brown; spines brown, short and not numerous, 5 or 6 on tibiae and 4 on the second and third femora.

Abdomen above black, narrowed basally on I to form a nearly equilateral triangular area; basal two-thirds of 9 dark rich blue, apex of 9, all of 10 and appendages black (in one specimen blue is not evident on 9 which is pruinose with a large rounded median pruinose spot on 10); sides of I and 2 extensively pale, almost white; a small basal spot of same color on 3 and a longer, ill defined inferior pale area subapically on the same segment, or the entire side below except the extreme apex pale; 4-6 similar but with the spots successively less conspicuous posteriorly, the subapical spot disappearing on 6, or with the pale the full length of each segment below except the apex, narrowing progressively from 4 to 6; 7 narrowly pale at base, encircling the segment, pale the entire length below except at extreme apex; 8 pale blue or yellowish basally, not reaching the apex where the black of the dorsum extends over the sides for one-fourth the length of the segment, but the black does not reach the extreme lower border; o similar to 8 but distinctly blue, the apical black slightly less extended than on 8; 10 and appendages black.

Appendages as figured. They are peculiar in the long Heteragrion-like form of the superiors, and the so-called rudimentary inferiors, which in this case alone so far as I know, unless tenuissima is an exception also, have a minute lateral spine.

Described from 2 males, Rockstone, British Guiana, B. J. Rainey, L. A. and E. B. Williamson, Feb. 1, 1912; in the writer's collection.

Three new Species of Coccophagus, Family Encyrtidae (Hym.).

By A. A. GIRAULT, Washington, D. C.

1. Coccophagus magniclavus new species.

Female.—Length, 1.00 mm. Deep orange yellow, the following parts black: Caudal half of parapsidal furrows, club, a small round spot in the middle of each parapside, apex (cephalad) of the much advanced axilla, suture along cephalic margin of scutellum, thorax transversely laterad of scutellum, propodeum except broadly across meson, immediate center of the occiput transversely and dorsal abdomen (but as the incisions sometimes show through, then the abdomen appears to be alternately striped white and black). Abdomen orange yellow at base transversely. Club blotched with yellowish. Pronotum black except laterad. Legs white; the fore wings hyaline; venation, pale yellow. Tip of abdomen above and ovipositor valves yellow.

Pedicel small, very slightly longer than wide, funicle 3 shortest of the funicle, somewhat longer than wide, I and 2 subequal, each about twice longer than wide, very much longer than the pedicel which is shorter than funicle 3; club twice wider than the funicle but shorter, its joints wider than long.

Stigmal vein linear, not long, more or less parallel with the marginal vein, without a distinct knob. Marginal vein a little longer than the submarginal. Marginal fringes of the fore wing short.

Scutum with many short black hairs, the scutellum with from four to six long ones.

The male is very similar. Ring-joint short.

Described from one male, six females reared from *Aleu-rochiton* species, Berlice, Demerara, British Guiana, March, 1913 (G. E. Bodkin).

Types. Catalogue No. 19343, United States National Museum, the above specimens on a slide.

2. Coccophagus mexicanus new species.

Female.—Length, 1.60 mm. In Howard's (1897) table of species runs to californicus, but differs in having the caudal tibiae black except at tip and the caudal coxae white, the middle tibiae lightly dusky above and so on. Differs from albicoxa Howard in having only the apex of scutellum lemon yellow, the abdomen coarsely scaly, the face sometimes yellow to the clypeus from a little below the vertex and between the eyes, the scape and pedicel yellowish (the pedicel dark above except at apex); from howardi Masi in the coloration of the legs.

Fore wings slightly stained along under the marginal vein, the stigmal vein minute. Tarsi white. Black with the apical border of scutellum lemon yellow and the hind coxae white (the other yellow markings as noted). Occipital border of vertex yellow.

Scutum with many minute setigerous punctures. Thorax microscopically scaly. Funicle I somewhat longer than wide, longer than the pedicel, 2 and 3 subequal, each a little longer than wide. Funicle subcompressed, the pedicel nearly as long as funicle 3. Club not enlarged, its joints not long.

Described from two females, labeled "Porto Bello, Panama, March 18, 1911. Busck. On a fig lecanium."

Type.—Catalogue No. 19344, United States National Museum, the two specimens on tags.

3. Coccophagus coxalis new species.

Female.—Like the preceding, but the head is all black, the funicle joints all somewhat longer, the apical half of the scutellum, the post-

scutellum and the propodeum (except along meson narrowly and the cephalic margin) lemon yellow, the black of the scutellum running a little farther caudad at lateral margins. Scape yellow, also the pedicel except above at proximal half. Fore wings slightly more infuscated. Abdomen compressed.

Described from one female taken with mexicanus.

Type.—Catalogue No. 19345, United States National Museum, the female on a tag.

The species coxalis is close to albicoxa, but the yellow on the propodeum and scape and the different form of that on the scutellum seem to be characters sufficient to require distinction.

Argynnis diana (Lep.).

Dr. Henry Skinner (Ent. News, vii, 318, 1896) calls attention to the fact that the females of this species vary considerably, some speci-

mens being blue and some green.

Among a short series of specimens collected for me by Mr. C. Harvey Crabill in August, 1914, at Camp Craig, Virginia, is one female which differs in another, and very marked respect, from the typical form. W. H. Edwards' description of the female (Proc. Ent. Soc. of Phila., III, 431, 1864) says of the under side of the primaries, "apex and hind margin brown," and of the secondaries, "basal two-thirds dark red brown," "the outer third of the wing blackish brown."

The specimen in question has all these areas described as "brown"

of a dark bluish black. Has this variation been noted previously?—

WM. C. WOOD, New York City.

Accidental Color Variation (Lep.).

I have in my collection a specimen (9) of Sphinx jamaicensis, form geminatus, in which the pink color of the discal area of the secondaries is replaced by lemon yellow. The primaries are rather light in tone, with the brown markings reddish. The pupa from which it emerged (May 12, 1905) was the only one of a batch to reach maturity, the box having been alternately too dry and too wet.

Mr. S. D. Nixon (Ent. News, xxiii, 127, 1912) describes from a single male specimen a variety of "Smerinthus jamaicensis," which would seem to correspond very closely with my specimen, the chief point of variation from normal being the replacing of the pink of the

secondaries by yellow.

In the collection of the National Museum in Washington there was, several years ago, a specimen (2) of "Smerinthus ocellatus Linn." in which the pink of the secondaries was replaced by yellow, in precisely the same manner as in the foregoing instances. Also a specimen (3) in which the pink was so reduced and faint as to make it an interest of the secondaries was reduced and faint as to make it an intergrade between the normal and the pale forms.

Is it not probable that this disappearance of the pink color is an accidental effect? The history of my bred specimen is at least suggestive.

—WM. C. Wood, New York City.



Girault, Alexandre Arsène. 1915. "Three new species of |Coccophagus|, family Encyrtidae." *Entomological news, and proceedings of the Entomological Section of the Academy of Natural Sciences of Philadelphia* 27, 33–35.

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