

NEW DISTRIBUTION RECORDS OF SPIDER WASPS (HYMENOPTERA, POMPILIDAE) FROM THE ROCKY MOUNTAIN STATES

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Published distribution records of Pompilidae suggest that the Rocky Mountain states (Colorado, Wyoming, Montana) have an attenuated fauna of spider wasps. For the most part, this is a result of the fact that until recently there had been little systematic collecting in these states. In this report, distribution records are presented for 25 species and subspecies not previously reported from these states.

The following list includes records not reported by Townes (1957) or Evans (1950, 1951) and not reported or implied in the Catalog of Hymenoptera north of Mexico (Krombein et al. 1979). Arrangement follows the catalog. Specimens are in the collections of Colorado State University, Fort Collins (CSU), or the University of Colorado, Boulder (UC), except as otherwise noted.

Cryptocheilus hesperus (Banks). CO: 1 ♀, Otero Co., Higbee, 14 June 1966 (pit trap, J. Brookhart) [UC]; WY: 1 ♀, Fremont Co., 3 mi E Moneta, 7 July 1963 (B. Vogel) [UC]. Not previously reported east of Utah.

Priocnemis minorata Banks. CO: 1 ♀, Larimer Co., 13 mi W Livermore, 12 June 1987 (H. E. Evans) [CSU]. Previously reported from forests east of the 100th meridian.

Priocnemis kevinii Wasbauer. CO: 2 ♂♂, Larimer Co., 13 mi W Livermore, July, Sept 1983, 1987 (malaise trap, H. E. Evans) [CSU]. Described from Idaho, with a paratype from Michigan, by Wasbauer (1986); identification confirmed by Wasbauer.

Priocnemis scitula relictata Banks. CO: 1 ♀, 1 ♂, Larimer Co., on alfalfa, 9 Aug 1985 (F. Peairs) [CSU]; 1 ♂, Larimer Co., Fort Collins, 4 July 1982 (W. J. Pulawski) [Calif. Acad. Sci.]. Not previously reported west of Wisconsin.

Calicurgus hyalinatus excoctus Townes. CO: 1 ♀, Larimer Co., 13 mi W Livermore, 23 July 1985 (H. E. Evans) [CSU]; 3 ♀♀, Larimer Co., Hewlett Gulch, Aug–Sept 1978 (H. E. Evans) [CSU]. Previously recorded only from New Mexico and Arizona.

Dipogon lignicolus Evans. CO: 5 ♀♀, 2 ♂♂, Larimer Co., 13 mi W Livermore, April 1986, 1989 (reared from trap nests containing fragments of prey, salticid spiders, probably *Phidippus* species; H. E. Evans) [Mus. Comp. Zool., CSU]. Described by Evans, 1987.

Dipogon sericeus Banks. CO: 4 ♀♀, 1 ♂, Larimer Co., Hewlett Gulch, Aug, Sept 1987 (malaise trap, H. E. Evans) [CSU]. Previously reported only from Oregon and California.

Dipogon iracundus Townes. CO: 1 ♀, Boulder Co., Nederland, 25 Aug 1961 (U. N. Lanham) [UC]. Previously recorded only from Arizona.

Auplopus mellipes variitarsatus (Dalla Torre). CO: 2 ♀♀, Larimer Co., Fort Collins, 20 June 1986, 15 July 1987 (black light trap, W. Cranshaw) [CSU]. Widely distributed in northeastern states.

Ageniella rufescens (Banks). CO: 1 ♀, Boulder Co., Hygiene (J. Polhemus) [UC]; 1 ♀, Larimer Co., 20 mi N Fort Collins, 30 Aug 1974 (H. E. Evans) [CSU]. WY: 2 ♀♀, Platte Co., Glendo, 22 Aug 1957 (D. R. Tyndall) [Univ. Wyoming]. Previously reported from Kansas, Texas, New Mexico, and Arizona.

Aporus luxus (Banks). CO: 6 ♂♂, Montezuma Co., Arriola, Sept 1975 (malaise trap, T. Marquardt) [CSU]. A West Coast species; also reported from Utah and New Mexico.

Psorthaspis nigriceps (Banks). CO: 1 ♀, Montrose Co., Uravan, 28 Aug 1947 (H. G. Rodeck) [UC]. Previously known only from

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New Mexico, Arizona, and Utah.

Evagetes c. crassicornis (Shuckard). CO: 1 ♀, Larimer Co., Fort Collins, 21 May 1982 (H. E. Evans) [CSU]; 1 ♀, Larimer Co., 13 mi W Livermore, 20 July 1989 (H. E. Evans) [CSU]. WY: 1 ♀, Platte Co., Wheatland, 24 Aug 1974 [Univ. Wyoming]. A Canadian Zone subspecies. *E. crassicornis consimilis* (Banks) is widely distributed in Colorado and Wyoming.

Sericopompilus neotropicalis (Cameron). CO: 1 ♀, Otero Co., Hawley, 8 Aug 1978 (H. E. Evans) [CSU]. Occurs in Kansas but otherwise not previously reported north of Texas and Arizona.

Episyrus quinquenotatus hurdi Evans. CO: 1 ♀, 25 ♂♂, Alamosa Co., San Luis Lake, 19 Aug 1981 (H. E. Evans) [CSU]; 2 ♀♀, Mesa Co., Fruita, 21 May 1963 (B. Vogel) [UC]. Not previously reported east of Utah.

Tachypompilus u. unicolor (Banks). CO: 1 ♂, Larimer Co., 20 mi N Fort Collins, 14 July 1975 (H. E. Evans) [CSU]. I have also seen 1 ♀ from Badlands National Monument, SD, 24 July 1953 (F. Rindge) [Amer. Mus. Nat. Hist.]. Previously reported from the West Coast states east to Utah, Wyoming, and Idaho.

Tachypompilus unicolor cerinus Evans. CO: 1 ♀, 1 ♂, Bent Co., Hasty, 1 July 1982 (W. J. Pulawski) [Calif. Acad. Sci.]; 3 ♀♀, 3 ♂♂, Bent Co., 23 mi S Las Animas, 10 Aug 1986 (H. E. Evans) [CSU]. Previously reported from Utah, New Mexico, and Texas.

Anoplius lepidus atramentarius (Dahlbom). CO: 1 ♂, Baca Co., Two Buttes Reservoir, 9 July 1986 (H. E. Evans) [CSU]; 1 ♀, Larimer Co., 13 mi W Livermore, 27 July 1989 (H. E. Evans) [CSU]. Occurs primarily east of the 100th meridian but extending westward.

Anoplius acapulcoensis (Cameron). CO: 2 ♀♀, 5 ♂♂, Prowers Co., 10 mi W Lamar, 19 July 1974 (H. E. Evans) [CSU]; 1 ♀, 3 ♂♂, Bent Co., Hasty, 26 June 1974 (H. E. Evans) [CSU]; 2 ♂♂, Cheyenne Co., Aroya, 25 June 1974 (H. E. Evans) [CSU]. These represent the northernmost records for this species, which ranges widely in Mexico.

Anoplius percitus Evans. CO: 1 ♀, Douglas Co., Castle Rock, 12 Aug 1962 (S. M. Sutton) [UC]; 1 ♀, Boulder Co., 4 mi NE Lyons, 15 Sept 1962 (U. N. Lanham) [UC]; 1 ♀, 1 ♂,

Larimer Co., 13 mi W Livermore, July, Aug 1986, 1989 (H. E. Evans); 4 ♀♀, 6 ♂♂, Larimer Co., Fort Collins and vicinity, June–Aug 1974, 1977, 1985 [CSU]; 1 ♀, Eagle Co., Dotsero, 21 June 1977 (H. E. Evans) [CSU]. An eastern species not previously reported from Colorado. Evans (1970) reported it from Teton Co., Wyoming.

Pompilus silvivagus Evans. MT: 1 ♀, Carbon Co., 5 mi NE Belfry, 24 Aug 1965 (M. Vogel) [UC]. Considerably north of the known range for this species.

Minagenia congrua (Cresson). CO: 3 ♂♂, Larimer Co., Fort Collins, July 1978, 1989 (H. E. Evans) [CSU]. Not previously recorded west of Michigan.

Minagenia montisdorsa Dreisbach. CO: 12 ♂♂, Bent Co., Hasty, 17 July 1974 (malaise trap, H. E. Evans) [CSU]. Previously reported west of the 100th meridian from Texas, Arizona, and Mexico.

Ceropales elegans aquilonia Townes. CO: 1 ♂, Larimer Co., 14 mi N Fort Collins, 7 July 1974 (H. E. Evans) [CSU]; 3 ♂♂, Weld Co., 12 mi NE Nunn, July 1982, 1987 (H. E. Evans) [CSU]. Previously recorded from Minnesota and Alberta. *C. e. elegans* Cresson is more widespread in Colorado.

Ceropales r. robinsonii Cresson. CO: 3 ♀♀, 1 ♂ Larimer Co., 13 mi W Livermore, 7–28 July 1985, 1989 (H. E. Evans) [CSU]. Not previously recorded west of Illinois, although *C. robinsonii stigmatica* Banks is known from Kansas.

In summary, range extensions for spider wasps in the U.S. are verified for the following areas: eight species from the East, eight from the Southwest, five from the Pacific Coast, and three from the North. The remaining species is presently known only from Colorado.

LITERATURE CITED

- EVANS, H. E. 1950–1951. A taxonomic study of the Nearctic spider wasps belonging to the tribe Pompilini (Hymenoptera: Pompilidae). Transactions of the American Entomological Society 75: 133–270, 76: 207–361, 77: 203–340.
- . 1970. Ecological-behavioral studies of the wasps of Jackson Hole, Wyoming. Bulletin of the Museum of Comparative Zoology, Harvard University 140: 451–511.
- . 1987. The genus *Dipogon* (Hymenoptera: Pompilidae) in the Rocky Mountains. Entomological News 98: 41–45.

- KROMBEIN, K. V., P. D. HURD, JR., D. R. SMITH, AND B. D. BURKS. 1979. Catalog of Hymenoptera in America north of Mexico. Pages 1523–1570 in Vol. 2 (Aculeata). Smithsonian Institution, Washington, D.C.
- TOWNES, H. K. 1957. Nearctic wasps of the subfamilies Pepsinae and Ceropalinae. Bulletin of the United States National Museum 209: 1–286.
- WASBAUER, M. 1986. Two new species of *Priocnemis* from the Nearctic region (Hymenoptera: Pompilidae). Pan-Pacific Entomologist 62: 214–217.

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