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to

POSTAGE AND FEES PAID
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 AGR 101



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BULK THIRD-CLASS

Table 2. Number of eggs laid in oviposition deterrent test using medium as an attractant.

Test No.	Aged Medium With Lime on Top	Aged Medium With Lime Mixed In	Aged Medium Control
1	0	0	90
2	0	0	123
3	0	0	183
4	0	0	375
5	0*	0*	626
6	0	0	364
7	0	0	375
8	0	0	529
9	0	0	226
10	0	0	39
11	0	0	133
12	0	0	234
13	0	0	111
14	0	0	109
15	0	0	583
16	0	0*	58
17	0	0	107

*Larvae present from milk feeder.

to milk contamination by the insecticide or its by-products. It is apparent that restrictions will be applied to more chemicals in the future. Some other chemical means for control will become unacceptable due to resistance developed by the fly.

Larvicidal treatment by lime would be unlikely to cause flies to develop resistance since it is more an abroding physical action rather than chemical action. Results of the oviposition tests indicate that good management will be required to make this method of control practical. The house fly female will leave the preferred egg laying area with lime on it and lay her eggs in a "second best" place. The operator will then be forced to keep secondary breeding sites at a minimum. Preventive control, where eggs are not laid or where the immature forms do not become adults, is doubly effective for the house fly where the adult is the pest and the vector of disease. The reproductive potential of each adult female is so great that any interruption of egg laying is a form of control. The added benefit of a lower incidence of foot rot would be welcome bonus to the livestock producer.

REFERENCES CITED

1. Britton, W. E. 1936. *Conn. State Entomologist. Rev. Appl. Entomol.* Vol. 24:657.
2. Downes, W. 1935. *Recent Trial of repellents for Narcissus fly.* *Can. Entomol.* 67:23-24.
3. Kuznetsov, V. I. 1957. *The bionomics and systematic status of the species of Euzaphuss injurious to pomegranate, apple, and quince.* *Rev. Ent. U.S.S.R.* 35, pt. 1, pp. 58-71. Moscow. Taken from *Rev. Appl. Ent.* Vol. 48, Series A, pp. 224-245, 1960.
4. Schaal, G. 1924. *The bark beetle.* *Rev. Appl. Ent.* Vol. 12, Series A, p. 103 (abstract).