

9. *Simulium congarinarum* (Dyar & Shannon)
10. *Simulium decorum* Walker
11. *Simulium gouldingi* Stone
12. *Simulium jenningsi* Malloch
13. *Simulium parnasum* Malloch
14. *Simulium tuberosum* (Lundström)
15. *Simulium verecundum* Stone & Jamnback
16. *Simulium vittatum* Zetterstedt

References Cited

CRANS, W. J. and McCUISTON, L. G. 1970. The current status of blackfly investigations in New Jersey. Proc. 57th Ann. Mtg. N. J. Mosq. Ext. Assoc. (In press).

DIMOND, J. B. and HART, W. G. 1953. Notes on the blackflies (Simuliidae) of Rhode Island. Mosq. News 13(4):238-242.

FROST, S. W. 1949. The Simuliidae of Pennsylvania (Dipt.). Ent. News 60:129-131.

STONE, A. and JAMNBACK, H. A. 1955. The Blackflies of New York State. (Diptera-Simuliidae). Bull. N. Y. State Mus. 349:1-144.

THE OCCURRENCE OF *Aedes flavescens* (MÜLLER), *Psorophora cyanescens* (COQUILLET) AND *Culex erraticus* (DYAR AND KNAB) IN NEW JERSEY.¹

WAYNE J. CRANS

The most recent checklist of New Jersey mosquitoes (Crans, 1967) lists fifty-two species known to occur in the State. Since the time of that publication, three additional mosquito species representing three different genera have been collected and identified by various New Jersey investigators. The details of these initial records are included in this report.

Aedes flavescens (Müller). *Aedes flavescens* is recognized as a northern mosquito species with a single generation each year. Although the adults appear very early in the spring, the females often survive until late in the season (Carpenter and LaCasse, 1955). In all probability, New Jersey now represents the southernmost boundary for this species in the northeast.

A single adult female *Aedes flavescens* was taken in a light trap near Rutherford, New Jersey on 3 June 1968 by Mr. Herman Ehrenberg of the Bergen County Mosquito Extermination Commission. The specimen was identified by Mr. Ehrenberg and forwarded to the author at that time. One additional specimen has since been taken from a neighboring area.

Psorophora cyanescens (Coquillett). *Psorophora cyanescens* is a fairly common mosquito of the southeastern United States, recently reported as far north as Delaware (Lake et al., 1967). It would now appear that southern New Jersey represents the northernmost boundary for this species on the Atlantic seaboard.

Several adult female *Psorophora cyanescens* were taken in a sweep collection by the author near Woodbine, New Jersey on 11 August 1967 and submitted alive to the New Jersey State Department of Health with numerous other species for virus investigations. Mr. George Bordash of the State Department of Health recognized and identified the first record of this species from that collection. Since that time, numerous adults have been taken in light traps from Cape May, Cumberland, Salem and Ocean Counties and it would appear that the species is now well established in the southern portion of the State.

Culex erraticus (Dyar & Knab). *Culex erraticus* is known to occur along the Atlantic coast as far north as New York State (Barr, 1958). Prior to this report, however, the species had not been recorded in New Jersey.

The first record of this species in New Jersey was taken on 12 August 1969 by Dr. Lyle Haggman of the Department of Entomology and Economic Zoology at Rutgers University and Mr. Boyd Lafferty of the Cape May County Mosquito Extermination Commission from a resting box near Dennisville. Mrs. Linda G. McCuiston made the original identification at Rutgers. Simultaneously, Mr. Walter Gusciara and Mr. George Bordash of the New Jersey State Department of Health collected and identified several specimens from the same area. Additional collections have revealed the species to occur infrequently in the southernmost portion of New Jersey.

The addition of these three mosquito species now brings the New Jersey state list to fifty-five. Each of the original collections herein mentioned were graciously received and confirmed by Dr. Alan Stone of the United States National Museum.

References Cited

BARR, A. R. 1958. The Mosquitoes of Minnesota. Univ. of Minn. Ag. Exp. Sta. Tech. Bull. 228.

CARPENTER, S. J. and LACASSE, W. J. 1955. Mosquitoes of North America. University of California Press, Berkeley and Los Angeles.

CRANS, W. J. 1967. *Anopheles earlei* Vargas, an addition to the checklist of New Jersey mosquitoes. Mosq. News 27(3):430.

LAKE, R. W., MURPHEY, F. J. and STACHECKI, C. J. 1968. The occurrence of *Psorophora cyanescens* (Coquillett), *P. horrida* (Dyar & Knab) and *P. varipes* (Coquillett) in Delaware. Mosq. News 28(3):470.

¹Paper of the Journal Series, Department of Entomology and Economic Zoology, Rutgers-The State University of New Jersey, New Brunswick, N. J.