In 1967 the mosquito population at Swift Current was only about one-tenth that of 1966 (unpublished data). The *A. melanimon* taken in the Swift Current trap were: one male on July 19, one female on August 22, one female on August 24 and one male on August 28. A total of 70 females were collected by two Communicable Disease Center light traps (set up with dry ice) and by hand aspirator from the P.F.R.A. Station at Maple Creek on August 24. On the same day, six resting females were aspirated from two highway culverts about 9 miles northeast of Swift Current. Hence, in spite of generally low mosquito population levels in 1967, *A. melanimon* was still present in southwestern Saskatchewan.

The location of the Saskatchewan collection sites, in relation to those in Montana and Alberta, are indicated in Figure 1.

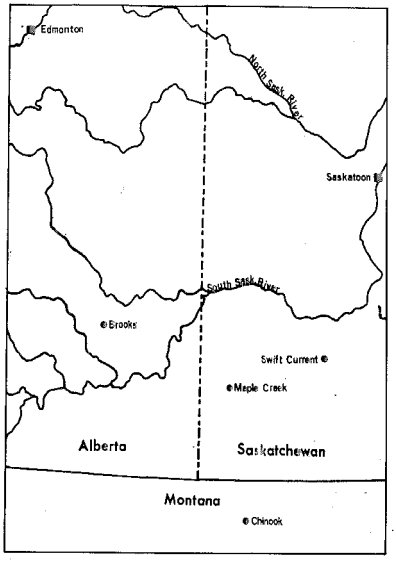

FIG. 1.—Locality records (circular dots) for *Aedes melanimon* in Alberta, Saskatchewan and northern Montana.

During the summers of 1962–1967, light trap and miscellaneous collections of adult mosquitoes were made throughout the agricultural area of Saskatchewan, but *A. melanimon* was found only in the southwest corner of the province and between mid-July and the end of August. Although *A. melanimon* was not found in Saskatchewan until 1965, the species might have been present but at too low a population level to be sampled by the routine light trap at Swift Current. In 1966 the mosquito population at Swift Current was the largest recorded in five years and that of 1965 the second largest; on the other hand, the population of 1967 was the smallest (unpublished data). Further collections should tell more about *A. melanimon* with respect to its range, relative abundance and whether it is a permanent or sporadic resident of this province.

ACKNOWLEDGMENTS. This paper has been prepared with the generous help and cooperation of Dr. J. McLintock, Dr. J. Rempel and the staff of the western encephalitis project. We also thank Mr. D. Baillie and Mr. W. R. Hedstrom of the Swift Current Research Station for operating the light trap.

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COITUS BY *Aedes aegypti* MALES WITH UNROTATED AND PARTIALLY ROTATED TERMINALIA [1]

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It is currently believed that, if the terminalium of an adult male of *Aedes aegypti* either fails to undergo any rotation or rotates less than the normal 180°, the male is unable to copulate when his genitalia are placed in contact with those of the female at an appropriate angle with the forced copulation technique of McDaniel and Horsfall (1957), in spite of the fact that such

[1] Supported by N.I.H. Grant GM 6021. Scientific Article Number A 1441, contribution number 4068 of the Maryland Agricultural Experiment Station.

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males are known to contain sperm in their seminal vesicles and have normal accessory glands (Jones, 1961).

In the course of studies on the sexual responses of *aegypti* males, we found a 48-hour-old male whose terminalium had failed to undergo any rotation. We offered him in an inverted position to a normal virgin female, and he copulated with her for 16 seconds. When the female was dissected, it was found that she had not been inseminated. Twelve hours later we again offered this same male (whose terminalium still remained unrotated) to another virgin female. This time he copulated for 11 seconds; the female was inseminated and spermathecal filling had occurred.

A second 48-hour-old male was found whose terminalium had undergone a 90° rotation, and he was presented to a virgin female of the same age at an angle allowing for effective genital contact. After 45 seconds of contact the male copulated with the female for 80 seconds. When the female was dissected, two of her spermathecae contained spermatozoa.

These observations clearly show that *aegypti* males with unrotated or partially rotated terminalia can copulate and inseminate females, provided they are presented to them at an appropriate angle. The sexual responses of males with unrotated and partially rotated terminalia deserve detailed study, even though it seems quite certain that such males in nature would never be able to circumvent the dilemma of copulating in their normally inverted stance with non-inverted or partially inverted genitalia.

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