CARPENTER, S. J., and LACASSE, W. J. 1955. Mosquitoes of North America (North of Mexico). Univ. of Calif. Press, Berkeley and Los Angeles. 360 pages, Illus.

, MIDDLEKAUF, W. W., and CHAMBER-LAIN, R. W. 1946. The Mosquitoes of the Southern United States East of Oklahoma and Texas. The American Midland Naturalist, Monograph No. 3. The University Press, Notre Dame, Ind. 292 pages.

Horsfall, W. R. 1955. Mosquitoes, Their

Bionomics and Relation to Disease. The Ronald Press, New York, 723 pages.

KING, W. V., BRADLEY, G. H., SMITH. CAR-ROLL, N., and McDuffie, W. C. 1960. A Handbook of the Mosquitoes of the Southeastern United States. U. S. Department of Agriculture Handbook No. 173., Washington, D.C. 188 pages.

TINKER, M. E., and STOJANOVICH, C. J. 1962. Identification of the pupae of receptacle-breeding mosquitoes. Ann. Ent. Soc. Amer. 55:577-582.

OCCURRENCE OF Culiseta melanura (Coquillett)
IN Illinois 1

R. E. SIVERLY 2

Culiseta melanura (Coq.) has been reported from Kentucky, Minnesota, Wisconsin, (Quinby et al., 1944, Sandve, 1946, Dickinson, 1944), and from Indiana (Siverly, 1958). Ross and

Horsfall (1965) list *C. melanura* as occurring in neighboring states but unreported from Illinois at the time of their publication.

C. melanura larvae were collected at four differ-



Fig. 1.—Culiseta melanura production site in Massac County, Illinois.

ent sites in Johnson and Massac counties in southern Illinois during July and August of 1965. Many larvae, occasional egg rafts, and a few pupae were taken from water-filled recesses at ground level in water tupelo, bald cypress, and

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Fig. 2.—Culiseta melanura production site in Johnson County, Illinois.

oak trees. In some instances, immature stages were taken from trapped water in bases of living trees; in other cases collections were made from hollow stumps (Figures 1, 2). In all instances, larvae utilized a type habitat described by Siverly and Schoof (1962), characteristically a dark cavity lined with roots and soil. Larvae observed to be associated with C. melanura included Culex

territans Walker, Culex peccator Dyar & Knab, and Toxorhynchites rutilis septentrionalis Dyar and Knab.

No adults were collected from light traps or resting boxes placed in proximity to larval collecting sites during the study interval, and natural resting shelters yielded only a few adult specimens. However, swamp areas in both Johnson and Massac counties are quite extensive. These areas probably harbor a much higher population of C. melanura than indicated by adult collections.

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References

DICKINSON, W. E. 1944. The mosquitoes of Wisconsin. Milwaukee Pub. Mus. Bull. 8:269-

QUINEY, G. E., SERFLING, R. E., and NEEL, J. K. 1944. Distribution and prevalence of the mosquitoes of Kentucky. Jour. Econ. Ent. 37: 547-550.

Ross, Herbert H. and Horsfall, William R. 1965. Illinois Natural History Survey Biological Notes No. 52. 50p.

Sandre, J. R. 1946. Report of St. Croix State Park mosquito control project. Minn. Dept. Health. 220.

SIVERLY, R. E. 1958. Occurrence of *Culiseta melanura* in Indiana. Proc. of the Ind. Acad. of Science Vol. 67, 1957, p. 137. (Abstract).

SIVERLY, R. E., and Schoof, H. F. 1962. Biology of *Culiseta melanura* (Coquillett) in southeast Georgia. Mosquito News 22(3):274–282.

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