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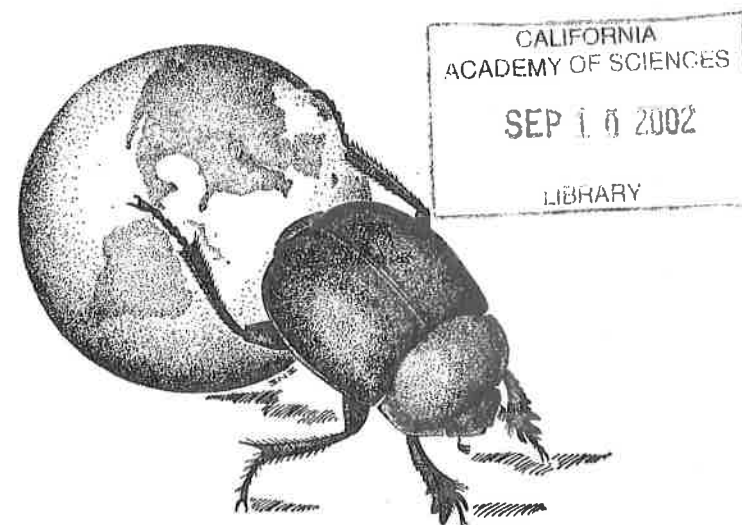
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**A NEW SPECIES OF *CERCERIS* FROM SOUTHERN UTAH  
(HYMENOPTERA: SPHECIDAE, PHILANTHINAE)**

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*Abstract.*—A new species, *Cerceris escalante*, is described from Kane and Garfield counties, Utah.

*Key words:* Hymenoptera, *Cerceris*, new species, Utah.

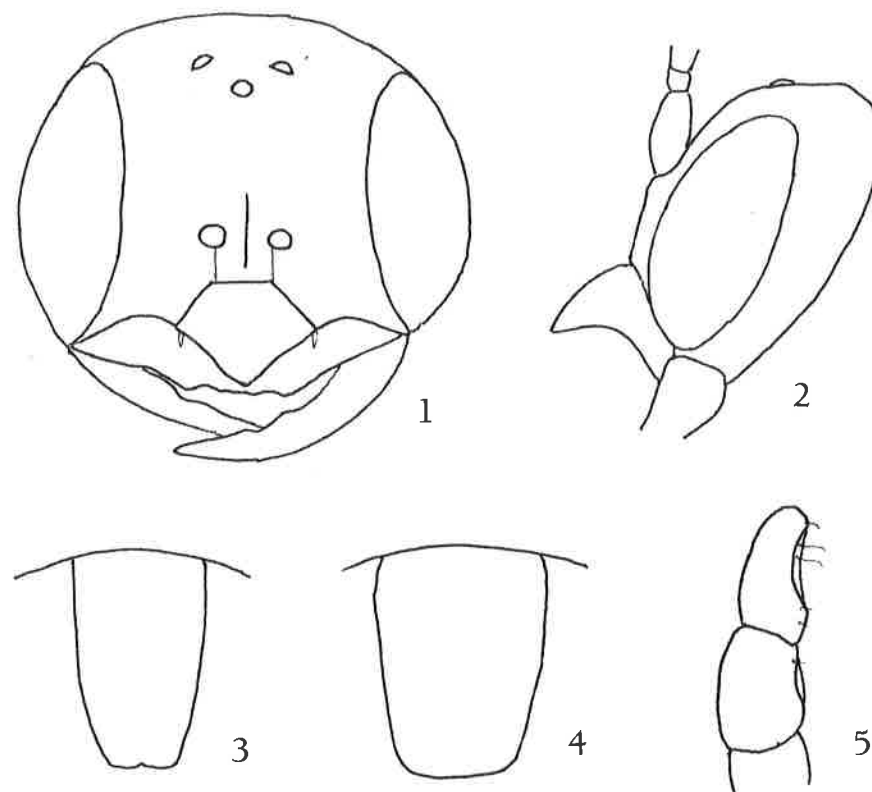
*Cerceris* is the largest genus of the family Sphecidae, with over 850 species worldwide, 84 of them recorded from America north of Mexico (Bohart and Menke, 1976; Ferguson, 1984). The genus is of much biological interest, since some of the species nest communally and occupy nests over more than one season (e.g., Hook, 1987). The keys in Scullen (1965, 1972) remain useful, but new species and sex associations, as well as new synonymies, have since been noted (Ferguson, 1984). The purpose of the present paper is to provide a name for a striking new species from southern Utah, represented by a female and 8 males collected quite recently. These specimens are in the collections of Brigham Young University (BYU) and Colorado State University (CSU); the holotype and allotype will be deposited in the National Museum of Natural History (NMNH).

***Cerceris escalante* new species**

Figs. 1-5

**Description of female holotype.** Length 11 mm; fore wing 8 mm. Black, yellow, and rufotestaceous (hereafter called "red") in the following pattern. Mandibles yellow basally, then red, tipped with black; clypeus yellow, black along median apical margin and tip of median process; face yellow except with vertical black streaks extending through antennal sockets to join black of frons and vertex; genae black with small yellow spot at upper eye margins; scape yellow, pedicel and flagellum red except upper surface of flagellum gradually suffused with black on apical half. Thorax black, except pronotum with a yellow band interrupted medially and metanotum with a yellow band; tegulae reddish. Propodeum with lateral yellow spots partially bordered with red. Metasomal tergite 1 red, with transverse yellow band; tergite 2 red basally, elsewhere yellow, narrowly black along posterior border; tergites 3-5 yellow except very narrowly black at anterior and posterior borders; tergite 6 black; sternites 1 and 2 largely red, 3 and 4 suffused with red medially but otherwise banded black and yellow; sternites 5 and 6 black. Legs largely red, apical parts of fore and mid femora and all tibiae yellow; hind femora and tibiae lightly suffused with yellow. Wings very lightly fumose, fore wing slightly darkened apically and through marginal cell; costal veins of both wings yellowish, stigma light yellow-brown.

Clypeus with margin of median section crenulate; median lobe bearing a nasiform



Figs. 1-5. *Cercheris escalante* new species. 1. Head of female, anterior view. 2. Head of female, lateral view. 3. Pygidium of female. 4. Pygidium of male. 5. Apical antennal segments of male.

process that is broader than long, apically broadly rounded with midpoint slightly projecting. Punctures of clypeus separated by slightly more than their diameters, those of face below antennae by less than their diameters; frons, vertex, and genae with strong, close punctures. Head 1.15 times as wide as high; eyes weakly convergent above. Greatest width of clypeus 1.15 times width of frons at greatest convergence of eyes; ocello-ocular distance 1.3 times interocellar distance. First 4 antennal articles in a ratio of 17:5:14:10, article 3 2.8 times as long as wide at apex. Thoracic dorsum and propodeal slope with strong punctures separated by less than their diameters, spaces between punctures dull, microreticulate; propodeal enclosure with longitudinal, slightly radiating striae, space between striae dull, somewhat foveolate. Mesopleura coarsely punctate, without a spine or process. Metasomal tergites 1-5 with large punctures separated by less than their diameters, spaces between them shining but microreticulate. Pygidial plate with sides slightly convex, weakly convergent to a truncate apex that bears a small median notch; plate 1.6 times as long as its basal width. Hypopygium deeply emarginate, sides obliquely truncate apically.

**Description of male allotype.** Length 9 mm; fore wing 7 mm. Color pattern similar to that of female except as follows. Clypeus and face entirely yellow; pronotum with transverse band that extends to posterior lobes, also a small yellow spot on each side of collar; mesopleura with a yellow spot just below posterior lobes of pronotum; tegulae yellow; scutellum as well as metanotum broadly yellow; base of first tergite red, as well as small spots basolaterally on second tergite; first tergite otherwise yellow, tergites 2–6 yellow with narrow intersegmental spaces black; pygidium yellow basally, black apically; sternites 1–6 banded with yellow, 1 and 2 also suffused with red. Leg color as in female but legs more generously marked with yellow.

Clypeus with central part of apical margin subtruncate, bearing 3 weakly defined teeth, truncate portion 0.35 times width of clypeus; each hair brush 0.25 times width of clypeus. Head 1.03 times as wide as high; eyes subparallel; width of clypeus 1.1 times distance between eyes at their closest point. Ocello-ocular distance subequal to interocellar distance. Punctures of head much as in female. Third antennal article 2.5 times as long as its apical width; terminal article decurved, bearing 3 erect, slightly hooked setae ventrally and 2 shorter setae subbasally. Punctures of thorax, propodeum, and metasomal much as in female; propodeal enclosure with striae smaller and more numerous than in female. Metasomal venter with many short, stiff setae that form no brush-like pattern. Pygidial plate 1.5 times as long as wide, apex truncate, sides strongly carinate and surface strongly punctate.

**Variation.** The male paratypes vary little in size, wing length from 6.7 to 7.2 mm. There is variation in the amount of darkening of the apical half of the antennae, one male having the antennae wholly red. One male has a second yellow spot on the mesopleura, lateroventally, as well as very large spots on the propodeum.

**Types.** Holotype, female, and allotype, male: UTAH, **Kane Co.**, Coral Pink Sand Dunes, 7 June 2001, B. Kondratieff, D. Leatherman, M. Kippenhan, & J. Schmidt (NMNH). Paratypes: UTAH, **Kane Co.**: 1 male, same data as holotype (CSU); 2 males, 2.3 mi NNW White Point, 12S E471555 N4155408 5B98, *Tamarix*, 1–5 June 2000am, J. Janjic, O. Messenger (BYU). **Garfield Co.**: 2 males, 2 mi. NNW Duffy Mesa. 12S E468824 N4189305 21A99, *Tamarix*, 8 June 2000pm, C. Davidson (BYU); 2 males, 0.8 mi. NNW Mouth Long Cyn., 12S E472118 N4190897 19A99, *Melilotus*, 31 Aug. 2000, T. Griswold (BYU, CSU).

**Etymology.** Named for Padre Sylvestre Escalante who, with Padre Francisco Domingues and others, traversed southern Utah in 1776. Individuals of the type series were taken in Grand Staircase-Escalante National Monument.

**Discussion.** In the keys of Scullen (1965) and of Bohart and Grissell (1975) the female will run to *C. aequalis* Provancher, but in *C. aequalis* the pygidial plate is strongly tapered apically, the clypeal process is less erect, and the yellow coloration of the metasoma is much less complete. The males belong to a group of at least 13 species having erect setae beneath the apical antennal article. The male of *C. escalante* differs from all of those species in the nearly solid yellow coloration of the metasoma. However, a few males of *C. tepanica* de Saussure and *C. vicina* Cresson (both slightly larger species) approach this condition. Males of this complex show few morphological differences, and Scullen (1965) left some of them unresolved. Pending a resolution of this complex, I suggest features of the male *C. escalante* (other than color) that may serve to distinguish the species may include (1) the broad, median lobe of the clypeus, with only the faintest indication of teeth, (2) the apically

squarely truncate and deeply pitted pygidium, and (3) the presence of 3 prominent setae on the apical antennal segment, with shorter setae toward the base and on the preceding segment.

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