

## Two new species of *Baryscapus* Foerster from New York U. S. A. (Hymenoptera: Eulophidae: Tetrastichinae)

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### Summary

Two new species of *Baryscapus* Foerster, i. e. *B. fechteri* n. sp. and *B. kulnceri* n. sp. from New York, U. S. A. were described and illustrated. Diagnostic characters of the Nearctic species of genus were discussed.

### Introduction

The genus *Baryscapus* Foerster was not known very well by the authors who has studied on Tetrastichinae for a long time. A few years ago, La Salle and Graham (1990) worked on the identity of the genus, discussed the diagnostic characters of its type species, *Baryscapus centricolae* Ashmead, and listed the synonymy of the genus. Recently, Graham (1991) gave its synonymy again and discussed some of them, and gave the diagnostic characters of the genus and made a revisional works on its species and described and keyed most of the species of the genus from the Palearctic region. Doğanlar (1992) studied on the species of the genus from Europe and Türkiye, described some new species and listed the species with their distributional and biological data.

The Present study deals with the specimens collected from some parts of New York, U. S. A. by Dr. Babiy and found in Zoologische Staatssammlung München, Germany by the author

The abbreviations used in the descriptions were taken from Graham (1991).

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*Baryscapus fechteri* n. sp.  
(Figs. 1-4)

Female: Length of body 1.5-1.7 mm

Body black with greenish tints; pedicellus, flagellum and pretarsi brown; coxae and 0.75 basal part of femora colored like body; scape and rest of legs yellow; tegulae black; wings hyaline, venation yellow, without pale break.

Head collapsed, eye 1.43 times as long as broad; mouth 1.36 malar space; pedicellus plus flagellum 0.9 breadth of mesoscutum; antenna (fig. 1) with scape 0.75 length of eye, about 5-4 times as long as broad; funicular segments equal in length, but gradually broadening distally,  $F_1$  1.56,  $F_2$  1.43,  $F_3$  1.11 times as long as broad; clava with a spine, half length of  $C_3$ . Thorax 1.45 times as long as broad, mid lobe of mesoscutum with 4+5 adnotaular setae in two rows on each side; scutellum with 2-3 pairs of setae, submedian lines slightly nearer to each other than to sublateral lines, enclosed space 2.6-3 times as long as broad; propodeal callus with 3 setae. Forewing (fig. 2) twice as long as broad, and 2.6 times as broad as hind wing, with costal cell 1.5 times as long as M; SM with 3 setae; M short about 1.66 length of ST, its front edge with 10-12 setae; PM a short stub; speculum very broad, closed below, extended as a broad bare strip below M; wing thickly pilose beyond stigma. Gaster 1.2 times as long as thorax, and 1.57 times as long as broad; ovipositor slightly exerted; tip of hypopygium at slightly beyond middle of gaster. Hypopygium as seen fig. 3.

Male: Length of body 1.4 mm. Similar to female excepts as follows: antenna (fig. 4) with scape 2.13 times as long as broad, with very small ventral plaque, its length 0.2 length of scape, and placed on upper half; pedicellus plus flagellum 1.12 times breadth of mesoscutum; pedicellus 1.66 times as long as broad, only slightly longer than  $F_1$ ; funicular segments without whorls of dark setae;  $F_1$  slightly shorter than  $F_2$ , 1.33 times as long as broad;  $F_2 - F_4$  equal in length,  $F_2$  1.66,  $F_3$  and  $F_4$  1.25 times as long as broad; clava 2.6 times as long as broad, about length of  $F_4$  plus  $F_3$  and  $1/2 F_2$ , with  $C_1$  quadrate, slightly longer than  $C_2$  which is slightly transverse,  $C_3$  about 0.55 length of  $C_2$ , spine longer than thick, about 0.6 length of  $C_3$ ; propodeum with spiracle separated by 0.4 their diameter from hind edge of metanotum. Gaster as long as, but 0.8 times as broad as thorax; 1.73 times as long as broad.

Material examined: 2 females, 1 male. Holotype female, Bancho mirage, New York, U. S. A., 18.IV.1980, swept from *Larrea tridentate* (Leg. F. Bachmaier) (in Zoologische Staatssammlung München).

Paratypes: 1 female, 1 male, Palm Desert Region, New York, U. S. A., 26.IV.1980, swept from *Atriplex canescens* (Leg. F. Bachmaier) (in Zoologische Staatssammlung München).

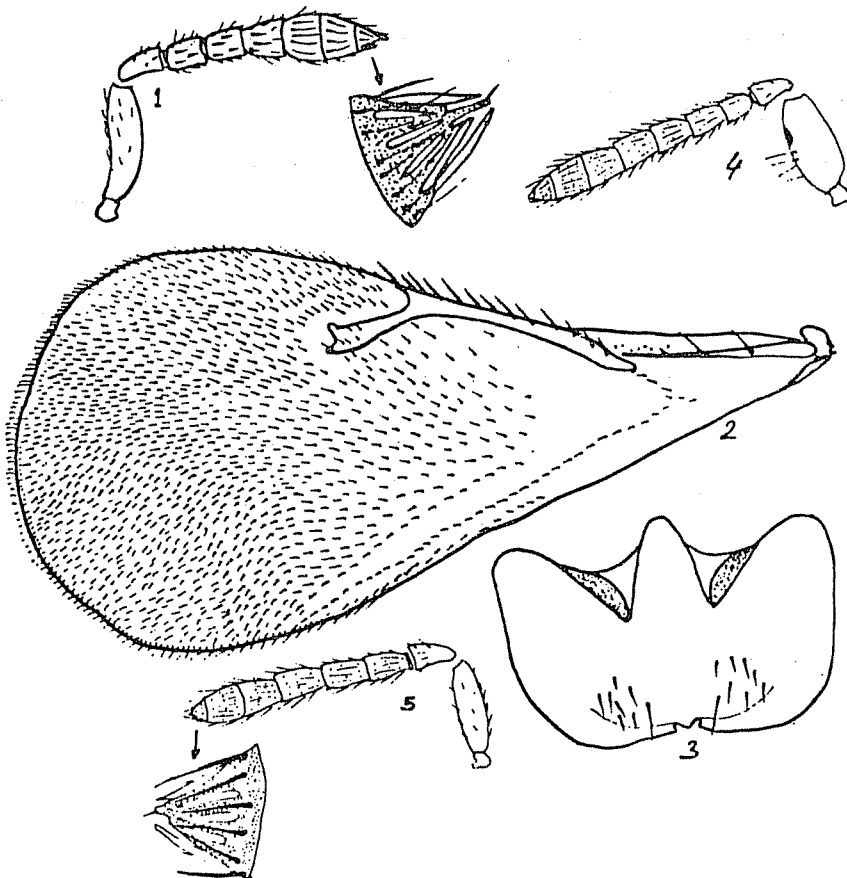
Diagnosis: The new species belongs to the evonymellae group. In the group, it resembles the holarctic species *bruchivorus* (Graham) and the Nearctic species *racemariae* (Ashmead), but it differs from the former in having forewing with very broad speculum and pale yellow scape (in *bruchivorus*, forewing with speculum at most moderate sized and scape black). The new species differs from *racemariae* in having propodeum without paraspiracular and oblique carina (Burks, 1973 as *Tetrastichus phegus* Burks). The new species differs from all the known species of the genus in having male antenna (fig. 4) with scape having ventral plaque about 0.2 length of scape (in all of the species, male antenna with ventral plaque at least 0.45 length of scape (Graham, 1991).

*Baryscapus kilinceri* n. sp.  
(fig. 5)

Female: Length of body 1.4 mm.

Body black, with bluish metallic tint; scape, coxae, 0.80 length of femora basally and pulvilli colored like body; pedicellus and flagellum fuscate; rest of legs and venation of wings pale yellow.

Head about as broad as mesoscutum; POL 2.5 OD; eyes 1.43 times as long as broad; malar space 0.4 length of eye; mouth 1.6 malar space; antenna (fig. 5) with scape 0.65 length of eye, not reaching median ocellus; pedicellus plus flagellum 1.48 breadth of mesoscutum; pedicellus 1.8 times as long as broad and as long as funicular segments which are subequal in length; funicle as broad as pedicellus proximally,  $F_3$  slightly thicker than pedicellus; 1.5 times as long as broad; clava 1.66 times as broad as pedicellus, distinctly longer than  $F_2$  plus  $F_3$ , 2.6 times as long as broad, with  $C_1$  and  $C_2$



Figs 1-4, *Baryscapus fechteri* n. sp., 1, female antenna; 2, female forewing; 3, hypopygium; 4, male antenna; 5, *Baryscapus kilinceri* n.sp., female antenna

quadrate,  $C_3$  0.4 length of  $C_2$ , spine very short, Thorax 1.52 times as long as broad; mid lobe of mesoscutum with 8(5+3) adnotaular setae in two rows on each side, and with distinct median line; scutellum only slightly broader than long; enclosed space between submedian lines 2.9 times as long as broad; propodeum 1.28 times length of dorsellum, spiracle small, its diameter far from hind edge of metanotum; callus with 5 setae; forewing with costal cell as long as M; M 2.83 length of ST, its front edge with 10-11 setae; PM a short stub; speculum moderate sized; wing beyond M moderately thickly pilose; cilia 0.25 length of ST. Gaster 1.16 times as long as thorax and 1.63 times as long as broad; last tergite slightly broader than long; ovipositor sheaths not reaching tip of last tergite; cerci placed almost ventrally.

Male: unknown

**Material examined:** 1 female. Holotype female, Falm Desert Region, New York, U. S. A. 26.IV.1980, swept from *Atriplex canescens* (Leg. F. Bachmaier) (in Zoologische Staatssammlung München).

**Diagnosis:** The new species differs from the known species of the genus, except *eudolichocerus* Graham, in having pedicellus plus flagellum 1.48 breadth of mesoscutum (in other species, pedicellus plus flagellum at most 1.2 times breadth of mesoscutum). It differs from *eudolichocerus* in having shorter gaster, mouth 1.6 malar space, scutellum only slightly broader than long (in *eudolichocerus*, gaster 1.7 times length of thorax, mouth hardly greater than malar space, scutellum 1.4 times as broad as long).

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### Özet

*Baryscapus* Foerster cinsine giren New York, U. S. A.'dan toplanmış iki yeni tür (Hymenoptera: Eulophidae: Tetrastichinae)

*Baryscapus fechteri* n. sp. ve *B. kulnceri* n. sp. türleri New York, U. S. A.'dan tanımlanmış ve önemli diagnostik karakterleri çizilmiştir. Yeni türlerin karakterleri cinsin diğer yakın türlerinin karakterleriyle karşılaştırılmıştır.

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