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(Hymenoptera, Chrysididae) Author(s): Karl V. Krombein

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# A New Chrysura from Plummers Island, Maryland (Hymenoptera, Chrysididae)

Karl V. Krombein, Entomology Research Division, Agricultural Research Service, U. S. Department of Agriculture, Washington 25, D. C.

I am describing this species so that a name will be available for my annotated list of the wasps of Plummers Island, and also for use in my report on the biology of trap-nesting aculeate Hymenoptera. Originally I had thought that the name *hilaris* (Dahlbom) might apply to this species. However, through the courtesy of C. H. Lindroth, Zoological Institute, Lund, Sweden, I have had an opportunity to study Dahlbom's type. I find that it must be retained in the synonymy of *pacifica* (Say).

Superficially, the new species is rather similar in general appearance to *Chrysura smaragdicolor* (Walker). However, *smaragdicolor* differs in genitalia; in the subopaque third sternum; in having the second to fifth flagellar segments of the male strongly rounded out beneath, and the second to fourth with strong metallic reflections above; and in having the male hind femur stouter, its width one-third the length, and with a denser brush of erect white hair on the basal half beneath. It is also distinct from the wide-ranging *pacifica* (Say), which has

quite different genitalia, a comparatively broader head, and the margin of the third tergum with distinct posterolateral angles and a subtruncate apex.

I take pleasure in naming this handsome species for my daughter Kyra, who has helped in some of my trap-nest studies.

### Chrysura kyrae, new species

Type. 3; Plummers Island, Maryland; March 26, 1960 (reared from cell 2, nest Y 84 of Osmia lignaria Say; K. V. Krombein) [U. S. National Museum, Type No. 66808].

Male. Length 7 mm. Body dark metallic blue with scattered greenish tints on part of clypeus; second sternum with a pair of oval black spots about two-fifths as long as sternum; scape, pedicel and first two flagellar segments above metallic green; wings mostly clear, but with a strong, narrow infumation anteriorly in marginal cell, and with a scattered, diffuse, weak infumation in discoidal cell. Vestiture mostly erect and moderately dense, black on head, on dorsum and sides of thorax, and on abdomen, cinereous to white on clypeus, venter and legs; erect hair on dorsum of head, thorax and apex of abdomen about three times as long as ocellar diameter; antenna with short, decumbent silvery hair, particularly noticeable on first two flagellar segments; hind femur beneath with an erect brush of dense, short white hair on basal third.

Head height (apex of clypeus to vertex) 0.8 times the width; in frontal view the least interocular distance three times the width of an eye; subantennal distance half as long as malar space, 1.2 times as long as interantennal space, and 1.3 times as long as transverse diameter of an anterior ocellus; scapal basin very shallowly concave, almost flat, not margined above by a carina, with small contiguous pits; upper part of front and vertex with larger contiguous pits; ocelli not lidded; first flagellar segment twice as long as second; second to fourth flagellar segments moderately rounded out beneath.

Pronotum with anterior angles right-angled, the surface with large, subcontiguous pits, the interspaces with some micropunctures; propodeal enclosure with large contiguous pits except

along posterior margin where there is a shallow furrow crossed by a series of short carinae; propodeal tooth acute as viewed from above, arcuate beneath.

Hind femur slender, its length three times the greatest width.

Abdomen dorsally with moderately small punctures, those on disk of first tergum and on anterior two-thirds of second and third terga subcontiguous, those posteriorly on second and third terga more separated; third tergum in profile sloping evenly to posterior margin, the apical margin arcuate and without lateral angles, the subapical row of pits very shallow, poorly defined, and barely impressed; second and third sterna shining.

Allotype. Q; Plummers Island, Maryland; March 30, 1960 (reared from cell 7, nest Y 92 of Osmia lignaria Say; K. V. Krombein) [USNM].

Female. Length 8 mm. Color, vestiture and punctation much as in male: Erect hair on head only twice as long as diameter of ocellus; basal flagellar segments not rounded out beneath; pronotal pits contiguous, micropunctures lacking on interspaces; subapical row of pits on third tergum somewhat more deeply impressed.

Paratypes. 16 & A, 18 QQ; Plummers Island, Maryland; reared from cocoons of Osmia lignaria Say in wooden borings, with emergence dates under artificial conditions from late January to early April, 1960–1963 (K. V. Krombein) [USNM, KVK]. 3 QQ; Plummers Island, Md.; April 25 and 30, 1961, and May 3, 1959 (K. V. Krombein) [USNM, KVK]. 1 Q, 1 &; Loudoun Co., Virginia; extracted November 1937 from cocoons of Osmia lignaria in old Sceliphron mud-dauber nests (J. C. Bridwell) [USNM]. 1 Q; #2982, presumably from St. Louis, Missouri (P. Rau) [USNM]. 4 QQ; Ripley Co., Indiana; May 6, 1956 (L. Chandler) [Purdue University]. Paratypes are deposited in the U. S. National Museum, Museum of Comparative Zoology, Academy of Natural Sciences of Philadelphia, Purdue University, and the personal collections of R. M. Bohart, K. W. Cooper and K. V. Krombein.

Paratypes of both sexes are 6 to 10 mm long. They are mostly quite similar to the type and allotype in all essential details. The

pits on the pronotum show some variation in closeness, so that there may or may not be some micropunctures on the interspaces. Occasionally, the apical margin of the third tergum may have a very shallow, narrow median emargination. The black oval spots on the second sternum may be larger, and there may be more green tints on the face or side of thorax.

Biology. Detailed notes on the biology will be presented in a separate contribution. As is apparent from the rearing data, kyrae is probably host-specific on Osmia (Osmia) lignaria Say, a species which differs from most of our native Osmia in that it uses mud for cell partitions rather than masticated leaf pulp. The female kyrae deposits her egg along the side of the pollennectar mass of the host bee in April or May a short time before the host egg is deposited. The bee larva hatches in 5 to 7 days, and the chrysidid larva hatches a day later. About a week after hatching the chrysidid larva attaches by its mandibles to the dorsum or side of the host bee larva. It sucks a small amount of blood, but it does not molt or increase much in size until the bee larva spins its cocoon 3 to 4 weeks after hatching and becomes a quiescent larva. Then the chrysidid molts and proceeds to devour the host larva entirely. It spins its own cocoon inside that of the host bee, transforms to a pupa and then to an adult in mid-summer as does the host bee, and remains inside the two cocoons until the following spring. Adults of kyrae are active at Plummers Island from as early as April 9 until the end of May.

# Correction (Golcondamyia, Tachinidae)

Correction of a tachinid generic name: Colcondamyia (Ent. News, 74: 82) equals Golcondamyia, which is based upon the name of the type locality. Also, Pahvant, Utah, is incorrectly cited as Panvant.—H. J. Reinhard.