Another Record of Urinary Myiasis by Fannia Canicularis (L)

(Diptera: *Anthomyia,* in part).—On August 6 1953, a first year medical student of the University of British Columbia, working protem. as an orderly in New Westminster Hospital, sent in a letter of enquiry, with two maggots. In part, he said " . . . these insects were found in large numbers in a urine specimen of a five year old girl. They were found in repeated voidings but in diminishing numbers. The doctor brought in another (urine) specimen several days later but none could be found in it nor in a stool specimen . . . The doctor described the child as being very wild and uncooperative but she quieted down after treatment with terramycin".

The maggots were those of the anthomyid fly *Fannia* (*Homalomyia*) *canicularis* (L), the lesser housefly, whose larvae usually develop in human faeces and decaying vegetation, where the eggs hatch in about twenty-four hours and the larval growth is completed in six to twelve days and the pupal period occupies about nine days.

There are numerous records of the larvae of this species causing gastric and intestinal myiasis of man. The infestation generally occurs by somebody swallowing the eggs of the fly which are laid on a variety of household foods exposed to the air, and it is one of the few insects that can develop in the digestive tract. The presence of the maggots is usually indicated by nausea, vertigo and violent pains; the larvae in many cases are expelled by vomiting. If they occur in the intestine they are expelled with the faeces and their presence is indicated by diarrhoeal symptoms, abdominal pains or haemorrhage caused by the traumatic lesions of the mucous membrance of the intestine which the larvae affect (partly, after Matheson).

In addition, this species has been recorded from the human urethra of both males and females. Detwiler* (1929) reported a case of urinary myiasis caused by the larvae of this insect. The infestation in the urinary tract probably occurs by flies depositing their eggs about the anus or the external genital orifice and the tiny larvae hatching from the eggs, work their way up into the vagina and sometimes into the urethra, whence they normally are expelled after they have completed their development. Since these flies are common in warm weather the deposition of eggs may take place when a person is lying asleep on top of a bed in a naked or partly clothed condition. Usually no treatment is necessary because the larvae are expelled anyway.

It is surprising that such an infestation should occur in so young a child but if the home was unclean and the girl had not been frequently bathed, the infestation may have occurred when she was lying exposed on top of a bed.— *G. J. Spencer, University of British Columbia.*

* Detwiler, J. D. Notes on myiasis of the urinary passage caused by larvae of Fannia. 59th Ann. Rept. Ent. Soc. Ontario, 1928.57-59. 1929.

Collecting *Tabanus* Males

I have collected Tabanids for quite a number of years, but have never had the luck to find many males. This year, however, I found out that our early species *T. procyon* O.S. seems to congregate on rocks (large outcroppings of bedrock) as soon as they emerge. I took 41 males and 39 females on outcroppings of bedrock (about ½ an acre in extent) in 6 days. I was surprised that the emergence lasted that long.

It wasn't very warm—62° high the first day; several days were warmer afterwards. First of all I thought they went on the rocks to copulate (probably the real reason), but I caught only one pair in copulation. It might be that the rocks were a little warmer. There are two small springs in the near vicinity, one on each side of the rocks. I am wondering if some of our other B.C. Tabanids have the same habit.

There were cows quite near but apparently the flies didn't bother them. None of the females flew round or settled on me, so possibly they don't try for blood until after they are fertilized. Perhaps someone else can answer that.—*H. R. Foxlee, Robson, B.C.*

Tropical Rat Mites in a Domestic Sparrow's Nest

The latter part of July 1955 I received a telephone call from the local R.C.A.F. depot at Sea Island regarding a plague of mites in a hangar, and requested that specimens be sent in for identification. The messenger left some specimens in a bottle somewhere outside our building where they were found six weeks later and handed to me. I cleared and mounted them and found that the mites were *Bdellonyssus bacoti* (Hirst), the tropical rat mite which the Station Medical Officer told me were found to have originated in a sparrow's nest.

A bird's nest is an unusual place for rat mites so it is likely that an infested nest was abandoned by the rats and the fabric used by the sparrows: upon the removal of the nest, the mites soon disappeared.
—*G. J. Spencer*, University of British Columbia.*

* Spencer, G. J. The menace of rat parasites in Vancouver in 1936. Proc. B.C. Ent. Soc. 33: 44, 45. 1937.

Control of the Cabbage Maggot, *Hylemya Brassicae* (Bouché), in Rutabagas - 1954*

In evaluating the treatments the categories of injury were as follows:

Clean—no maggot marks visible
Light—superficial maggot injury
Moderate—marketable for second grade after trimming
Severe—unmarketable

Exp. No. 54-17. Furrow, Band and Spray Methods. Five replicates in randomized blocks. Planting date, July 15. Band treatments applied July 12. Furrow treatment applied July 15. Second spray treatment applied August 31. The rutabagas were harvested October 29, appraisal being based on 40 roots per plot, 200 per treatment.

Insecticide	Method of Application	Amount Actual/acre (pounds)	Total Infestation Index	Total Damage Index	Damage Reduction (per cent)
Check			794	794	—
Heptachlor dust 2.5	Band	5.08	125	16	97.8
Heptachlor dust 2.5	Furrow	2.54	141	38	95.2
Aldrin dust 2.5	Band	5.08	154	38	95.2
Aldrin dust 2.5	Furrow	2.54	134	46	94.2
Aldrin emulsion	Surface	4.15	168	46	94.2
Heptachlor emulsion	Surface	2.18	149	50	93.7
Isodrin dust 2.0	Furrow	2.54	337	234	70.5

An infestation index was determined by placing penalties on infested plants as follows: Clean—0; light—1; moderate—2; severe—4; for the damage index only the two latter categories were used. Maximum damage index total 800.

The results confirm earlier findings of co-operative work carried out in British Columbia and Western Washington that effective control of root maggots attacking rutabagas is possible with heptachlor and aldrin under a wide range of conditions provided these chemicals are present in adequate amounts throughout the time protection from infestation is needed.

Angus J. Howitt,
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* The methods of application and evaluation are those described in detail and discussed by King, K. M. and A. R. Forbes, Jour. Econ. Ent. 47(4): 607-615, 1954. The work supplements that of King, K. M., A. R. Forbes, D. G. Finlayson, H. G. Fulton, and A. J. Howitt, Jour. Econ. Ent. 48(4):470-473, 1955; and Forbes, A. R. and K. M King, Jour. Econ. Ent. (in press).