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NEW PSAMMOCHARIDÆ FROM THE UNITED STATES

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The following new species are largely from the collections made by Dr. Bequaert and recently given by him to the Museum of Comparative Zoölogy.

***Planiceps yavapai* sp. nov.**

♀ Black, scarcely at all purplish, wings black, on each side of second segment of abdomen is a distinct white spot.

Head and general structure similar to *P. luxus*, the front femora even more swollen than in *P. luxus*; the hairs on front coxae are very fine and short, much shorter than in *P. assimilis*, the rest of legs devoid of hairs. There are short erect hairs on face, and still shorter ones on pronotum; propodeum and pleura without hairs. The face is fully as narrow as in *P. luxus* (much more narrow than *P. niger*). The posterior ocelli are scarcely nearer to eyes than to each other; the antennae are noticeably more slender and longer than in other species, the third joint being more than three times as long as broad; inner spur of hind tibia about two-fifths of basitarsus. Venation similar to the mentioned species; the second submarginal rather long, receiving the

first recurrent vein just beyond the middle, the second recurrent ends just a little beyond the cell; the second discoidal cell is quite long, once and a half as long as second recurrent vein, latter very oblique.

Length 14 mm., fore wing 10 mm.

From Post Creek Canon, Pinaleno Mts., Arizona, 15-18 July (J. Bequaert). Type M.C.Z. 17028.

***Pedinaspis nigriceps* sp. nov.**

♀ Head black, scutellum, propodeum, pleura, legs, antennae, basal abdominal segment, and tip of abdomen, black. Pronotum, mesonotum (except scutellum) abdominal segments from second to fifth inclusive, red. Clypeus strongly rounded below; third joint of antennae no longer than fourth; ocelli up as high as in *P. mariae*, in a low triangle, posteriors scarcely nearer to eyes than to each other. Pronotum slightly arcuate behind; propodeum with a broad deep median groove on the basal part, the declivity transversely striate. Wings fumose, about as in *P. contiguus*; venation like that of *P. mariae*; inner spur of hind tibia scarcely two-fifths of basitarsus, shorter than *P. mariae*, legs spined similar to *mariae*.

Length 19 mm., fore wing 12 mm.

From Stein, Grant Co., New Mexico, 14 July (J. Bequaert). Type M.C.Z. 17029.

Separated from *P. contiguus* by black propodeum, and by fifth abdominal segment red, no white on tip, and striæ on propodeum. It is near to *P. portici* Rohwer in appearance, but that has a red head and is described in the subgenus *Psorthaspis*; this is a true *Pedinaspis*.

***Allaporus* gen. nov.**

Type *Planiceps pulchellus* Bks., also going in the genus is *P. hesperus* Bks.

They differ from our other *Planiceps* in having the first recurrent vein interstitial with the base of the second submarginal cell, and the second recurrent vein ends in the second submarginal cell a short distance before tip. This

second submarginal cell is fully as high as long. Both species are very small.

It differs from *Teleostegus* (of Europe) which has both recurrents ending in second submarginal, in having this cell very short, the first recurrent interstitial with the base of second submarginal, and in that the basal vein ends plainly before the transverse cubital.

***Aporinellus bequaerti* sp. nov.**

♀ Black, basal joint of antennæ, the mandibles, all coxæ, femora and tibiæ ferrugineous. Head, pronotum (except black before tip), most of propodeum, the pleura, apical bands on first four segments of abdomen sericeous, the first segment also sericeous in middle above, not on sides, tarsi yellow brown; wings slightly fumose, much darker toward tip.

Clypeus very broad, truncate in front; third joint of antennæ scarcely if any longer than first, a faint median line from anterior ocelli down to antennæ; face about as broad as in *ferrugineipes*; ocelli a little closer to eyes than to each other; front basitarsus with but two comb-spines; mid and hind tibia with a few spines above, inner spur of hind tibia about one-half of basitarsus; in fore wing the second submarginal cell is no longer than the marginal.

Length 5.5 mm., fore wing 4.5 mm.

From El Paso, Texas, 11 July (J. Bequaert). Type M.C.Z. 17030.

Separated from *A. ferrugineipes* not only by the front and mid legs and basal joint of antennæ yellowish, but by the sericeous basal abdominal segment; in *ferrugineipes* it is across both base and tip.

***Aporinellus basalis* sp. nov.**

♀ Deep black, face, clypeus and basal joint of antennæ densely sericeous, vertex bare, front half of pronotum sericeous and a narrow white band on mesonotum connecting the bases of the wings; the metanotum outside of the scutellum sericeous, propodeum sericeous, pleura sericeous, but usually part of sides black; legs (except tarsi) also seri-

ceous; abdomen with rather narrow sericeous bands on apex of first, second, third, and fourth segments, the first segment also shows a median area sericeous, but the sides are deep black; venter with three narrow sericeous bands. Head very narrow, face (including clypeus) much more narrow than in *A. fasciatus*; no evident median line on face; posterior ocelli closer to eyes than to each other, ocellar triangle not as low as in *A. fasciatus*; antennæ, spines on legs, and venation as in *A. fasciatus*; three of the four females have three submarginal cells, the other lacks (as usual) the dividing nervure, when present the third is much smaller than the second, and narrowed above.

Length 6 mm., fore wings 5.5 mm.

From Tempe, Arizona, 2 August (J. Bequaert). Type M.C.Z. 17031.

Readily separated from others by the narrow face.

Male taken at same time is very similar, more slender, the propodeum is sericeous all over, four segments banded at tip, and much resembles *A. apicatus*, but lacks the white spot at tip of abdomen, and has a narrower face.

***Episyron laevis* sp. nov.**

♀ Black, no yellow on orbits nor on abdomen. Resembles *biguttatus*, but with much less and shorter hair, and with the third joint of antennae not nearly as long as in *E. biguttatus*, not nearly equal to width of vertex; there are three comb-spines on front basitarsus as in *biguttatus*, but all are longer, the apical one reaching much beyond the tip of the second tarsal joint, and more than one-half the length of the basitarsus, other comb-spines also extra long. The hair on head is short, as also that on pronotum, the pleura are not hairy, except very minute ones; the propodeum with a few erect hairs, and a few on basal abdominal segment above; venter with hairs only toward tip; the femora show no hair below; long spur of hind tibia two thirds of basitarsus. Wings and venation similar to *biguttatus*.

Length 7.5 mm., fore wing 7 mm.

From Fedor, Lee Co., Texas, 27 March (G. Birkmann). Type M.C.Z. 17032.

***Episyron arizonica* sp. nov.**

♀ Bluish black throughout, no pale on orbits nor on abdomen; wings nearly uniform black, only little darker towards tips. Head and thorax and basal abdominal segment hairy as in *E. biguttatus*. The femora with very fine short hairs beneath as in *biguttatus* (not long as in *californica*). Front tarsi with three comb-spines on front basitarsus, but all, as well as others, longer than in *biguttatus*, the one at tip extending over tip of second tarsal joint, otherwise legs spined as in *biguttatus*; third joint of antennae long as in *biguttatus*, no median line on lower face as shows in *biguttatus*. Abdomen more slender than in *biguttatus*, scarcely any hairs on basal part of venter, many near tip; venation as in *biguttatus*.

Length 11 mm., fore wing 10 mm.

From Apache Camp, Santa Catalina Mts., Arizona, 25 July, 5,500 ft. (J. Bequaert). Type M.C.Z. 17033.

***Sericopompilus fumosus* sp. nov.**

♂ Body and antennae black, the hind border of the pronotum with a yellowish band; fore wings black except the base; hind wings fumose, base clearer; legs black, hind tarsi with the upper half of the second, third, and fourth joints and on mid tarsi, the upper half of first, second, third, and fourth joints white, hind tibia with a white streak on basal half above.

Body very slender as in *S. cinctipes*, and the structure generally similar. Clypeus rounded below; ocelli in a low triangle, the posteriors a little nearer to eyes than to each other; hind border of pronotum broadly arcuate; propodeum scarcely arched, with a silvery sheen in certain lights; abdomen black, beneath with a few fine hairs, most numerous near the tip; long spur of the hind tibia two-thirds of basitarsus. Wings with venation very similar to *S. cinctipes*, but the third submarginal cell is less narrowed above, and the second recurrent ends at middle of third submarginal.

Length 7 to 8 mm., fore wing 7 to 8 mm.

Type M.C.Z. 17050. From Colorado Springs, Colo., 12

to 19 July (Klots), and Hot Springs, So. Dak., 9 to 19 July (Severin).

***Sophropompilus mohave* sp. nov.**

♀ Differs from *bradleyi* and *tumiformis* in less hairy head and body. From *subangulatus* in shape of pronotum and in shorter propodeum, from *parvus* in having ocelli about as near eyes as to each other.

Deep bluish black, antennae and tarsi dull black, forewings violaceous black, hind wings hyaline, tips clouded; clypeus and lower part of face silvery. Clypeus broad, truncate in front; face with very short hairs; vertex nearly straight across, with some long hairs; ocelli subequal, in low triangle, posteriors about as near to eyes as to each other; occiput strongly silvery; antennae short as usual, third joint not longer than fourth; pronotum arcuate behind, with few extremely short hairs above; propodeum fully as short as in *parvus*, with few, short erect hairs above; pleura without hair; abdomen with only a very few short hairs near tip above, below more hairy, but also short. Legs smooth on femora and tibiae, front coxae with a few long hairs in front, mid and hind tibiae with short scattered spines; inner spur of hind tibia a little more than one-half of basitarsus; front tarsus with three long comb spines on basitarsus. Venation very similar to eastern *S. hyacinthinus*, but the marginal cell longer, in this respect like the western *S. tumifrons*.

Length 9 mm., fore wing 6.5 mm.

From Tempe, Arizona, 1 August, and southern Arizona (J. Bequaert). Type M.C.Z. 17034.

***Psammochares fabricii*, nom. nov.**

Dr. J. Bequaert has shown that the *Sphex tropica* of Fabricius (which is a Psammocharid) is not the same as the older *Sphex tropica* of Linnæus (which is a *Vespa*). It is therefore necessary to rename the species which Cresson (Trans. Amer. Ent. Soc. I, 98, 1867) treated as *Pompilus tropicus*; I presume, but do not know, that the species called *Sphex tropica* by Fabricius is the same.

***Psammochaeres catalinæ* sp. nov.**

♀ Black throughout, head and thorax, pleura, propodeum with front coxæ hairy; not quite as much so as in *P. scelestus*, the femora not hairy, or with a few fine hairs, the mid and hind femora on apical part with distinct short spines rising from pits (these not in *scelestus*.) Face narrower than in *P. scelestus*, plainly narrowed above; the ocelli in a more nearly equilateral triangle, the posteriors only a little nearer to each other than to eyes; third joint of antennæ one and a third as long as the fourth; pronotum strongly angulate behind as in *P. scelestus*; propodeum sloping as in *P. scelestus*, not quite as much arched, a distinct median line on basal part; abdomen with a few hairs on base of first segment, and on tip and along venter. Legs of moderate length, with only a few extremely fine short hairs; front basitarsus with but three comb-spines, no shorter spine before them; inner spur of the hind tibia a little more than one-half of basitarsus. Wings with venation about same as in *P. scelestus*, second and third submarginal usually a little shorter in proportion and subequal in length. The male is very similar, but much more slender; the ventral plate has a very prominent median carina on the basal part, no hair-tufts; tip of abdomen is somewhat silvery in certain lights.

Length 9-10 mm., fore wing 8 mm., male 8 mm.

From Mt. Lemon, Santa Catalina Mts., Ariz., 6000 to 9150 ft. (mostly at 7800 ft.), 27 to 29 July (J. Bequaert).

Readily separated from *P. scelestus* by the narrower face, only three comb-spines on front basitarsus, less hairy body, and by the minute spines above on mid and hind femora. Type M.C.Z. 17039.

***Cryptocheilus arizonicus* sp. nov.**

♀ Body, antennæ, and legs black; wings yellowish, tips black. Clypeus broad, broadly concave in front, more so than in *C. terminatus*; vertex rounded; ocelli subequal, in a low triangle, posteriors almost twice as close to each other as to eyes; antennæ not very long, slender, third joint long, one-half longer than the fourth; occiput without long hair;

pronotum moderately long, angulate behind, not hairy; pleura and propodeum also without hair, propodeum rather short, at first nearly horizontal, then suddenly bending down, basal part smooth, but apical part very plainly finely striate, the striæ strongest near tip. Abdomen with a few hairs near tip and on apical half of the venter. Legs of moderate length, spined about as in *C. terminatus*, inner spur of hind tibia short as in that species, some long hairs on front of front coxæ. Wings also similar to *C. terminatus*, the marginal cell a little more pointed at tip, first recurrent ends beyond middle of second submarginal, second recurrent at middle of third submarginal.

A male is similar, with very long, slender antennæ, the clypeus not excavate in front, the propodeum distinctly finely striate, and more toward base than in the female. The ventral plate is broad, with a median carina which on the basal part widens to a triangular area, not margined by carinæ, very similar to the plate of *C. birkmanni*.

Length ♀ 13 mm., fore wing 10 mm.; ♂ 10 mm.

From Tempe, Arizona, 1 August (J. Bequaert).

Readily separated from *C. terminatus* by the striate posterior part of propodeum. Type M.C.Z. 17035.

***Cryptocheilus attenuatus* sp. nov.**

♂ Body and legs black, clothed with fine appressed pubescence, antennæ beyond the second joint yellow, wings yellowish, tips broadly black. Face rather narrow, clypeus broad, truncate in front, vertex rounded from eye to eye, ocelli subequal, posteriors much nearer to each other than to eyes, vertex with a few erect hairs, thorax without long hairs; pronotum rather long, arcuate behind; propodeum rather long, evenly arched, sides parallel; abdomen elongate, slender, hairs only on the last segment, pygidium margined on each side by a row of curved upturned hairs, and a median row of smaller hairs; ventral plate much longer than broad, tapering toward tip, with a faint median carina. Wings rather slender, marginal cell broadly rounded at tip, where it scarcely surpasses end of the third submarginal, being much more than its length from the tip of wing;

second submarginal a little longer than high, third but little longer than second, but wider, upper side fully two thirds of lower; first recurrent ends at middle of second submarginal, second recurrent, which is evenly curved, ends beyond the middle of the third submarginal.

Legs not very long, but tarsi long; front tibia with only a trace of spines beneath, front basitarsus not spined above, mid tibia with two rows of a few weak spines, or bristles above, hind tibia with two rows of about eight short bristles above, inner spur of hind tibia scarcely two fifths of basitarsus, last joint of hind tarsus with only two or three small spines beneath.

Length 9 mm., fore wing 5.5 mm.

From New Braunfels, Texas, 27 June (J. Bequaert).
Type M.C.Z. 17036.

The last joint of hind tarsus would almost place this in *Priocnemis*, but the shape of the marginal cell and the palpi is that common in *Cryptocheilus*. Its slender body separates it from all other species that I have seen.

Onochares gen. nov.

In general similar to *Cryptocheilus*; last joints of all tarsi with spines beneath; claws with tooth near middle; marginal cell pointed at tip; entire body, coxæ, femora, and tibia with long hair; even on the abdomen above; the hind tibia beneath with long hairs (no spines), above the hind tibia is densely hairy, there is an inner row of teeth without spines, and among the hairs an outer row of very short spines, hind basitarsus without spines.

Separated from *Cryptocheilus* by the armature of hind tibia, the more pointed marginal cell, and hairy body and legs.

Includes *C. rugosus* Bks. Type *O. brazoria* n. sp.

Onochares brazoria sp. nov.

♀ Body, legs, and antennæ black; the tips of several joints of the antennæ narrowly reddish; wings ferruginous, extreme tips black. Body and legs hairy all over, those on head, pronotum, and upper side of abdomen rather short.

Clypeus broad, slightly concave on margin below; a line above base of the antennæ about one-half way up; ocelli large, posteriors very much nearer each other than to eyes; third joint of antennæ scarcely longer than the fourth, second and third about one-half of vertex-width; pronotum arcuate behind; propodeum short, high, rounded, steeply sloping behind, on basal part a median line very faint, no transverse wrinkles. Abdomen rather long, flattened above, last segment very densely hairy, basal parts of ventral segments without hair, surface punctulate; pleura very hairy, above the mid coxæ the mesopleura projects almost cone-like; legs rather short, front tibia with short spines below almost to base, mid and hind tibiæ without spines beneath, only long hairs, above armed as mentioned in generic description, the teeth about ten in number on hind tibia; long spur of hind tibia slightly incurved at tip, not one-third of the basitarsus. Wings similar to most *Cryptocheilus*; in hind wing the anal is nearly interstitial with the cubital fork; in fore wing the basal is much before the transverse; the marginal cell long, but with a pointed tip; second submarginal about one-half longer than high, third much longer below, scarcely longer above than second; first recurrent ends near middle of the second submarginal cell, second recurrent ends much before the middle of the third submarginal, this vein is only a trifle bowed outward.

Length 18 to 20 mm., fore wing 15 mm.

From Fedor, Lee Co., Texas (Birkman).

Type M.C.Z. 17037.

***Priocnemis alienatus borealis* var. nov.**

Structurally similar to *P. alienatus*; differs in having the hind, as well as other, legs black, and in having but the first two segments of abdomen reddish. It represents a northern form with less red than usual, in contrast to Texas and Mexico specimens (*P. ruxpe* Cress.) which have the abdomen entirely red.

Specimens from Mt. Whiteface, N. Y., 22-24 August; Stony Brook Reservation, Mass., 21 June; and Alton, N. H., 11 August (Banks). Type M.C.Z. 17038.

Priocnemis oregona n. nov.

Priocnemis comparatus Walker was described in *Pompilus*; there was a previous *Pompilus comparatus* by Smith in 1855, therefore a new name is necessary for our species.

Priocnemis apache sp. nov.

♀ Body, legs, and antennæ ferrugineous throughout, tips of antennæ and last joints of legs a little more brown. Fore wings yellowish hyaline and with three brown bands, one over basal nervure, one behind the stigma, and one at apex; hind wings yellowish hyaline, with a broad dark band over tip. Clypeus large, truncate in front, with mostly golden appressed hair; vertex with some long erect hairs; ocelli equal, posteriors nearer to each other than to eyes, vertex straight across eye to eye; antennæ long and slender, third joint one-fourth longer than fourth, latter not longer than next; occiput, pronotum, and front coxæ with long yellowish hair, also rather long hair on scutellum and propodeum, latter with appressed yellowish pubescence behind, especially on sides; pronotum angulate behind. Abdomen moderately flattened and rather broad in middle, with yellowish hairs towards apex and on venter. Pleura with fine long, yellowish hair. Legs almost devoid of hairs, front tibia with a few minute spines, mid tibia with two rows of spines above, hind tibia with two rows of about twelve teeth above, last joint of hind tarsi without spines beneath, inner spur of hind tibia not quite one-half of basitarsus. Fore wings with marginal cell not its length from tip, second submarginal longer than high, both ends oblique, third submarginal one-half longer and wider behind, upper side one-third shorter than lower, first recurrent ends beyond middle of second submarginal, second recurrent ends a little before middle of the third submarginal cell. Veins yellowish, except in dark areas where they are brown.

Length 18 mm., fore wing 15 mm.

From Apache Canon, Santa Catalina Mts., 5500 ft., 25 July (J. Bequaert) and southern Arizona. Structurally similar to *P. nuperus*, and like that belonging to the subgenus *Priocnessus*. Type M.C.Z. 17040.

Priocnemis kiowa sp. nov.

♀ Body dull black, or very dark brown; femora and tibiae the same, tarsi more brown, first and second joints of antennæ brown, beyond yellow, last two joints more brown. Wings black, tips scarcely paler. Clypeus large, front margin truncate, with appressed yellowish hair, and longer more erect bristles; ocelli equal, posteriors much closer to each other than to eyes; vertex straight across, with some erect black hairs; antennæ moderately long, third joint about one-third longer than the fourth, which is scarcely longer than each of the four following. Occiput, front coxæ and prosternum with much long black hair; pronotum with short black hair above, angulate behind, scutellum and propodeum with long black hair, as also on the pleura. Abdomen somewhat depressed, about as broad as *P. nuperus*, with much black or brown hair toward tip and on venter. Legs scarcely hairy, a few minute spines on front tibia, mid tibia with two rows of yellowish spines above, hind tibia with two rows of about 10 teeth above, inner spur of hind tibia almost one-half of the basitarsus, last joint of hind tarsus without spines beneath. Marginal cell of fore wings of the same shape as in *P. nuperus* and *apache*, the second submarginal longer than high, the third submarginal one-half longer and wider behind than the second, upper side about one-half of lower, first recurrent ends beyond middle of the second submarginal, second recurrent ends at middle of the third submarginal.

Length 15 mm., fore wing 13 mm.

From Walthena, Kansas, 23 July (W. M. Mann).

Like *P. apache*, it belongs in the subgenus *Priocnessus*, and like that species is structurally close to *P. nuperus*.

Type M.C.Z. 17041.

Priocnemis reynoldsi sp. nov.

♀ Head, thorax, legs, and antennæ dull black, abdomen yellowish above and below, wings pale yellowish hyaline, tips infuscated, veins yellowish. Clypeus very broad and low, in front faintly rounded, with appressed gray hair, and some longer yellowish ones; vertex plainly rounded from

eye to eye; anterior ocellus rather larger than the posteriors, latter plainly a little nearer to each other than to the eyes; all front of head and vertex with appressed pale hair, no longer hairs; occiput and base of front coxæ with a few long hairs; antennæ very slender, third joint only about one-fourth longer than the fourth, which is no longer than any of the four following. Pronotum rather long, arcuate behind, clothed with appressed hair, as likewise the rest of the notum and the propodeum, latter rather low and evenly rounded, pleura without hair. Legs very long and slender especially the tarsi, coxæ and femora with only fine pubescence, front tibia with a few minute bristles beneath, front basitarsus with a few minute spines above, mid tibia with two or more rows of bristles above, hind tibia with two rows of about ten low teeth, each tipped with a minute bristle or spine, inner spur of hind tibia scarcely two-fifths of the basitarsus, hind tarsi especially long, claws with a minute tooth toward base. Abdomen convex, not very broad in middle, with appressed fine pubescence, only a few pale hairs near tip, none on venter except near tip.

Fore wings with marginal cell rather long, its outer side scarcely curved, and the end is out almost as far as the end of the third submarginal cell; second submarginal much longer than high, base more oblique than tip, third submarginal but little longer than the second, but wider behind, upper side about two-thirds of the lower; first recurrent ends at middle of the second submarginal, second recurrent a little before middle of the third submarginal, basal a little disjointed from transverse.

Length 14 mm., fore wing 10 mm.

From Ft. Reynolds, Colo. (Mills coll., Peabody Acad.). Type M.C.Z. 17042.

By the rounded vertex, long legs, and appressed hair, and venation it is similar to *P. incitus*; that species has a black abdomen.

***Priocnemis pretiosa* sp. nov.**

♂ Black, tarsi more brown, wings yellowish on basal two-thirds, beyond infuscated. Body with minute appressed pubescence, practically no long hairs, two or three each side

on vertex, and a few at tip of the abdomen. Face rather broad, vertex arcuate from eye to eye, clypeus moderately broad, slightly rounded below, eye extending a little below corner of clypeus; antennae situate close to clypeal margin, moderately long and slender, third joint hardly as long as first and second combined, and barely if any longer than the fourth; anterior ocellus larger than the posteriors, latter plainly nearer each other than to the eyes; pronotum moderately long, angulate behind; propodeum low, finely punctate, a faint median line; abdomen rather slender, almost polished, ventral plate a little longer than broad, slightly produced in middle behind, surface hairy, with some stout bristles on margin, a row of longer ones across tip; legs moderately long, front tibia without bristles, none above on front basitarsus, mid tibia with two rows of minute bristles above, hind tibia with scarcely more distinct bristles above, about eight in each row, inner spur of the hind tibia more than one-half of the basitarsus. Wings rather slender, out to the stigma yellow, and with yellow veins, a brown cloud in the basal half of marginal cell, in most of second submarginal, and most of second discoidal cells; a similar, broad, brown cloud over the apex; hind wings yellow on basal part, tip infuscated; in forewing the marginal is pointed at tip which is less than length of marginal from tip of wing, and beyond the end of third submarginal; second submarginal scarcely longer than high, third submarginal a little longer, but narrowed above, first recurrent ends at middle of second submarginal, second recurrent ends before middle of third submarginal, basal and transverse widely disjointed.

Length 5 mm., fore wing 5 mm.

One from Mt. Lemon, Santa Catalina Mts., Arizona, 6000 ft., 27 July (J. Bequaert). Type M.C.Z. 17043.

A female taken at same time is wholly black with blackish wings; its structure is closely similar to the male; it may be the female of the species.

***Priocnemis arizonica* sp. nov.**

♀ Very similar to *P. facetus* except that the abdomen is

wholly black, and no band over the basal and transverse nervure of the forewing. Head, thorax, legs, and antennæ yellowish, tips of hind tibiæ, and tips of hind tarsal joints darker, forewings with a dark cloud behind the marginal cell and another over the tip of wing, veins brown, elsewhere and the hind wing hyaline.

Clypeus broad, rounded below, clothed with yellowish hair; antennæ a little longer than in *P. facetus*, third joint a trifle longer than the fourth; ocelli subequal, posteriors nearer to each other than to the eyes; vertex nearly straight across, with two or three erect hairs each side; occiput with scattered pale hairs, similar ones on prosternum and front coxæ; pronotum rounded behind as in *facetus*; propodeum with some white pubescence each side behind near tip, also silvery pubescence on most of the pleura, and on middle and hind coxæ. Front tibia with a few bristles beneath, mid tibia with two rows of a few bristles above, hind tibia with two rows or eight or nine small, but distinct, teeth above, each tipped with a bristle; inner spur of hind tibia about two-thirds of the basitarsus. Marginal cell of fore wings pointed at tip, not its length from tip of wing, and extending as far out as the tip of the third submarginal cell; second submarginal a little longer than high, third much longer, but upper side only about two-thirds of lower side, first and second recurrent veins end at middle of second and third submarginal cells, second recurrent only faintly sinuate, basal and transverse slightly disjointed.

Length 7.5 mm., fore wing 5.5 mm.

From Tempe, Arizona, 2 Aug. (J. Bequaert).

Type M.C.Z. 17044.

***Priocnemis navajo* sp. nov.**

♀ Black throughout, abdomen polished, thorax and head finely punctate; wings dark, but darkest on tip, and in second and third submarginal cells and in the second discoidal, similar to *P. conicus*. Clypeus broad, truncate below; ocelli subequal, posteriors a little nearer each other than to eyes; vertex nearly straight across, with a few erect hairs, a few hairs on face; third joint of antennæ not as long as first

and second combined; hind margin of pronotum scarcely angulate in middle; propodeum at first nearly flat, then down-curved, without noticeable long hairs above; pleura also devoid of hairs. Abdomen without hairs except near tip and on venter; front coxæ with some long hairs, other coxæ without hairs, mid tibia spinulate above, hind tibia with the teeth and bristles like *P. conicus*, but not so large, inner spur of hind tibia about two-thirds of the basitarsus. Fore wings with marginal cell more rounded at tip, not near as pointed as *P. conicus*, about length of cell from tip of wing, stigma much shorter than in *P. conicus*, third submarginal shorter than in *P. conicus*, more like *P. pompilus*, first recurrent ends beyond middle of second submarginal, second recurrent ends a little before middle of third submarginal.

Length 7 mm., fore wing 5.5 mm.

From Apache Camp, Santa Catalina Mts., Arizona, 5500 ft., 25 July (J. Bequaert).

Differs from *P. conicus* in being less hairy, especially noticeable on mid and hind coxæ and thoracic notum; from *P. pompilus* in being more hairy, especially the front coxæ, from both species it differs by the shorter, more rounded tip of marginal cell and the shorter third joint of the antennæ.

Type M.C.Z. 17945.

***Deuteragenia pilosa* sp. nov.**

♀ Body black, with much pale hair, even on the middle of abdomen above with erect hairs; antennæ pale yellowish on base, brown beyond; mandibles pale; front legs (including coxæ) yellowish, other legs brown, the tarsi and mid tibia at tip paler, spurs brown; wings hyaline, marked with dark bands as in *D. caliptera*. Face with appressed gray pubescence, and also erect hairs, hair-basket brown; clypeus broad, truncate in front, with some long hairs; ocelli subequal, in a moderately low triangle, posteriors scarcely closer to each other than to eyes; pronotum rather long, longer than in *D. caliptera*, scarcely angulate behind; antennæ slender, third joint one-fourth longer than the fourth,

equal to first and second together; propodeum silvery each side behind, and with some short erect hairs, scarcely a trace of transverse striæ on the propodeum, and no sign of a median furrow; pleura also with fine erect hairs; front coxæ with rather short hairs in front, mid and hind tibiæ not as strongly spinulate above as in *D. caliptera*, inner spur of hind tibia less than two-fifths of the basitarsus; abdomen moderately elongate, with some erect hairs on nearly all segments above as well as below. Wings closely resemble those of *D. caliptera* and the venation is practically the same.

Length 7 mm., fore wing 6.5 mm.

From Lafayette, Indiana, 10 July (J. Bequaert). Type M.C.Z. 17046.

***Deuteragenia papago* sp. nov.**

♀ Black, with some whitish pubescence, but most of the abdomen is shining; wings wholly evenly dark; hair-basket of brown hairs. Clypeus broad, truncate in front; vertex nearly straight across; ocelli subequal, in a low triangle, posteriors plainly farther apart than from the eyes; third joint of the antennæ not as long as first and second combined; pronotum arcuate behind, mesonotum with two fine parallel lines each side, propodeum plainly striate (more so than in *D. caliptera*), with erect white hairs; all coxæ and femora with some white hairs, tibia spinulate above as in *D. caliptera*. Abdomen with erect white hairs on basal segment above, and longer, more numerous hairs near tip, venter also with hairs.

Wings, uniformly fuscous, veins dark brown; marginal cell long and pointed, second and third submarginals short as in *D. caliptera*; first recurrent ends at middle of second submarginal, second recurrent ends much before middle of third submarginal, second discoidal thereby shorter than in *D. caliptera*, basal nervure interstitial with the transverse.

Length 8.5 mm., fore wing 7 mm.

From Southern Arizona (J. Bequaert). Readily separated by the uniform dark wings. Type M.C.Z. 17047.

Our four species of this genus can be separated as follows:

- 1—Wings wholly dark; hair-basket brown, body and legs and antennæ wholly black *papago*
Wings hyaline with two dark bands, or clouds 2
- 2—Hair-basket white; face and thorax with yellowish pubescence, pronotum arcuate behind; third and fourth section of marginal vein straight and oblique; spots in wing rather faint *brevis*
Hair-basket brown; face with gray or whitish pubescence; pronotum slightly angulate behind; third and fourth section of marginal vein somewhat curved, spots in wing very dark and distinct 3
- 3—Front legs and basal part of antennæ yellowish; abdomen hairy above; propodeum without median groove and no transverse striæ *pilosa*
Front legs and antennæ black; abdomen hairy only at tip, propodeum with median groove and transverse striæ *caliptera*

Phanagenia gen. nov.

Intermediate between *Ageniella* and *Cryptocheilus*. Discoidal cell without pocket; second ventral segment with strong transverse furrow; hind tibiæ with rows of small but distinct bristles above, but no teeth; last joint of hind tarsus with spines beneath in middle as other joints, marginal cell rather long and tip pointed and less than its length from tip of wing, basal disjointed from transverse nervule, claws with a tooth near middle.

Type *P. osceola* n. sp.

The last joint of the hind tarsus allies it to *Cryptocheilus*, but the very weak spines on the hind tibia with *Ageniella*. The genus includes also *Ageniella coronata* Fox, from California, and the Eastern *Ageniella bombycina* Cress.

Phanagenia osceola sp. nov.

♀ Black, in some parts with purplish reflections, tips of

antennæ paler. Clypeus broadly rounded below, with appressed hair and long erect hairs in front; vertex faintly arcuate, with a few erect hairs each side, and four in the middle; anterior ocellus rather larger than the others, posteriors a little nearer to each other than to the eyes; third joint of antennæ very long, fully one-half longer than the fourth; occiput without long hair; pronotum angulate behind, with a very few fine erect hairs above; pleura with very fine short hairs; propodeum low, evenly curved, without hairs except very fine short ones each side near tip. Legs moderately long, front coxæ with some fine long hairs in front, front tibia with minute spines below almost to the base, mid tibia with short stiff bristles above in two rows and others on sides and below, hind tibia spined in the same manner, inner spur of hind tibia not two-fifths of the very long basitarsus. Abdomen fusiform, with fine hair near tip and on apical part of venter.

Fore wings with a long marginal cell, its tip nearly as far out as the tip of third submarginal cell; stigma wholly dark, very long, nearly four times as long as broad (longer than in *P. bombycina*); second submarginal over once and a half as long as high, third submarginal longer below but not above; first recurrent ends in the second submarginal beyond middle, second recurrent ends before middle of the third submarginal; basal less disjointed from the transverse than in *P. bombycina*, and the transverse is more oblique than in that species, lower part of the basal much bowed, more than in *P. bombycina*.

Length 13 mm., fore wing 11 mm.

From Miami, Florida (A. E. Wight). Type M.C.Z. 17048.