects: 4
Dip samples/transect: 50 at 1 meter intervals
Water temperature (treatment day): 11° C min, 24° C max

Untreated Plot

Four transects also sampled in nearby, untreated waters.

Mosquito species in Treated Plot

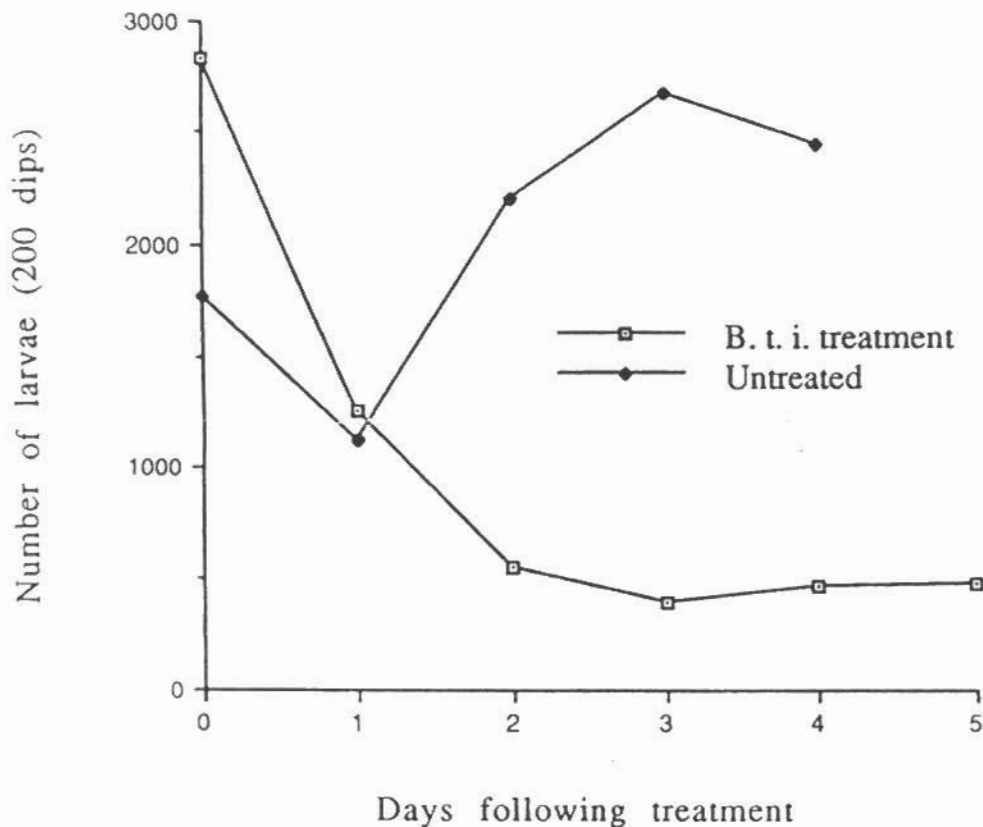
83% Aedes dorsalis

17% Aedes melanimon

Efficacy

Based on pre-treatment mosquito counts of approximately 14 larvae per dip, percent control of mosquito larvae with Acrobe B.t.i. was between 83 and 86 percent 3 and 5 days following treatment.

Efficacy of Acrobe Formulation of B. t. i. against Larval Aedes 1994



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