

*Aedes euedes* H. D. & K. - A Report of a New Record

## From Wyoming With Notes on the Species

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*Aedes euedes* was recently resurrected from synonymy with *Ae. excrucians* by Wood (1977). The species is most easily recognized in the larval stage which has the larger more widely spaced pecten teeth extending well beyond the middle of the siphon followed by siphonal tuft located at about two thirds the distance from the base of the siphon. The pecten teeth of *excrucians* end before the middle of the siphon and the siphonal tuft arises at about the middle of the siphon and is composed of much longer setae than in *euedes*. The comb scales in *euedes* are spine-like as in *excrucians* but are fewer in number (usually 15-18), with *excrucians* averaging about one third more.

Adult females of both species are very similar, but differ chiefly in the structure of the tarsal claw (Wood 1977). Wood, Dang and Ellis (1979) report a greater amount of white scaling on the mid-regions of the proboscis and first tarsomere in *euedes* than in *excrucians*. This scale character of the proboscis is useful in separating *euedes* and *excrucians* in some northern areas where their ranges overlap and where more melanistic forms of *excrucians* occur. Material of both species in my possession from Alaska can be reliably separated by this character; the proboscis of *excrucians* is almost entirely dark scaled while that of *euedes* is predominately white scales except at the base and apex. There is considerable overlap, however, in the amount of white scaling on the first tarsomere in all the material I have examined of the two species from both the United States and Canada. The same holds true for the proboscis scaling in more southern areas. In all of the *excrucians* material that I have examined from the United States and from Manitoba, the amount of white scaling is highly variable ranging from virtually absent to abundant. White scaling on the proboscis is also somewhat variable in *euedes*. I have reared females of *euedes* from Minnesota with only a few scattered white scales on this structure. Males of *euedes* and *excrucians* can be separated by structure of the hind tarsal claw and the prominent apical lobe on the terminalia of *euedes* which extends apically beyond the base of the gonostylus; in *excrucians* this lobe is smaller and does not reach the apex of the gonocoxite (Wood, Dang and Ellis 1979).

The present known distribution of *euedes* was summarized by Darsie and Ward (1981) who reported it from eight Canadian Provinces (Quebec in the east to British Columbia in the west) and from three of the United States, Alaska, Michigan and Minnesota.

On July 10, 1982, I collected *euedes* in Yellowstone National Park, Wyoming. Larvae were found along the trail to Grebe Lake in the central part of the Park. The pool was semipermanent containing *Carex* and also contained larvae of *Ae. diantaeus*, *Ae. excrucians*, *Ae. pionips*, *Chaoborus americanus* and *Mochlonyx* sp. A further examination of some previous unsorted reared material from the Park revealed some additional specimens of *euedes*. These larvae were collected in a permanent *Carex* marsh, 10 miles north of West Thumb, on June 12, 1974. Associated species were *excrucians* and *Ae. hexodontus*.

Two males and one female of *euedes* were reared from this material. These collections of *euedes* suggest that the species probably occurs throughout the montane areas in the northern Rocky Mountain states.

#### REFERENCES CITED

- Darsie, R. F., Jr. and R. A. Ward. 1981. Identification and geographical distribution of the mosquitoes of North America, north of Mexico. Suppl. 1 to Mosquito Systematics. American Mosquito Control Assoc., Fresno, Calif. 313 pp.
- Wood, D. M. 1977. Notes on the identities of some common Nearctic *Aedes* mosquitoes. Mosquito News 37:71-81.
- Wood, D. M., P. T. Dang and R. A. Ellis. 1979. The mosquitoes of Canada (Diptera: Culicidae). Series: The insects and arachnids of Canada. Part 6. Biosystematics Res. Inst., Canada Dept. Agr. Publ. 1686. 390 pp.