

Papéis Avulsos de Zoologia

NEOTROPICAL *ACRONYCHES* (DIPTERA, ASILIDAE), NEW OR OTHERWISE

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ABSTRACT

Four new species of Acronyches (alexanderi, from Mogi das Cruzes, São Paulo, Brazil; geosarginus, from Paramaribo, Surinam; meruuna, from Linhares, Espírito Santo, Brazil; and plutactites, from Turrialba, Costa Rica) are described. Megonyx Hull is placed in the synonymy of Acronyches Williston, and the synonymy of Megonyx giganteus Hull with Acronyches fenestratulus Hermann is proposed.

The little-known genus *Acronyches* was originally described in a footnote to the 3rd edition of Williston's Manual (1908: 388, fig. 103), but no nominal species was ascribed to that genus at the occasion. In 1921 Hermann described three species (*willistoni*, the type-species by subsequent designation; *imitator*, and *fenestratulus*), from Paraguay and Surinam.

In 1962, Hull proposed the genus *Megonyx*, monotypic for *giganteus* Hull, defined as "related to *Acronyches* Hermann (*sic*), and distinguished by the comparatively wide vertex, the greatly reduced height of the face, widely covered with slender bristles and bristly pile, and the conspicuous, bristly, shaggy fringes above and below on the outer half of the strongly swollen hind femur" (op. cit., p. 312).

Martin (1968) described three more species of *Acronyches* (*maya*, *rarus* and *westcotti*), all from Mexico, furnishing additional diagnostic characters for the genus, which permit its separation from representatives of the family Leptogastridae. Martin examined the types of *A. imitator* and *A. willistoni* at Munich, but was not able to locate the type of *fenestratulus* Hermann.

The finding of three new species of *Acronyches* in the collections of the Museu de Zoologia, Universidade de São Paulo, the rediscovery of *imitator* and *fenestratulus*, in the same collection, and also the discovery of an interesting new species in the Museum of Comparative Zoology of Harvard University, with characters intermediary between *Acronyches* and *Megonyx* which resulted in the synonymy of the latter genus, proposed here, led me to prepare this note.

I want to express my gratitude to Prof. Dr. Howard E. Evans, Museum of Comparative Zoology, Harvard University, Cambridge,

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Acronyches Williston

Acronyches Williston, 1908: 388, fig. 103. Type-species, *willistoni* Hermann (sub. des.; Hermann, 1921: 121).

Megonyx Hull, 1962: 312. Type-species, *giganteus* Hull (orig. des.) = *fenestratulus* Hermann. *N. syn.*

The distinction between *Acronyches* and *Megonyx* cannot be maintained. One species from Costa Rica (here described as *plutactites*, sp. n.) presents intermediary characters between the two genera, namely, the face is not produced, not forming a moderately sharp angle with the epistoma, but is covered with bristly pile, up to the base of the antennae; the vertex is comparatively wide; the hind femora are swollen but do not show the shaggy fringes above and below on the outer half, only the normal vestiture. The characters employed by Hull for *giganteus* (= *fenestratulus* Hermann) are therefore merely specific characters, and *Megonyx* is to be considered a synonym of *Acronyches*.

Key to Central and South American species

1. Body mostly or largely black 3
 - Body largely brownish-yellow 2
2. Tergites of abdomen brown, with yellow posterior margin; species resembling *Blepharepium* (Brazil, Mato Grosso; Paraguay) *imitator* Hermann
 - Tergites of abdomen entirely dark-yellow, with light-yellow posterior margin (Surinam) *geosarginus*, sp. n.
3. Face moderately produced, in lateral view, forming an angle with the epistoma; wings fumose, with hyaline spots on first basal and discal cells; abdomen black, with large bluish-grey pollinose spots on posterolateral margins of tergites; hind femora greatly swollen at apical half, with dense tuft of black pile above and below (Brazil, Amazonas; Paraguay; Argentina, Jujuy) *fenestratulus* Hermann
 - Face not produced, not forming angle with epistoma; other combination of characters 4
4. Wings fumose black, with hyaline spots; posterior femora swollen; very robust flies (Costa Rica) *plutactites*, sp. n.
 - Wings hyaline, with brown or yellow spots; posterior femora normal; more or less slender flies 5
5. Wings hyaline, with central transverse brown stripe; hind tarsi yellowish-white; slender flies (Brazil, Guanabara and São Paulo) *alexanderi*, sp. n.

— Wings hyaline, yellowish on anterior border; hind tarsi black; more robust flies (Brazil, Espírito Santo) *meruuna*, sp. n.

Acronyches willistoni Hermann (from Surinam) was not included in the key because it is only known from the original description.

***Acronyches alexanderi*, sp. n.**

♂ — Body length: 18 mm; wing length: 12 mm.

Head dark brown, front darker; face flat; face and occiput greyish tomentose; antennae, palpi, proboscis, mystax and all bristles brown; occipital bristles black.

Thorax chocolate-brown; mesonotum greyish-blue pollinose, with longitudinal geminate stripe showing the ground colour of thorax; scutellum greyish-blue pollinose on disc; pleurae and metanotum bare; notopleural and supraalar bristles whitish; bristle on postalar callus and all vestiture of thorax black.

Coxae chocolate-brown; legs entirely brown, posterior legs darker and shining; apex of hind basitarsus and remaining segments of hind tarsus yellowish-white; vestiture brown and black; bristles black, except on ventral surface of middle tarsi, where they are yellowish-white; claws black.

Wings yellowish, hyaline, with transverse dark brown stripe, roughly triangular in shape, extending from Costa to anal margin, and from the anterior to the posterior crossvein; halteres dark brown.

Abdomen long and slender, broadening towards the apex, entirely black, and greyish pollinose; posterior margins of tergites 2-4 with very narrow yellowish stripe; pile black, yellowish at posterolateral margins of tergites; sternites black, with yellowish pile; genitalia black.

♀ — unknown.

Holotype ♂ from Mogi das Cruzes, São Paulo, Brazil, I.1939 (M. Carrera col.), deposited in the Museu de Zoologia, Universidade de São Paulo; 1 paratype ♂ from Reprêsa do Rio Grande, Jacarepaguá, Rio de Janeiro, Guanabara, Brazil, XII.1967 (M. Alvarenga col.), returned to the collection of the Museu Nacional, Rio de Janeiro.

The specific name represents a homage to Prof. Charles P. Alexander for his gigantic work in the classification of the world crane-flies.

***Acronyches fenestratulus* Hermann**

Acronyches fenestratulus Hermann, 1921: 122 (from Santa Trinidad, Paraguay).

Megonyx giganteus Hull, 1962: 312, fig. 204 (from Manaus, Amazonas, Brazil). *N. syn.*

This beautiful, highly characteristic species is represented in the collection of the Museu de Zoologia, Universidade de São Paulo, by a ♀ specimen from Calilegua, Prov. Jujuy, Argentina, II.1950

(Willink & Monrós col.). Hermann's specimen, an imperfectly preserved specimen, was collected at Santa Trinidad, Paraguay. Hull's description of *Megonyx giganteus* applies perfectly to our specimen, and so, in spite of the great geographic distance between the two nominal species, I consider *giganteus* as synonym.

***Acronyches geosarginus*, sp. n.**

♂ — Body length: 12 mm; wing length: 10 mm.

Face and face tomentum, mystax, palpi, proboscis, and their respective vestiture, yellow; basal segments of antenna yellow, third segment and style brownish; front black, sparsely brown pollinose; occiput black, with yellow pile.

Mesonotum chocolate-brown; humeri and postallar callus yellow; longitudinal geminate stripe of a brownish tinge, running from the anterior margin of mesonotum to the posterior margin, and tapering towards the apex; at the posterior margin of the humeri, in the mesonotum, there is a transverse, short, yellowish stripe, as long as the length of the humerus; sides of mesonotum grey pollinose; bristles yellow; disc of scutellum dark brown; metanotum yellow, with black spot on inferior margin, below the scutellum; pleurae yellow, with fuscous black spots on inferior margin of mesopleura and above coxae II and III.

Wings as in *imitator* Hermann; halteres yellow.

Legs entirely yellow, with brown and black hairs and bristles; hind femora darker, especially on central area in the posterior surface.

Abdomen entirely yellow, with narrow stripes of a lighter hue on anterior and posterior margins of each tergite; hairs long, mostly black, but mingled with yellow ones at posterior margins of tergites; lateral margins of tergites 2-3 with very narrow black rim; sternites entirely yellow; genitalia yellow.

♀ — unknown.

Holotype ♂ from Paramaribo, Surinam, VI.1960 (Doesburg col.). In general pattern this species is most closely related to *imitator* Hermann, differing however in the colour of the proboscis, front and occiput, the pattern and colour of mesonotum, and especially in the colour of the abdomen.

***Acronyches imitator* Hermann**

Acronyches imitator Hermann, 1921: 122 (from "Paraguay").

(Original description: "Die Art besitzt in Habitus und Färbung eine nicht zu verkennende Ähnlichkeit mit der über weite Strecken des mittleren und südlichen Amerikas verbreiteten Spezies *Blepharopium* (sic) *coarctatum* Perty.

Kopf. Gesicht und Stirne gelb, durch Bestäubung matt, Knebelbart und die feinere Behaarung unter den Fühlern gelb; Taster gelb mit gleichfarbiger Beborstung, auch die kurze Behaarung des braunen Rüssels, der Kinngegend, sowie der schwache Backenbart gelb; Hinterhau-

pt bleich gelb bestäubt mit gelber Randbeborstung. An den Fühlern sind die beiden Basalglieder gelb und gleichfarbig behaart, das lange Endglied sowie der Endgriffel dunkelbraun.

Thorax dicht ockerbraun bestäubt, die Striemenzeichnung hebt sich durch die fast goldgelbe Farbe ihrer Bestäubung sehr lebhaft ab; die Schulterbeulen, die Postalarhöcken, das Schildchen sowie die völlig nackten Pleuren ebenfalls gelb bestäubt. Die Seitenborsten des Mesonotum rotgelb.

An dem Abdomen sind die beiden ersten Segmente rotgelb und an den Seiten mit längerer abstehender gelber Behaarung versehen; der dritte Abschnitt besitzt eine sehr breite dunkelbraune Querbinde, die nur am Vorder- und Hinterrande die Grundfarbe bindenartig frei lässt; die folgenden Segmente mit Ausnahme der Hinterränder matt schwarz, nach rückwärts mit dünner goldschimmernder Bestäubung bereift, die zarte anliegende Behaarung schwarz.

An den Beinen sind die Schenkel und die Schienen glänzend gelbbraun, mit zarter, anliegender, vorwiegend schwarzer Behaarung. Schienenborsten gelb. Die gebräunter Tarsen mit gelber Behaarung und Beborstung, die Krallen schwarz.

Die nur sehr wenig graugetrübbten Flügel sind an der Wurzel und am Vorderrande intensiv gelbbraun gesäumt, die Adern schwarzbraun. — Long corp. 18 mm, long. alar. 14 mm."

Hermann's description fits perfectly well to the specimen in the collection of the Museu de Zoologia, a ♂ from Dourados, Mato Grosso, Brazil, IV. 1937 (Serviço de Febre Amarela col.).

Acronyches meruuna, sp. n.

♀ — Body length: 18 mm; wing length: 15 mm.

Head fuscous black, ochre pollinose on face; ochre-yellow tomentum present along facial grooves; occiput sparsely ochre-yellow pollinose; mystax yellow; palpi light brown; proboscis reddish-brown on base, shining black on remaining; beard yellow; occipital hairs black.

Mesonotum fuscous black, with longitudinal geminate stripe tapering backwards, two elongated spots at the sides, humeri and postallar calli, and scutellum, of a plumbeous colour; bristles yellow; metanotum and pleurae fuscous black, with spots of ochre-brown pollinosity.

Wings hyaline, yellow on anterior margin; halteres slender, transparent yellow.

Legs shining dark brown; hind legs darker; bristles yellow, black on under surface of tarsi; internal surface of the posterior portion of hind tibia and ventral surface of hind tarsi with a somewhat dense covering of yellow hairs.

Abdomen black, with black vestiture; tergite 2 with greyish pollinose spot on anterolateral margin; tergites 2-4 with yellowish stripe at posterior margin, the stripe being more developed at the posterolateral margins; sternites black, with yellowish pollinose spots on posterior margins.

♂ — unknown.

Holotype ♀ from Parque Sooretama, Linhares, Espírito Santo, Brazil, XI.1962 (Oliveira col.), in the collection of the Museu de Zoologia, Universidade de São Paulo.

The specific name comes from the Tupi "mberu" = fly, and "una" = black.

***Acronyches plutactites*, sp. n.**

♀ — Body length: 25 mm; wing length: 18 mm.

Head black in ground colour; face and front (the latter more sparsely so) covered with grey pollinosity; mystax black, confined to epistomal margin, mixed with white bristly pile; these white bristly pile forming two separated, convergent rows, towards the base of the antennae; palpi and proboscis brown; palpi with black hair above, yellowish below; beard yellowish-white; occiput densely covered by grey pollinosity; occipital bristles yellowish; basal 2 segments and immediate base of 3rd segment of antennae light brown, remaining of 3rd segment and style black.

Thorax black; mesonotum covered with grey pollinosity; under certain lights some areas of more sparse pollinosity, at the sides of geminate longitudinal stripe, going from the posterior margin of the humeral calli to posterior margin of mesonotum, can be seen; posterior margin of humeral calli reddish-brown, the calli covered with ochre pollinosity; mesonotum with black hairs and bristles, some white hairs present on center of disc, in front of end of transverse sutures; scutellum covered with grey pollinosity; metanotum and pleurae dark chocolate-brown, covered in greater or lesser extent with mixed ochre and grey pollinosity, according to incidence of light.

Coxae chocolate-brown, covered with same kind of pollinosity as the pleurae; trochanters reddish-yellow, with shining black dot on posteroventral surface; front and middle femora reddish-brown, covered with black hairs; posterior femora swollen on distal half, yellowish in dorsal surface of basal half and on ring on apex, covered with black hairs; posterior surface of apical swollen half with dense tuft of black shaggy hairs; all knees of femora shining black; a strong black spinous bristle on posterior surface, apically, on hind femora; front and middle tibiae dark yellowish-brown, darker on apical half, with black hairs and bristles; hind tibiae yellowish on anterior surface, brownish on internal and posterior surface, covered with dense patch of short, closely-appressed yellowish-white hairs, and black bristles, in addition to black hairs on anterior surface; tarsi yellowish-brown, with black apex; hind tarsi lighter, but also black on apex; tarsal bristles and hairs black; hind tarsi with patch of yellowish-white hairs on posterior surface; claws black.

Wings fumose brownish-black, darker along veins of fore border, with more or less hyaline spots: (i) inside the 1st submarginal cell, beginning as a faint line above anterior crossvein, and increasing in size, terminating above fork of third vein; (ii) a triangular spot on the apex of 1st submarginal cell; (iii) an elongated, linear spot in the interior of marginal cell, above spot on middle of 1st submarginal cell; C, R₁, R₅ and its posterior branch,

Cu and base of second anal vein black; remaining veins more or less reddish-brown; halteres black.

Abdomen constricted at base, robust, *Polistes*-like; tergites 1-2 chocolate-brown, remaining dull black; tergite 2 with grey pollinose anterior and posterolateral margins; remaining segments in bad state of preservation, not showing vestiges of eventual pollinose markings; pile black; apical 3 tergites with white pile; sternites black, tergites 1 and 2 light brown, grey pollinose, with black-rimmed lateral margins; remaining tergites with longitudinal reddish-brown ovoid spot on middle.

♂ — unknown.

Holotype ♀ from Turrialba, Costa Rica, IV.1944 (F. Schrader col.), in the Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts.

Acronyches willistoni Hermann

Acronyches willistoni Hermann, 1921: 121 (from Surinam).

Original description: "Kopf. Gesicht und Stirne gleichmässig mit schokoladenbrauner Bestäubung bedeckt, Knebelbart und die feinere Behaarung tiefschwarz, Rüssel, Taster und Fühler braun mit gleichfalls schwarzer Behaarung, das ockerbraun bestäubte Hinterhaupt mit schwarzen Borstenkranz.

Thorax. Mesonotum dunkelbraun, mit schwach entwickelter Striemenzeichnung; die durch eine schwarze Mittellinie getrennte und das Mesonotum mit etwas lichter Bestäubung bedeckt; die Kräftigen Seitenborsten und die feinere Behaarung schwarz.

Das ausgesprochen retortenförmige Abdomen dunkelbraun und schwarz behaart; die Seiten des 1. Segmentes, die distale Hälfte des 2. und Hinterränder des 3. — 5. Segmentes mit gelbbraunen bis ocker-gelb verwaschenen Hinterrandbinden. Legeröhre schwarzbraun.

Beine düster gelbbraun, die Schenkel dunkelbraun, die gesamte Behaarung und Beborstung, sowie die sehr langen Krallen schwarz.

Die grauen, schwach hyalinen Flügel besitzen von der Wurzel an am ganzen Vorderrande eine, verwaschene gelbe Säumung, auch die im übrigen braunen Adern sind hier teilweise gelb gefärbt.

Long. corp. 17 mm; long. alar. 14 mm."

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