

SCIENTIFIC NOTE

A CHECKLIST OF THE MOSQUITOES OF CONNECTICUT WITH NEW STATE RECORDS

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ABSTRACT. Distribution and collection records for 3 previously unrecognized species, *Anopheles barberi*, *Culex erraticus*, and *Ochlerotatus diaantaeus*, are included herein. This brings to 48 the number of recognized species from 11 genera in Connecticut. Also, an updated checklist of the mosquitoes of Connecticut that reflects the recent elevation of the subgenus *Ochlerotatus* to generic rank is presented.

KEY WORDS Mosquitoes, Culicidae, Connecticut, checklist, distribution, new records, *Anopheles barberi*, *Culex erraticus*, *Ochlerotatus diaantaeus*

In 1904, Britton and Viereck published the 1st account of the mosquitoes of Connecticut (Britton and Viereck 1904), in which they provided brief descriptions and diagnostic keys to 21 species represented in 4 genera (*Aedes* Meigen, *Anopheles* Meigen, *Culex* L., and *Psorophora* Robineau-Desvoidy). Forty-one years later, Matheson (1945) published a monograph on the Diptera of Connecticut in which he included descriptions, keys, and local distribution records for 33 species among 8 genera that included *Culiseta* Felt, *Mansonia* Blanchard, *Orthopodomyia* Theobald, and *Wyeomyia* Theobald. The list of recognized species in the state was reported to be 37 by Wallis (1960), who reviewed the biology and life histories of the major pest species. In the most recent review of the geographical distribution of mosquitoes of North America, Darsie and Ward (1981) included 42 species represented in 10 genera from Connecticut. Since then, 3 additional species have been reported in the state, including *Ochlerotatus communis* (De Geer), *Ochlerotatus punctor* (Kirby) (Andreadis 1986), and the newly introduced exotic species, *Ochlerotatus japonicus* (Theobald) (Andreadis et al. 2001a).

With the discovery of West Nile virus in 1999 (Anderson et al. 1999), mosquito and arbovirus surveillance have been expanded intensively throughout the state (Andreadis et al. 2001b). This has resulted in the discovery of 3 previously unrecognized species, *Anopheles barberi* Coquillett, *Culex erraticus* (Dyar and Knab), and *Ochlerotatus diaantaeus* (Howard, Dyar, and Knab). This brings to 48 the number of recognized species among 11 genera in Connecticut. Collection and distribution records are recorded herein along with an updated checklist that reflects the recent elevation of the subgenus *Ochlerotatus* to generic rank (Reinert 2000). Identifications were made by using keys and descriptions of Carpenter and LaCasse (1955), Darsie and Ward (1981), and Means (1979, 1987). Voucher specimens have been deposited in the collection of

The Connecticut Agricultural Experiment Station, New Haven, Connecticut.

NEW STATE RECORDS

Anopheles barberi Coquillett

Fairfield County: 3 females, Sept. 19–21, Oct. 3, 2000 (CO₂-baited light trap); 3 females, June 20 (CO₂-baited light trap), July 16, Aug. 8, 2001 (gravid trap).

Hartford County: 4 females, June 27, Aug. 1, 14, Sept. 4, 2001 (gravid trap).

Litchfield County: 1 female, Aug. 30, 2001 (gravid trap).

Middlesex County: 3 females, July 2, 25, Aug. 16, 2001 (gravid trap).

New Haven County: 1 female, Sept. 19, 2000 (CO₂-baited light trap); 5 females, July 25, Aug. 1, Sept. 12, 18, 2001 (gravid trap).

New London County: 1 female, Sept. 4, 2001 (gravid trap).

Culex erraticus (Dyar and Knab)

Fairfield County: 5 females, Sept. 14 (CO₂-baited light trap), Nov. 30, 1999 (aspirator).

Ochlerotatus diaantaeus (Howard, Dyar, and Knab)

Litchfield County: 1 larva, May 1, 2000 (vernal, woodland pool).

CHECKLIST OF CONNECTICUT MOSQUITOES

Genus *Aedes* Meigen

Subgenus *Aedes* Meigen

Aedes cinereus Meigen

Subgenus *Aedimorphus* Theobald

- Aedes vexans* (Meigen)
- Genus *Anopheles* Meigen
- Subgenus *Anopheles* Meigen
- Anopheles barberi* Coquillett
Anopheles crucians Weidemann
Anopheles earlei Vargas
Anopheles punctipennis (Say)
Anopheles quadrimaculatus Say
Anopheles walkeri Theobald
- Genus *Coquillettidia* Dyar
- Subgenus *Coquillettidia* Dyar
- Coquillettidia perturbans* (Walker)
- Genus *Culex* Linnaeus
- Subgenus *Culex* Linnaeus
- Culex pipiens* Linnaeus
Culex restuans Theobald
Culex salinarius Coquillett
- Subgenus *Melanoconion* Theobald
- Culex erraticus* (Dyar and Knab)
- Subgenus *Neoculex* Dyar
- Culex territans* Walker
- Genus *Culiseta* Felt
- Subgenus *Climacura* Howard, Dyar, and Knab
- Culiseta melanura* (Coquillett)
- Subgenus *Culicella* Felt
- Culiseta minnesotae* Barr
Culiseta morsitans (Theobald)
- Subgenus *Culiseta* Felt
- Culiseta impatiens* (Walker)
Culiseta inornata (Williston)
- Genus *Ochlerotatus* Lynch Arribalzaga
- Subgenus *Finlaya* Theobald
- Ochlerotatus japonicus* (Theobald)
- Subgenus *Ochlerotatus* Lynch Arribalzaga
- Ochlerotatus abserratus* (Felt and Young)
Ochlerotatus atropalpus (Coquillett)
Ochlerotatus aurifer (Coquillett)
Ochlerotatus canadensis (Theobald)
Ochlerotatus cantator (Coquillett)
Ochlerotatus communis (De Geer)
Ochlerotatus diantaeus (Howard, Dyar, and Knab)
Ochlerotatus dorsalis (Meigen)
Ochlerotatus excrucians (Walker)
Ochlerotatus fitchii (Felt and Young)
Ochlerotatus grossbecki (Dyar and Knab)
Ochlerotatus intrudens (Dyar)
Ochlerotatus provocans (Walker)
- Ochlerotatus punctor* (Kirby)
Ochlerotatus sollicitans (Walker)
Ochlerotatus sticticus (Meigen)
Ochlerotatus stimulans (Walker)
Ochlerotatus taeniorhynchus (Weidemann)
Ochlerotatus thibaulti (Dyar and Knab)
Ochlerotatus trivittatus (Coquillett)
- Subgenus *Protomacleaya* Theobald
- Ochlerotatus hendersoni* Cockerell
Ochlerotatus triseriatus (Coquillett)
- Genus *Orthopodomyia* Theobald
- Orthopodomyia signifera* (Coquillett)
- Genus *Psorophora* Robineau-Desvoidy
- Subgenus *Janthinosoma* Lynch Arribalzaga
- Psorophora ferox* (von Humboldt)
- Subgenus *Psorophora* Robineau-Desvoidy
- Psorophora ciliata* (Fabricius)
- Genus *Toxorhynchites* Theobald
- Subgenus *Lynchiella* Lahille
- Toxorhynchites rutilus septentrionalis* (Dyar and Knab)
- Genus *Uranotaenia* Lynch Arribalzaga
- Subgenus *Uranotaenia* Lynch Arribalzaga
- Uranotaenia sapphirina* (Osten Sacken)
- Genus *Wyeomyia* Theobald
- Subgenus *Wyeomyia* Theobald
- Wyeomyia smithii* (Coquillett)

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