

Order Neuroptera, family Ascalaphidae

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INTRODUCTION

Hitherto 11 species of Ascalaphidae, also known as 'owl-flies', have been recorded from the Arabian Peninsula (Hölzel, 2004); at that moment only a single species (*Ptyngidricerus venustus* Tjeder & Waterston, 1977) from the United Arab Emirates was listed. Howarth and Aspinall (2002) recorded *Bubopsis hamata* Klug, 1834, and Gillett & Howarth (2004) listed *Ascalaphus* spec. from Jebel Hafit. M. Gillett & C. Gillett (2005) stated four species of Ascalaphidae were known from the UAE, but in the publication referred to by them (Gillett, 1999) only an unidentified species really from the territory of the UAE is mentioned, the others being from Oman. In the present paper five species from two subfamilies are recorded. As the sexual dimorphism, as well as the intraspecific variability may be considerable, the characteristic taxonomic features are given in a somewhat detailed form instead of a very short diagnosis.

MATERIALS AND METHODS

All examined specimens were collected in the UAE by Antonius van Harten, unless otherwise stated. The owl-flies were caught mainly with light traps which were operated in different parts of the country. The examined material is divided between UAE Invertebrate Collection and the collection of the Hungarian Natural History Museum.

Abbreviations used in the text: AL = at light; AvH = Antonius van Harten; KS = K. Szpila; LT = light trap; MT = Malaise trap; TP = T. Pape; WT = water trap.

SYSTEMATIC ACCOUNT

Subfamily **Haplogleniinae** Newman, 1853
(Eyes entire, not divided by a horizontal sulcus.)

Ptyngidricerus venustus Tjeder & Waterston, 1977

Plates 1–2

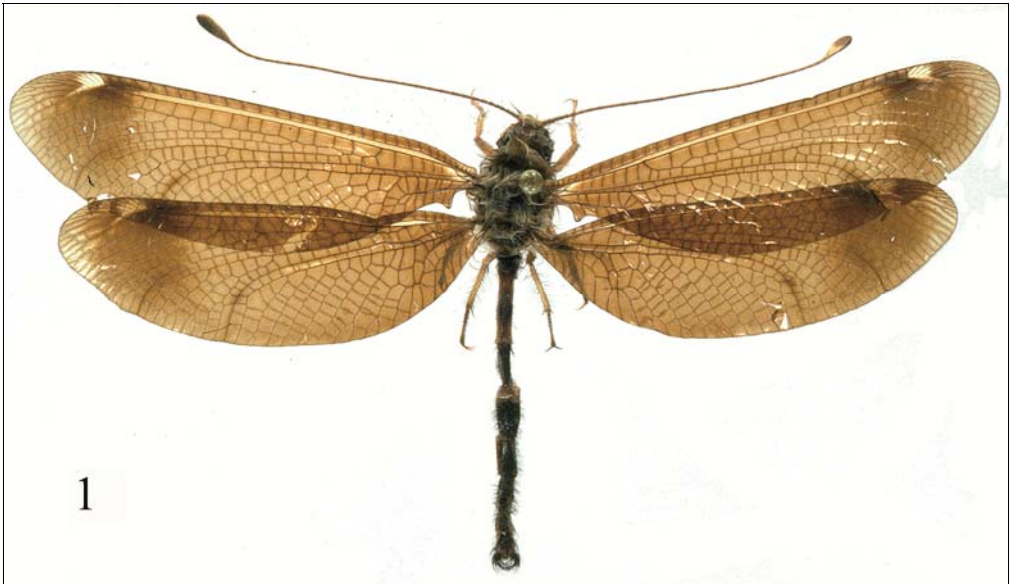
Specimens examined: Al-Ajban, 1♂, 25.ii–27.iii.2006, LT. Sharjah-Khor Kalba, near tunnel, 4♂, 2♀, 7–22.iii.2006, LT. Wadi Bih dam, 1♂, 15–22.iii.2007, LT; 1♀, 24.iv–1.v.2007, LT; 1♀, 7–13.v.2007; 1♂, 5♀, 21–30.iv.2008, LT. Wadi Maidaq, 6♂, 18♀, 18.iv.2005, AL & LT, leg. AvH, TP & KS; 1♂, 4♀, 27.iv–4.v.2006, LT. Wadi Safad, 2♀, 14–21.v.2006, LT. Wadi Wurayah, 5♂, 6♀, 12–14.iv.2005, MT+WT, leg. TP.

Characteristic features: Large species; length of the body and wings about 30 mm (fore wings slightly longer than hind wings or body). Length of antennae 20–22 mm. Wing pattern is rather characteristic, there is a broad dark band and a small dark spot on both wings distally. Other parts of wing membrane of male rather dark brown, of female almost hyaline, but the subcostal area in both sexes light brown. Pterostigma hyaline.

Distribution: UAE and Oman. Data from territories outside the Arabian Peninsula are questionable (Hölzel, 2004).

Subfamily **Ascalaphinae** Lefèbvre, 1842

(Eyes horizontally divided into two regions by a transverse sulcus)



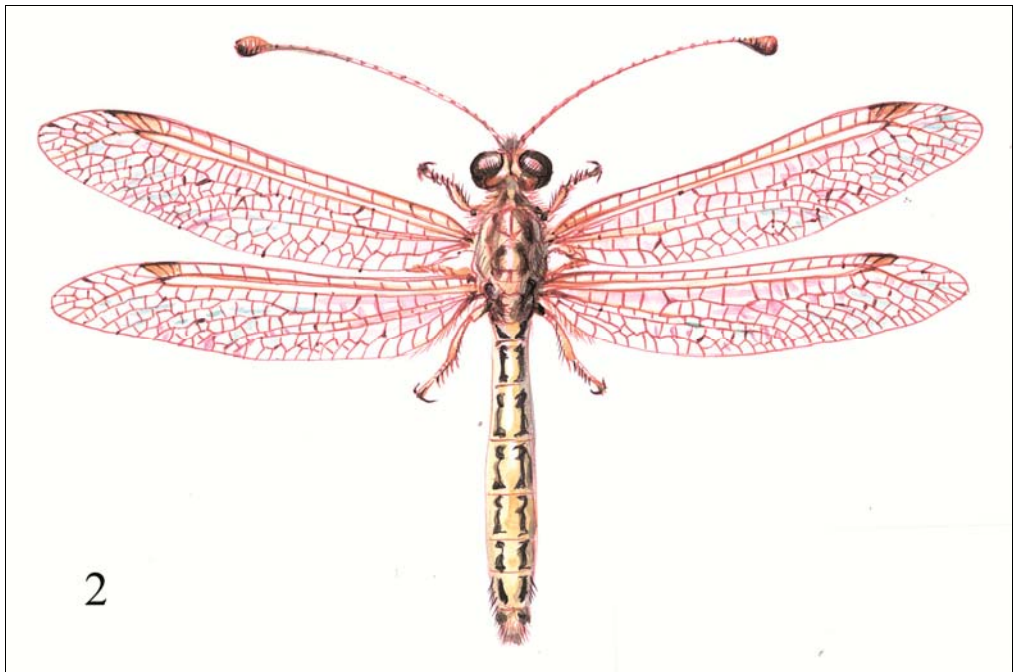
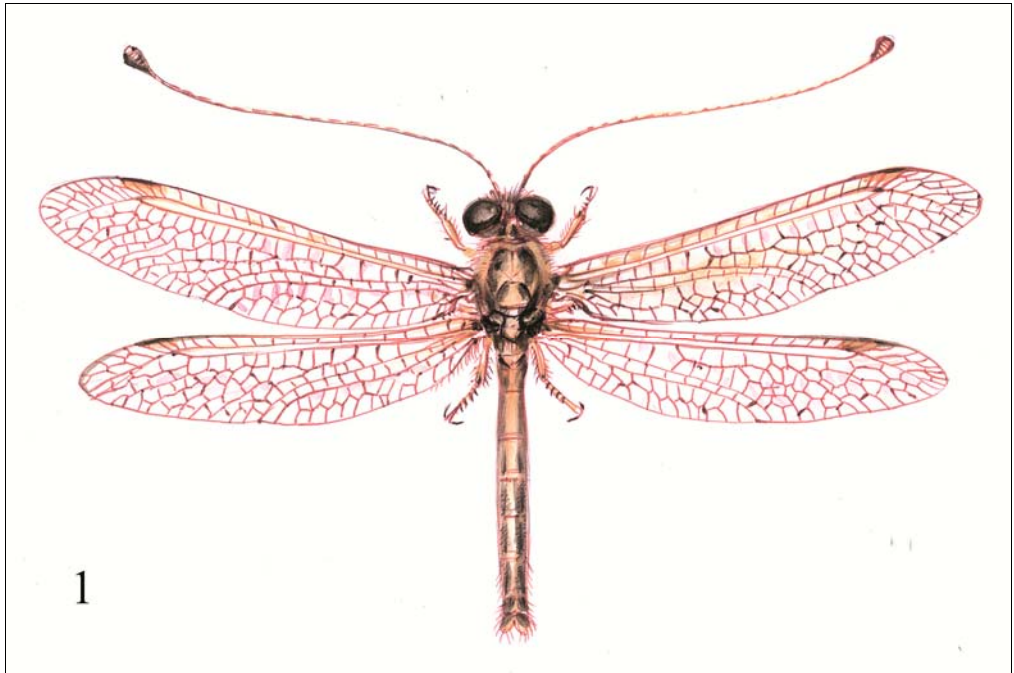
Plates 1–2. *Ptyngidricerus venustus* Tjeder & Waterston. 1: Male; 2: Female. (Photographs by Imre Retezár)

***Ascalaphus festivus* (Rambur, 1842)**

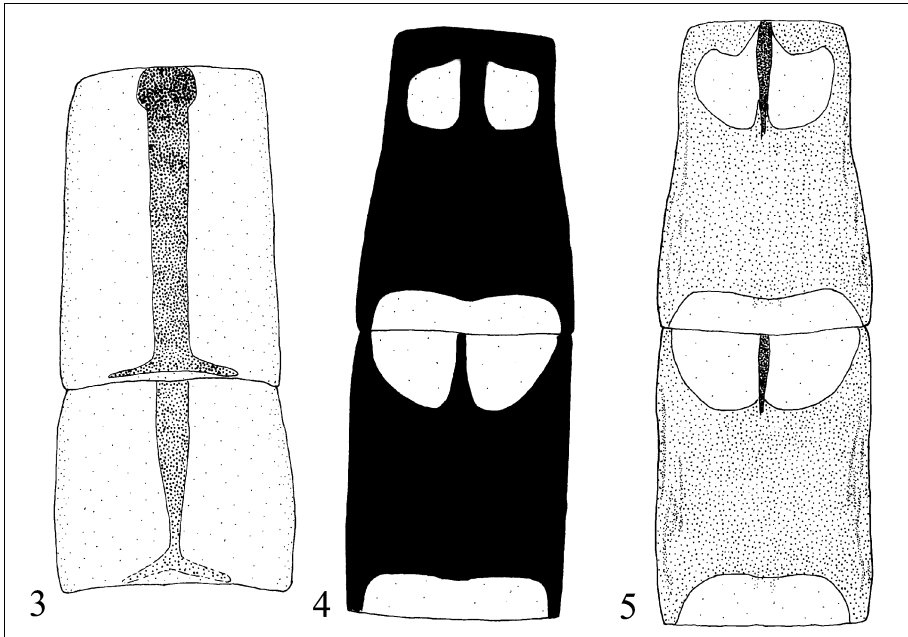
Figures 1–3

Specimens examined: Fujairah, 1♂, 17–24.vii.2005, LT; 2♀, 28.ii–1.iv.2006, LT; 2♀, 1–8.iv.2006, LT. Hatta, 1♂, 19–28.iii.2006, LT; 4♂, 2♀, 4–11.iv.2006, LT; 2♂, 4♀, 8–26.iv.2006, LT; 1♂, 24–30.v.2006, LT. Sharjah Desert Park, 1♀, 21–29.iii.2005, LT; 1♀, 6–30.iv.2008, LT. Wadi Bih dam, 1♀, 21–30.iv.2008, LT. Wadi Madaq, 1♂, 1♀, 27.iv–4.v.2006, LT. Wadi Safad, 1♂, 21.ii–4.iii.2006, LT; 1♂, 2♀, 15–22.iv.2006, LT.

Characteristic features: Length of the body and fore wing usually somewhat shorter than 30 mm, but with rather large variability. Length of antennae 21–24 mm. Wing membrane



Figures 1–2. *Ascalaphus festivus* Rambur. 1: Male; 2: Female. (Drawings by János Pál)



Figures 3–5. 3: *Ascalaphus festivus* Rambur, female, abdominal sternites 3–4; 4: *Aspoeckiella gallagheri* Hölzel, female, abdominal tergites 3–4 (dark specimen); 5: *Aspoeckiella gallagheri* Hölzel, female, abdominal tergites 3–4 (light specimen).

hyaline. There is a hair tuft on male forewing at the base of the costal margin. Thorax medially yellow or brownish-yellow. Abdomen dorsally with a yellow or ochreous strip. This strip includes small dark spots in male, and bordered laterally by dark lines which are straight in male and zigzaggy in female. Pleurites of female with yellow, white and grey patterns, while those of male usually without characteristic pattern. Abdominal sternites 3–7 yellow or ochreous with dark median strip (shortening and narrowing backwards), and with a caudal transverse line on one or more anterior segments (Fig. 3). Females usually are much more colourful than males. Male ectoproct short.

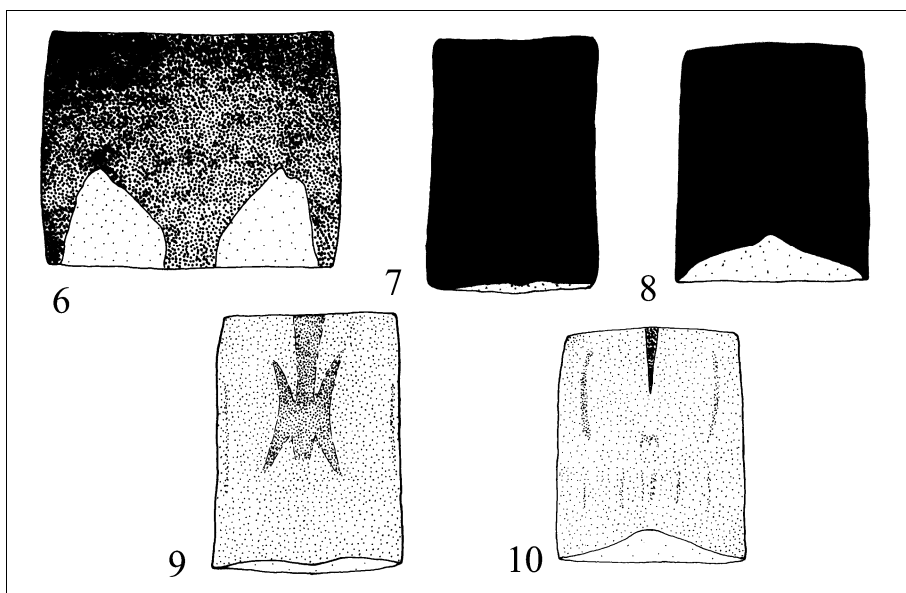
Distribution: Cape Verde Islands, Senegal, Tunisia, Israel, Saudi Arabia, Yemen, Oman. New to the UAE.

Aspoeckiella gallagheri Hölzel, 2004

Plate 3, Figures 4–5

Specimens examined: Khor al-Khwair, 1♀, 17–24.iv.2007, LT. Near Mahafiz, 1♀, 21–28.viii.2006, LT. Sharjah-Khor Kalba, near runnel, 2♀, 24–30.v.2006, LT; 1♂, 3♀, 31.v–7.vi.2006, LT; 1♀, 7–14.vi.2006, LT. Wadi Bih dam, 1♂, 2♀, 7–13.v.2007, LT; 4♂, 2♀, 30.v–5.vi.2007, LT; 10♂, 13♀, 30.iv–4.vi.2008, LT; 2♂, 2♀, 4–9.vi.2008, LT. Wadi Safad, 1♂, 14–21.v.2006, LT; 1♂, 17–24.vi.2006, LT.

Characteristic features: The measurements are highly variable: length of fore wing 23–30 mm, of body 19–27 mm, of antennae 15–23 mm. Pterostigma dark brown, otherwise, wing membrane of male entirely, of female mostly hyaline. In the latter sex subcostal and costal area (at least partly) dark brown, while the distal tip of the hind wing brownish. Abdominal tergites 3–7 black, with light spots as in Figure 4, however, in lighter specimens



Figures 6–10. 6: *Bubopsis zarudnyi* Alexandrova-Martynova, male, abdominal tergite 3; 7: *Tytomyia arabica* Hölzel, female, abdominal tergite 4 (dark specimen); 8: *Tytomyia arabica* Hölzel, female, abdominal sternite 4 (dark specimen); 9: *Tytomyia arabica* Hölzel, female, abdominal tergite 4 (light specimen); 10: *Tytomyia arabica* Hölzel, female, abdominal sternite 4 (light specimen).

medium brown with light spots and with a median dark brown line (Fig. 5). Sternites dark brown, with light transverse caudal strip. (The white colour is more extensive in males than in females.) Male ectoproct long.

Distribution: Oman. New to the UAE.

***Bubopsis zarudnyi* Alexandrova-Martynova, 1926**

Plate 4, Figure 6

Specimens examined: Khor al-Khwair, 2♂, 24.iv–1.v.2007, LT. Wadi Bih dam, 1♀, 7–13.v.2007, LT. Wadi Safad, 1♀, 15–22.iv.2006, LT; 1♀, 14–21.v.2006, LT.

Characteristic features: Moderately large owl fly; length of the body 20–25 mm, fore wing 25–30 mm, antennae, 20 mm. Wing membrane mostly fuscous, but distal part of hind wing brown and gradually darkened (in female darker than in male). Besides, Sc area of female also brown. Tergites of abdomen blackish brown, with a pair of pale ochreous posterior spots (Fig. 6). Most of the sternites dark brown, usually with some light margin. Last pregenital sternite with a pair of light strips between the median and lateral dark patterns. Male ectoproct long, with a large submedian projection.

Distribution: Iran and Oman. New to the UAE.

***Tytomyia arabica* Hölzel, 2004**

Plate 5, Figures 7–10

Specimens examined: Hatta, 1♂, 1♀, 24–30.v.2006, LT. Sharjah-Khor Kalba, near tunnel, 1♂, 1♀, 24–30.v.2006, LT; 1♂, 31.v–7.vi.2006, LT. Wadi Bih dam, 11♀, 30.v–5.vi.2007, LT; 1♂, 30.iv–4.vi.2008, LT; 1♂, 4–9.vi.2008, LT; 1♂, 2♀, 9–29.vi.2008, LT; 2♂, 1♀, 9–23.vii.2008, LT. Wadi Madaqa, 3♂, 2♀, 27.iv–4.v.2006, LT; 2♀, 1–8.vii.2006, LT. Wadi Safad, 3♂, 4♀, 17–24.vi.2006, LT.



Plates 3–4. 3: *Aspoeckiella gallagheri* Hölzel, male; 4: *Bubopsis zarudnyi* Alexandrova-Martynova, female. (Photographs by Imre Retezár)

Characteristic features: A smaller ascalaphid species; regarding the examined material, the length of the body 18–22 mm, of fore wings 20–26 mm, of antennae 15–18 mm. (According to the original description, the body and antennae may be shorter (Hölzel, 2004)). Wing membrane hyaline, pterostigma from light to dark brown. Tergites and sternites of the abdomen usually black, with a narrow posterior margin on the segments 3–7. This margin is somewhat wider in the segments 4 (Figs 7–10) and 6. In males often dark brown colour is instead of black on the sternites. Moreover, the original colour of sternites often is lost in the male specimens preserved in alcohol. Besides, there are pale specimens in both sexes with ochreous ground colour both on tergites and sternites. In these cases some patterns (Figs 9–10) are visible, which otherwise are covered by black or dark brown colour. Male ectoproct short. Distribution: Oman and Yemen. New to the UAE.



Plate 5: *Tytomyia arabica* Hölzel, female. (Photograph by Imre Retezár)

ACKNOWLEDGEMENTS

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