New and little-known species of Ephemerida from
Argentina. (Neuropt.)
By Iben Petersen, Silkeborg (Denmark).
(Written in the Text.)

As a contribution of "New Ephemeridae from Denmark,
Arctic Norway and the Argentine Republic" (Deutsch. Ent. Zeitschr.
1905) descriptions here follow of some new species from Argentina.

My countryman and good friend, Mr. P. Jørgensen, Collector
viajeante de la Seccion de Botanica y Biologia vegetal
del Ministerio de Agricultura, has made the collection, partly
faring his stay at Hompland in Missiones and partly by electric
light on board a steamer on Alto Paraná, between Posadas and
Corrientes.


Mr. P. Jørgensen has captured a very fine male of this
Brazilian species at Hompland. The specimen agrees very well
with the description given by Eaton. The only thing I have
to add is, that the first joint of the setae is very dark, and that
my specimen is larger than those Eaton has mentioned. My
specimen which is preserved in alcohol, measures: Length 11 mm;
wing 11 mm; setae 10 mm.

2. *Camptocercus Jørgenseni* sp.

Longo, of (in alcohol). Head dark in front, behind yellowish
white and with two violet greyish spots. Thorax above greyish
yellow. Prothorax with two, more or less, distinct violet greyish
markings; mesothorax with five violet greyish longitudinal lines, of
which the two side lines are touching each other in front, and the
three middle ones are running together banded. Abdomen dorsally
violet greyish with a fine light middle line on 2nd to 7th segment.
Each of these segments with two light spots on each side of the
longitudinal line and with light border behind. The 8th segment
darker, without the middle line and the light border and with
only one light spot on each side. The 9th segment with a fine
dark longitudinal line and two small dark spots. Abdomen ventrally
carefully lined greyish with a fine light middle line and with
one or two dark, curved longitudinal stripes on each side of
segments 2 to 9. Spiracles on segments 2—5 with a dark lunate
spot. Fore legs white with a violet greyish tinge; hinder legs
and ceco light. Wings vitraceous. Costa, subcosta and radius
violet greyish to a little beyond the middle. The other straum
Fig. 1. Comparsus Hageniinus. 

- Fore leg, b fore wing, c hind wing, d spinal joint with claws of fore leg (hind wing more enlarged than fore wing).

only visible when the wing is held up to the light. Forelegs and penis pale yellowish. Image a is pale on the ventral of abdomen, and the most of nerves in the wings have a fine violet grayish tinge.

Length 9 mm.; wing 10 mm.; 11 mm.

Collected by my friend Mr. F. Jürgensen on board a steamer on Alte Peninsula, after whom I name the species.

The specimens were captured in great numbers by night at the electric light.

The most interesting feature of the species is the forelegs, which is bluish at the base.

3. Comparsus argentinus n. sp.

Head above and behind dark. Prothorax above violet grayish, mesothorax paler with three dark longitudinal lines. Abdomen dorsally violet grayish with a white median line and with an indistinct pale spot on each side of segments 2–8. Segments 8 and 9 with a dark border behind. Venter pale yellowish with an indistinct, darker oblique stripe on each side of segments 2–8. Setae white. Forelegs and penis yellowish. Fore legs dark violet grayish; tarsus distinctly 6-jointed, and the 1st, 3rd, and 5th joint dilated in the middle. Wings violet with faint violet tinge. Subcosta and radius in the fore wings dark violet grey to a little beyond the middle. The other longitudinal nerves and the greater part of the transverse veins grayish yellow.

Length 13 mm.; wing 13 mm.; setae 30 mm.

One male, preserved in alcohol, was collected together with Comparsus Jürgensen. In the nervature of wings the species agrees with Comparsus oblongus.

Walk, but it differs in the shape of forelegs and penis.

4. Thraulus Voelmaeini n. sp.

Upper part of eye dark brown, lower black. Thorax dark brown with a median yellow-brown band. Abdomen dorsally dark greyish brown with the tip of each segment yellowish brown. Setae greyish brown without distinct annulations. Fore femur and tibia brown, tarsus paler. Forelegs (shrivelled up by the spirit) dark brown at the base, yellow-brown towards the apex. Wings with an intense brown tinge. Costal and subcostal areas and the nerves blackish brown as in Chorosceps Pictus.

Length 6 mm.; wing 7.0 mm.; setae 10–13 mm.; the middle one is the longest.

The description is made from a single specimen, a male, preserved in alcohol and collected at Borland in Misiones.

The species is easily recognized by the intense brown tinge on the wings. I have placed it in Thraulus, though there is some difference in the nervature in the hind wings and in the
proportion between the length of tarsus and tibia of the fore leg. The tibia is 1 1/4 times as long as the tarsus, and the tarsus is a little longer than the femora.

Fig. 4. Thrasus Foldenieri. Fore leg, fore wing and hind wing (the latter more magnified than fore wing).

5. Thrasus bowplandi n. sp.
Upper portion of eyes greenish blue, lower black. Thorax light brown. The 2nd to 8th segment of abdomen transparent whitish with a U-shaped, reddish brown figure on the dorsum of the segments; the figure touches the hind border of the segment. On the sides of this figure there are found 3 small, round spots; the largest one is placed half way between the front and hind borders, and the other two, of which the apical one is the largest, are placed parallel with the side margin. Along the lateral margin of all the segments there are a dark reddish brown stripe, which does not reach the angles. Segments 7—10 are yellowish red; 7th and 8th paler, and 9th and 10th darker. On the dorsum of the 7th to 9th segment an oblong, pale spot with a very fine longitudinal line. The three above mentioned side spots are also present on segments 7—9. The spiracles black. The undersides of the segments with 4 very small dark spots nearest to the front border, and with a larger one at the hind angles. Forecoxa yellowish white. Hind femora yellowish white with a reddish brown band before the middle and with a broader one at the tip. Hind tibia yellowish white. Fore wings hyaline with yellowish white longitudinal nervures and with a yellowish tinge in the costal and subcostal areas. The cross veins only visible when the wings are held up to the light. Subcoxa, radius and subradius with a small thickened part half way up the wing, more noticeable in the subcoxa and subradius. Fore and hind wings dark reddish brown clouded at the base. Length 8.5 mm; wing 8 mm.

The description is made from a single male, preserved in alcohol and collected at Bompilad. The example has lost its setae, the greater part of the forecoxa limbs and all its legs with the exception of one hind femora and tibia. It is a fine looking and an easily recognizable species. The species seems to have a from the underside. Pena seen from above.

Fig. 5. Thrasus bowplandi. Fore and hind wing (the latter more magnified than the former).

6. Thrasus Hassupi n. sp.
Female, in alcohol. Head brown; eyes black. Thorax yellowish brown, paler on the dorsum and with a fine longitudinal

Deutsch. Zentral. 1912.
dark brown line. Abdnomen light reddish brown; the hind and lateral borders of the segments darker. Femora brownish yellow and tarsus with blackish brown middle band and apex. Tibia and tarsus with yellowish; the apical joint of tarsus dark brown. Claw of each segment a with tarsus distinct. The ventral lobe of the 2nd segment formed as shown in the figure. Fore wings with a strong reddish brown tinge, especially in the costal and subcostal areas; the apical part of wings less coloured than the basal part. The costa, subcosta and radius dark reddish brown, and the cross veins in the ventral yellowish brown. Penes yellowish white.

Fig. 8. Thoraxus micrurus. a One of the forewings lateral and the penis, b hind wing.

The description is made from two males from Bououlia, prepared in alcohol. The specimens have lost their fore legs.

8. Calibactia triscariata n. sp.

Fig. 9. Fore wing of Calibactia triscariata.
Upper portion of eyes red brown, lower dark. Thorax light brown with a broad yellowish median stripe. Abdomen dorsally reddish with light or transluent spots, and with a short dark streak along the hind border of the first five segments and above the stigmata of the segments 1-8. Venter paler, especially towards the apex and with dark brownish oblong spots or stripes. Forcoa and legs pale yellow; the claws dark. Hind wings colourless.

Length 7 mm; wing 7.5 mm.

The description is made from only one male, preserved in alcohol and collected in Nanaimo.

9. Larva of Thrasonus.

One full grown larva was found amongst the material, and comparing the specimen with the figures on plate 3b in ‘Revisional monograph of recent Ephemeridae’ by A. E. Eaton, I have a clear conception that it belongs to the genus Thrasonus, but on

Fig. 10. Larva and pupa of Callibaetis trifasciatus.

Fig. 11. Larva of Thrasonus. Head and thorax; a double gill of 2nd pair.

the other hand I could see that it did not agree in every point with the typical larval form of that genus. I consider Thrasonus from Portugal to be the type, which A. E. Eaton also has seen from the South American I have already mentioned, that some of the South American

Petersen, new and little-known species of Ephemeridae from Argentina.

species differ considerably from the type, and I think this larva belongs to that group. The forehead is very broad, and the body is broad and, in some degree, flattened as in Kordyva. The fore femora very broad, the apical joint of the labial palp very short, and the mandible has only one blunt tooth. Thorax and abdomen light brown. Fore femora with a small dark brown band in the middle, fore tibia with two dark brown bands, a

Fig. 12. Larva of Thrasonus.

a Labium, b left mandible, c left mandible (all seen from underside), d left mandible, seen from above.

brood one near to the base and a smaller and darker one at the apex. Setas on the brown with small dark brown annulations at the base. 7 pairs of double gills; the 2nd pair the smallest. The hind angles of 8th and 9th segments prolonged into sharp lateral spines.

Length 8 mm; setas 9 mm.

10. Larva of Bethia.

Some few larvas of the common Bethia-type were found amongst the material, and 4 of them were fullgrown. As there are not yet described larvas of this genus from Argentina, I give some figures of the mouthparts and of a gill to show the likeness to our European forms. The only thing I know about South
American larvae of *Boilea*, I have found in *Helmholtz's Sammelbände. Ephemeriden*. Mannheim 1904*, by O. Ulmer*, where he described and figured a Chilian *Boilea*-larva, which differs a good deal from the Argentina, here mentioned.

The shape of head, thorax, abdomen and legs is quite the same as in European larvae. The median seta ciliated on both sides, and the outer setae on their inner side. Head light brown. Thorax light brown with a fine yellowish median line. Abdomen dorsally brown and with yellow side margins. Setae and legs yellowish. The knee and apical part of the tarsus dark brown.

Length 8 mm.

The larvae were found at Bompland, and Mr. P. Jürgensen writes, that they were common in rivulums with rapid current.