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Recent Holarctic species of the genus *Anaclileia* MEUNIER (Insecta, Diptera: Mycetophilidae)

With 10 Figures

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Abstract. Three new species from Bulgaria, Canada and Nepal are described: *A. beshovskii*, *A. vockerothi* and *A. nepalensis*. A key to the recent Holarctic species is given and the male genitalia are illustrated.

Introduction

MEUNIER (1904) has described genus *Anaclileia* where four fossil species from Baltic amber are included. Examining MEUNIER's specimens, EDWARDS (1941) established identity between genus *Paraneurotelia* LANDROCK and *Anaclileia*. That is why *P. dispar* and *P. dziedickii* are included in *Anaclileia*.

This study of specimens from Bulgaria, Canada and Nepal led to the establishment of three new species of this genus. Up to now, five recent species of *Anaclileia* are known only from Holarctic region.

Anaclileia MEUNIER

Anaclileia MEUNIER, 1904: 146. Type-species: *Anaclileia anacliniformis* MEUNIER, 1904 (des. JOHANNSEN, 1909).

Paraneurotelia LANDROCK, 1911: 161. Type-species: *Paraneurotelia dziedickii* LANDROCK, 1911.

Anaclileia belongs to the group of genera of tribe Sciophilini, characterized with: Sc ending in C; Cu branched; base of M_1 wanting or very weak; R_4 absent. By *Anaclileia* C produced at least one-third at the distance between apex of R_5 and M_1 , Sc_2 as a rule absent, R_5 moderately sinuate and M_1 weak at base for a considerable distance.

Basic differences between *Anaclileia* and related genera are the following:

By *Allocotocera* R_5 nearly straight and M_1 weak at base for only a very short distance.

By *Neuratelia* and *Baeopterygyna* C produced at most one-fifth of the distance between R_5 and M_1 and R_5 strongly sinuate.

Key to recent Holarctic species of *Anaclileia*

- 1 Cx_1 yellowish, Cx_2 and Cx_3 brown to black brown. 2
- All coxae yellowish or Cx_2 and Cx_3 darkened at the base. 3
- 2 R-m thrice longer than basal section of Rs. F_2 and f_3 darkened at the apex. Male genitalia — Figs. 3, 8. **A. beshovskii n. sp.**
- R-m twice longer than basal section of Rs. Male genitalia — Figs. 4, 9. **A. nepalensis n. sp.**
- 3 Cx_2 and Cx_3 darkened at the base. R-m twice longer than basal section of Rs. Male genitalia — Figs. 5, 10. **A. dziedickii (LANDROCK)**
- All coxae yellowish. 4
- 4 R-m thrice longer than basal section of Rs. Male genitalia — Figs. 1, 6. **A. dispar (WINNERTZ)**
- R-m twice longer than basal section of Rs. Male genitalia — Figs. 2, 7. **A. vockerothi n. sp.**

Anaclileia beshovskii n. sp.

Male : Head. Black, with black brown palpi and mouthparts. Scape, and pedicel dark, 1st flagellomere pale. Rest flagellomeres brown to dark brown, with short pale hairs.

Thorax. Black brown to black. Pronotum, mesoscutum, scutellum, laterotergite and posterior part of mediotergite with long pale setae.

Legs. Cx₁ yellowish, cx₂ and cx₃ dark brown to black brown. Trochanters black brown. Femora yellowish, f₂ and f₃ darkened at the apex. Tibiae yellowish, tarsi dark. Leg ratios: bt₁ : t₁ = 0,83; bt₂ : t₂ = 0,60; bt₃ : t₃ = 0,50.

Wing. Length 3,3–3,6 mm. Costa produced at about 0,4 from the distance between apex of R₅ and M₁. Sc₂ absent, r-m thrice longer than basal section of Rs. Point of furcation of Cu before the tip of Sc. All veins with macrotrichia. Haltera yellow.

Abdomen. Entirely black brown, with pale hairs. Male genitalia – Figs. 3, 8.

Female : Similar to male. Antennae shorter and finer.

Holotype : male, Bulgaria, Vratschanska Mountains, Parshevitza, 12. 6. 1982 (D. BECHEV) (UP). – **Paratypes** : 3 males, Bulgaria, Central Stara Planina, Boatin res., 6. 6. 1982 (D. BECHEV) (UP, IEMEA, coll. CHANDLER); 1 male, Bulgaria, West Stara Planina, Varshetz, Bjalata voda, 30. 5. 1985 (D. BECHEV) (CNC); 2 males and 2 females, Bulgaria, Vitosha Mt., Jarlovo, 20. 5. 1989 (D. BECHEV) (UP, SMT).

Distribution : Bulgaria – West and Central Stara Planina and Vitosha Mt.

Anaclileia dispar (WINNERTZ, 1863)

Boletina dispar WINNERTZ, 1863: 777; DZIEDZICKI, 1915: Figs. 78–81.

Paraneurotelia dispar (WINNERTZ, 1863): LANDROCK, 1927: 59; LANDROCK, 1940: 43.

Anaclileia dispar (WINNERTZ, 1863): EDWARDS, 1941: 32; HUTSON et al., 1980: 48, Fig. 191.

Male : Head. Dark brown, with brown palpi and mouthparts. Scape dark, pedicel and 1st flagellomere yellowish, the rest brown, with short pale hairs.

Thorax. Dark brown to black brown. Mesoscutum, scutellum, posterior part of mediotergite and laterotergite with long pale setae.

Legs. Coxae yellowish, trochanters dark. Femora and tibiae yellow brown. Tarsi dark. Leg ratios: bt₁ : t₁ = 0,81; bt₂ : t₂ = 0,71; bt₃ : t₃ = 0,63.

Wing. Length 2,5–3,0 mm. Costa produced at about 0,4 from distance between apex of R₅ and M₁. Sc₂ absent, r-m about thrice longer than basal section of Rs. Point of furcation of Cu before the tip of Sc. All veins with macrotrichia. Haltera yellow.

Abdomen. Entirely dark, with pale hairs. Male genitalia – Figs. 1, 6.

Material examined. Ireland: 1 male, Wicklow, nr. Kippure. Bog, 1700', 3. 6. 1970 (R. I. VANE-WRIGHT) (BMNH); 1 male, Sussex, Wadhurst Place, 11. 5. 1974 (A. E. STUBBS) (coll. CHANDLER).

Distribution : Europe – Austria, Czechoslovakia, Denmark, France, FRG, Great Britain, Hungary, Ireland, Netherlands, Sweden.

Anaclileia dziedickii (LANDROCK, 1911)

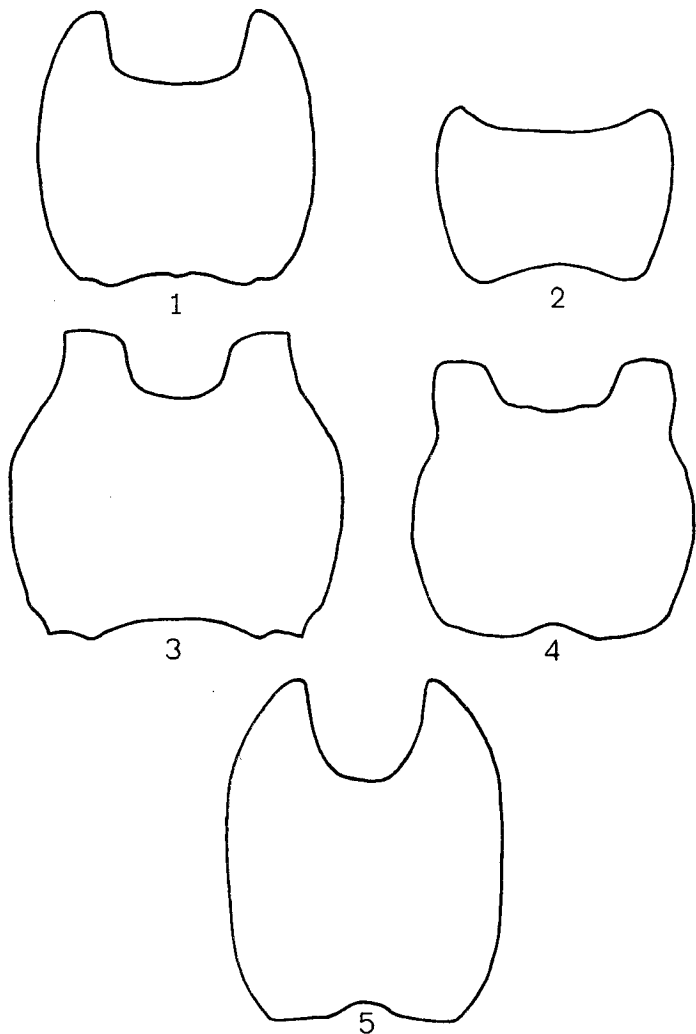
Paraneurotelia dziedickii LANDROCK, 1911: 162, Figs. 1–4; LANDROCK, 1927: 59; LANDROCK, 1940: 42, Fig. 55.

Anaclileia dziedickii (LANDROCK, 1911): EDWARDS, 1941: 32.

Male : Head. Black brown, mouthparts yellow brown, palpi yellowish. Scape and pedicel dark, 1st flagellomere pale. Rest flagellomeres brown.

Thorax. Black brown. Pronotum, mesoscutum, scutellum, laterotergite and posterior part of mediotergite with long pale setae.

Legs. Cx₁ yellowish, cx₂ and cx₃ darkened at the base. Trochanters dark. Femora and tibiae yellowish, tarsi brown.



Figs. 1-5: Tergite IX (setae not figured): 1 - *A. dispar* (WINNERTZ); 2 - *A. vockerothi* n. sp.; 3 - *A. beshovskii* n. sp.; 4 - *A. nepalensis* n. sp.; 5 - *A. dziedickii* (LANDROCK).

Wing. Length 3.4 mm. Costa produced at about 0.45 from the distance between apex of R_5 and M_1 . Sc_2 absent (according LANDROCK (1927, 1940) "sc₂ meist vorhanden, oft blaß oder fehlend"). R-m twice longer than basal section of Rs. Point of furcation of Cu before the tip of Sc. All veins with macrotrichia. Haltera yellow.

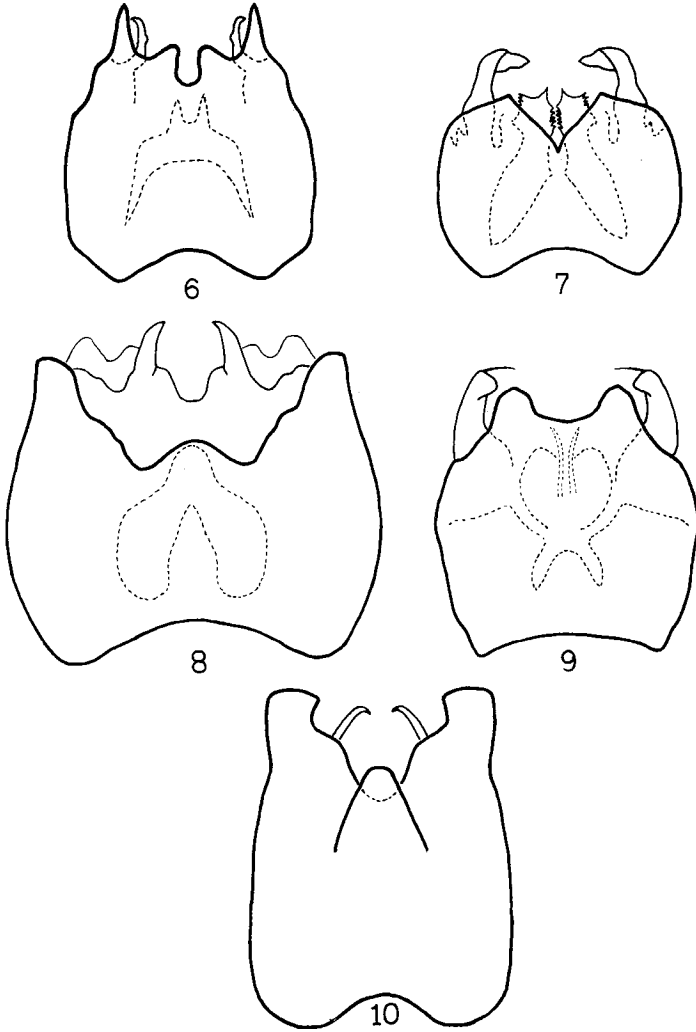
Abdomen. Entirely black brown, with pale hairs. Male genitalia - Figs. 5, 10.

Material examined. Lectotype (n. des.), male, Adamstal (Czechoslovakia), 13. 5. 11, K. LANDROCK, „*Paraneurotelia dziedickii* n. sp., K. Landrock det.“ (MMB, N1703, Syntype).

Distribution: Europe - Czechoslovakia, France.

***Anaclileia nepalensis* n. sp.**

Male: Head. Dark brown, with brown clypeus and yellowish palpi and mouthparts. Scape brown, pedicel and 1st flagellomere yellow, rest brown with short hairs.



Figs. 6–10: Male genitalia, ventral view (setae not figured): 6 – *A. dispar* (WINNERTZ); 7 – *A. vockerothi* n. sp.; 8 – *A. beshovskii* n. sp.; 9 – *A. nepalensis* n. sp.; – *A. dziedzickii* (LANDROCK).

Thorax. Entirely brown. Mesonotum with short pale setae. Scutellum, posterior part of mediotergite and laterotergite with setae too.

Legs. Cx_1 yellow, Cx_2 and Cx_3 brown. Trochanters dark brown. Femora yellow, with brown apical part. Tibiae yellow brown, tarsi brown. Leg ratios: $bt_1 : t_1 = 0,96$; $bt_2 : t_2 = 0,66$; $bt_3 : t_3 = 0,56$.

Wing. Length 3.5–4.0 mm. Costa produced at 0.3–0.35 from the distance between apex of R_5 and M_1 . Sc_2 absent, r-m about twice longer than basal section of Rs. Point of furcation of Cu before the tip of Sc. All veins with macrotrichia. Haltera yellow.

Abdomen. Entirely brown, with pale hairs. Male genitalia – Figs. 4, 9.

Holotype: male, Nepal, $28^{\circ}00'N$, $85^{\circ}00'E$, Mal. tr., 79 900', 20. 5. 1967, Can. Nepal Exped. (CNC). – **Paratypes**: 2 males, Nepal, $28^{\circ}00'N$, $85^{\circ}00'E$, Mal. tr., 79 900' 20. 5. 1967; 1 male, from same locality, 26. 5. 1967; 1 male, $27^{\circ}58'N$, $85^{\circ}00'E$, Mal. tr., 311 400',

15. 5. 1967; 1 male, from same locality, 17. 5. 1967; 1 male, from same locality, 18. 5. 1967 (all from Can. Nepal Exped., all in CNC).

Distribution: Nepal.

***Anaclileia vockerothi* n. sp.**

Male: Head. Black brown, with brown clypeus and yellowish palpi and mouthparts. Scape brown, pedicel and basal half or the whole 1st flagellomere yellow, rest brown, with pale hairs.

Thorax. Entirely dark brown. Pronotum, mesoscutum, scutellum, posterior part of mediotergite and laterotergite with pale setae.

Legs. Coxae, femora and tibiae yellowish. Trochanters dark brown. Tarsi brown. Leg ratios: $bt_1 : t_1 = 0.89$; $bt_2 : t_2 = 0.68$; $bt_3 : t_3 = 0.47$.

Wing. Length 2.6 mm. Costa produced at 0.45 from the distance between apex of R_3 and M_1 . Sc_2 absent, r-m twice longer than basal section of Rs. Point of furcation of Cu before the tip of Sc. All veins with macrotrichia. Haltera yellow.

Abdomen. Entirely brown, with pale hairs. Male genitalia — Figs. 2.7.

Holotype: male, Canada, Highlands, N. C., 3 800', 21. 6. 1957, J. R. VOCKEROTH (CNC). — Paratypes: 2 males, from same locality, 1. 6. 1957 and 26. 6. 1957, J. R. VOCKEROTH (CNC); 1 male, Canada, Pine Mountain, Rabun co., Ga., 1 400', 4. 5. 1957, W. R. MASON (CNC).

Distribution: Canada.

Abbreviations

Abbreviations of museums in which materials is deposited are as follows: BMNH — British Museum (Natural History), London, UK; CNC — Canadian National Collection, Ottawa, Canada; IEMEA — Institute of Evolutionary Morphology and Ecology of Animals, Moscow, USSR; MMB — Moravské Museum Brno, Czechoslovakia; SMT — Staatliches Museum für Tierkunde, Dresden, DDR; UP — University of Plovdiv, Plovdiv, Bulgaria.

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