FOLIA ENTOMOLOGICA HUNGARICA
ROVARTANI KÖZLEMÉNYEK
Volume 86 2025 pp. 97–111
ISSN 0373-9465 (print) ISSN 2786-2798 (online)
published: 26 May 2025

New species and new records of the genus *Hyalesthes* Signoret, 1865 from the Western Palaearctic Region (Hemiptera: Cixiidae: Pentastirinae)

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Abstract – Two new species of the genus *Hyalesthes* Signoret, 1865 (Auchenorrhyncha: Fulgoromorpha: Cixiidae: Pentastirinae: Pentastirini) are described: *Hyalesthes* (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov. from Syria and *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov. from North Macedonia. Additionally, *Hyalesthes* (*Hyalesthes*) *hani* Hoch, 1986 and *Hyalesthes* (*Hyalesthes*) *thracicus* Hoch, 1986 are reported for the first time from Syria. Previous records of *Hyalesthes* (*Homalesthes*) *scotti* Ferrari, 1882 from Hungary were based on misidentifications, therefore the species is excluded from the list of the Hungarian fauna.

Key words – Fulgoromorpha, Pentastirini, *Homalesthes*, taxonomy, faunistics, distribution

INTRODUCTION

The genus *Hyalesthes* Signoret, 1865 belongs to the subfamily Pentastirinae, a clade that has been recently elevated from tribal to subfamily rank by Emeljanov & Shcherbakov (2025). The genus *Hyalesthes* comprises 32 species distributed across the Western Palaearctic Region (Emeljanov 1974, Dmitriev *et al.* 2025). The genus was comprehensively revised by Hoch & Remane (1985) with several new species mentioned as "Hoch in litt."; formal descriptions of these new species were published in the following year by Hoch (1986) and Remane & Hoch (1986). After this major, meticulously detailed work, only three new species have been described to date: *Hyalesthes verticillatus* Dlabola, 1994, *Hyalesthes* (*Homalesthes*) *restultus* Dlabola, 1994 (Dlabola 1994), and *Hyalesthes* (*Homalesthes*) *sagittus* Gnezdilov, 2024 (Gnezdilov & Orlov 2024).

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DOI: *https://doi.org/10.17112/FoliaEntHung.2025.86.97*
ZooBank: *https://zoobank.org/urn:lsid:zoobank.org:pub:1FDDC26E-8612-4678-B5A4-B3D2C9BDDB09*

Hyalesthes (*Homalesthes*) *sagittus* was described based on a male with broken process of aedeagus (Gnezdilov & Orlov 2024); additional figures of the genitalic structures of this species were published by Gnezdilov *et al*. (2024).

Taxonomical and faunistical results published in the present paper are based on the unidentified Western Palaearctic Cixiidae material in the Hungarian National Museum Public Collection Centre – Hungarian Natural History Museum, Budapest (HNHM). The examined materials are from the Carpathian Basin (Hungary, Romania, Serbia), the Balkan Peninsula (Croatia, North Macedonia, Bulgaria) and from the Middle East (Syria). In this paper, two new species of the genus *Hyalesthes* Signoret, 1865 are described: *Hyalesthes* (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov. from Syria and *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov. from North Macedonia. Two other species, *Hyalesthes* (*Hyalesthes*) *thracicus* Hoch, 1986 and *Hyalesthes* (*Hyalesthes*) *hani* Hoch, 1986 are recorded from Syria for the first time. Previous Hungarian records of *Hyalesthes* (*Homalesthes*) *scotti* Ferrari, 1882 are attributed to *Hyalesthes* (*Homalesthes*) *philesakis* Hoch, 1986. Remarks are made on the taxonomy, identification, and subgeneric placement of certain species.

Morphological terminology follows Ossiannilsson (1978), that of the aedeagus the same work and Hoch & Remane (1985). The terminology of the appendages of the aedeagus does not follow the terminology of Hoch & Remane (1985) in case of *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov. due to incomplete designations. The specimens were examined and identified by the authors, using a Leica MZ 95 stereomicroscope. The genital segments of the examined specimens were macerated in 10% KOH solution and preserved in plastic microvials filled with glycerol. Photographs were taken using a Raynox Super Macro Conversion Lens DCR-202 adapter set attached to a Nikon D7200 digital camera. Type specimens of the newly described species are deposited in the Hemiptera Collection of the HNHM.

RESULTS

The number of the currently known *Hyalesthes* species has been raised to 34 by the present paper. As a result of our recent identification efforts, 17 species of the genus *Hyalesthes* are housed in the Hemiptera Collection of the HNHM from the Western Palaearctic Region, belonging to five different species groups and two subgenera: *Hyalesthes obsoletus* group (seven species): *Hyalesthes* (*Hyalesthes*) *obsoletus* Signoret, 1865, *Hyalesthes flavovarius* Kusnezov, 1935, *Hyalesthes* (*Hyalesthes*) *thracicus* Hoch, 1986, *Hyalesthes* (*Hyalesthes*) *hani* Hoch, 1986, *Hyalesthes verticillatus* Dlabola, 1994, *Hyalesthes* (*Hyalesthes*) *yozgaticus* Hoch, 1986, *Hyalesthes* (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov. (described below); *Hyalesthes productus* group (two species): *Hyalesthes* (*Homalesthes*) *productus* Lethierry, 1889, *Hyalesthes* (*Homalesthes*) *duffelsi* Dlabola, 1974;

Hyalesthes mlokosiewiczi group (two species): *Hyalesthes mlokosiewiczi* Signoret, 1879, *Hyalesthes mavromoustakisi* Dlabola, 1959; *Hyalesthes luteipes* group (five species): *Hyalesthes* (*Homalesthes*) *luteipes* Fieber, 1876, *Hyalesthes* (*Homalesthes*) *scotti* Ferrari, 1882, *Hyalesthes* (*Homalesthes*) *philesakis* Hoch, 1986, *Hyalesthes* (*Homalesthes*) *aylanus* Hoch, 1986, *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov. (described below); *Hyalesthes angustulus* group (one species): *Hyalesthes angustulus* Horváth, 1909.

Taxonomy

Genus: *Hyalesthes* Signoret, 1865
Subgenus: *Hyalesthes* Signoret, 1865

Type species: *Hyalesthes obsoletus* Signoret, 1865, by monotypy.

Diagnosis: Hoch & Remane (1985), Anufriev & Emeljanov (1988), Emeljanov (2015).

Hyalesthes (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov.
(Figs 1–10)

Type material – Holotype: male, "Syria, Pr. As Suwayda, 1211m, Salkhad 15 km E of Bosra, 21.V.2007 leg. Gy., Ib. & I. Rozner", specimen card-mounted. Paratype: one female, same label data, card-mounted.

Description – Male (Figs 1–3, 5–10).

Total length 3.46 mm. Transition of frons to vertex smooth, vertex and frons joined at obtuse angle in lateral view (Fig. 2). Vertex moderately wide, with convexly angular anterior, concave lateral and deeply concave posterior margins. Frons above eyes 0.6× as wide as at middle, enlarged to postclypeus. Median carina of frons moderately distinguishable, almost reaching epistomal suture (Fig. 3). Middle ocellus distinct. Rostrum projecting beyond middle coxae. Eyes large. Pedicel globular. Pronotum short, with two postocular carinae, posterior margin deeply concave. Mesonotum large, 1.25× as wide as long, with three longitudinal carinae (Fig. 1). Tegula large, 2× as wide as long. Hind tibia in profile with two minor spines close to femur and with a single spine approximately at middle. Hind tibia with six major spines apically, the two lateral spines larger and longer than middle ones. First tarsomere of hind tarsus 2.4× as long as second tarsomere, both with six spines apically, lateral spines more robust and longer than middle ones.

Colouration: Vertex black, broadly margined with light yellow, continuously from vertex to margins of frons. Frons (except margins) and median carina black. Postclypeus and anteclypeus black, rostrum whitish. Pedicel black. Tegula light

yellow. Pronotum entirely light yellow, including paranotal lobes. Mesonotum black, with whitish brown line on posterior margins close to tegula. Tip of scutellum brownish. Forewings translucent, with yellow veins gradually darkened to brownish apically. Pterostigma subtle, mostly pale yellow to whitish. Thorax dark. Fore and middle femora black, hind femur light yellow. All tibiae generally light yellow with a brown spot dorsally close to femoro-tibial articulation and with a marginally brown, yellow middle stripe ventrally. Tarsi yellow, slightly darker than tibiae. Spines on legs black apically, claws dark brown.

Figs 1–3. *Hyalesthes* (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov., holotype male, habitus, 1 = dorsal view, 2 = lateral view, 3 = frontal view. Scale bar = 1 mm (photos by Anna Ágnes Somogyi)

Genitalia: Pygofer with two asymmetrical lateral processes (Fig. 7): a short one slightly curved on the right lateral margin in caudal view (Fig. 9) and a longer one being nearly straight with an outward-curving tip on the left lateral margin in caudal view (Fig. 10). Process on lower margin of pygofer tongue-shaped with simple subapical carina. Anal tube lost during dissection. Genital style with a kink approximately at middle of its shaft, shaft with a row of setae below capitulum. Capitulum hook-shaped (Fig. 8). Aedeagus asymmetrical, with three long appendages: one long on phallotheca originating ventrally ("a" appendage on Figs 5–6), and two on distal part of aedeagus originating dorsally ("b" and "c" appendages on Figs 5–6); appendage "a" slightly twisted basally and curved distally, tapering towards its tip, running from ventro-basal part of phallotheca and reaching over distal part of aedeagus, where crossing appendage "c";

appendage "b" long, tapering towards its tip and bending at an almost right angle towards ventral side, extending beyond basal part of phallotheca, therefore tip remaining visible in dorsal view (Fig. 5); appendage "c" long, slightly twisted and tapering apically, moderately curved especially in basal part, tip almost straight and crossing over appendage "a", this crossing visible also in ventral view (Fig. 6).

Female (Fig. 4): Total length 3.52 mm. General colouration almost identical with that of male; intermediate carinae on mesonotum distinct.

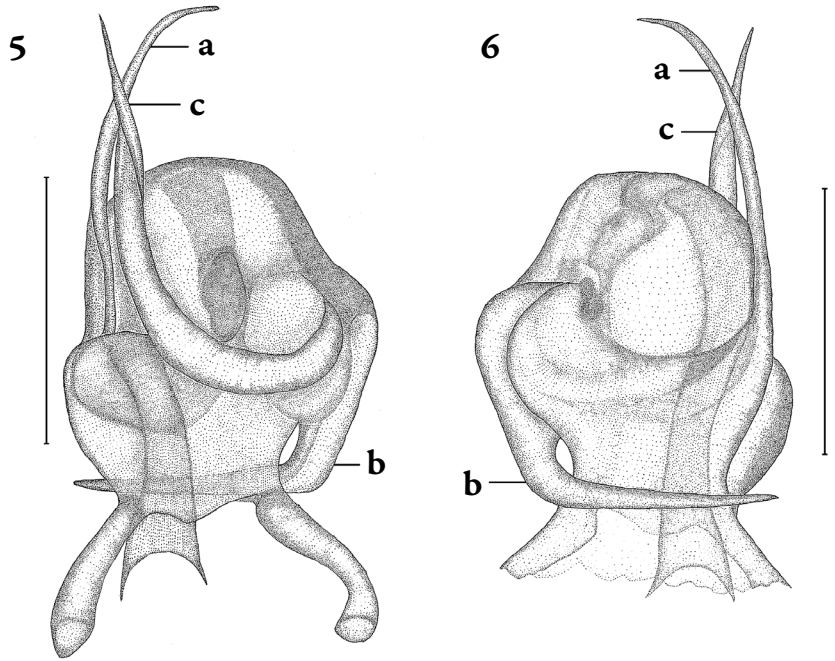
Fig. 4. *Hyalesthes* (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov., paratype female, habitus in dorsal view. Scale bar = 1 mm (photo by Anna Ágnes Somogyi)

Distribution – Syria, As-Suwayda Governorate (= Province).

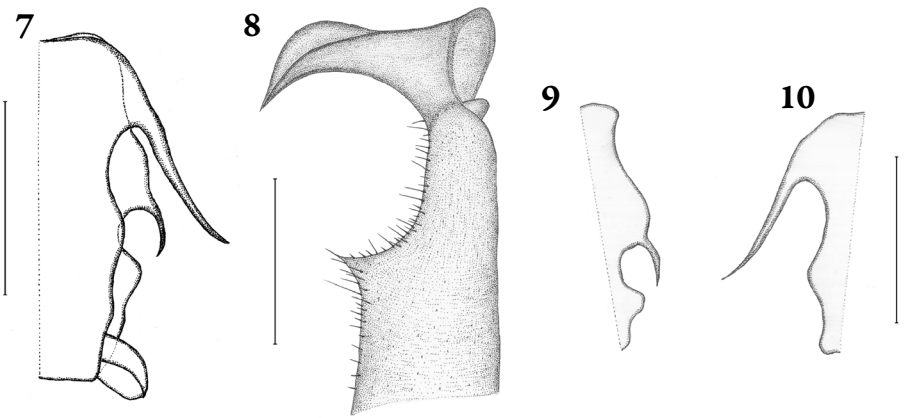
Etymology – The new species is dedicated to Kálmán Székely, devoted coleopterist, who greatly contributed to the richness of the insect collections of the HNHM. The specific epithet is proper noun in the genitive case.

Diagnosis – *Hyalesthes* (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov. is placed in the subgenus *Hyalesthes* Signoret, 1865 based on the smooth transition between the vertex and the frons in lateral view (Fig. 2), as well as the process on the lower margin of the pygofer having only a simple carina (Emeljanov 2015). The median carina of frons is moderately distinguishable, but not as distinct and long as in the species of the subgenus *Homalesthes* Emeljanov, 2015 (Fig. 3).

The species belongs to the *Hyalesthes obsoletus* species group sensu Hoch & Remane (1985) based on the asymmetrical lateral processes of the pygofer, the shape of the genital style and the general shape of the aedeagus, provided with three appendages: one long on the phallotheca (Hoch & Remane 1985: fig. 23a) and two appendages of various size on the distal part of the aedeagus (Hoch & Remane 1985: fig. 23b, c). Prior to this study, this group included six species: *Hyalesthes* (*Hyalesthes*) *obsoletus* Signoret, 1865, *Hyalesthes* (*Hyalesthes*) *flavovarius* Kusnezov, 1935, *Hyalesthes lacotei* (Dlabola, 1970), *Hyalesthes* (*Hyalesthes*) *thracicus* Hoch, 1986, *Hyalesthes* (*Hyalesthes*) *yozgaticus* Hoch, 1986 and *Hyalesthes* (*Hyalesthes*) *hani* Hoch, 1985. *Hyalesthes* (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov. differs from all of these species by the three long appendages of the aedeagus and the unique cross between appendages "a" and "c" (Figs 5–6). The species is most similar and potentially closely related to *Hyalesthes* (*Hyalesthes*) *thracicus* based on the shape of the aedeagus and the lack of the intermedial carinae on the mesonotum; however, the latter species has a short appendage "b" which does not curve back ventrally, furthermore its appendages "a" and "c" originate differently and do not cross apically (cf. Hoch & Remane 1985: figs 23d, 24d).



Figs 5–6. *Hyalesthes* (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov., aedeagus, 5 = dorsal view, 6 = ventral view. Abbrevations (a–c): appendages of the aedeagus. Scale bar = 0.2 mm (line drawings by András Orosz)



Figs 7–10. *Hyalesthes* (*Hyalesthes*) *szekelyi* Orosz et Schlitt, sp. nov., male genitalia, 7 = left pygofer in lateral view, 8 = style, 9 = right appendage of the pygofer (interior view), 10 = left appendage of the pygofer (interior view). Scale bar = 0.2 mm (line drawings by András Orosz)

Subgenus: *Homalesthes* Emeljanov, 2015

Type species: *Hyalesthes luteipes* Fieber, 1876, by original designation.

Diagnosis: Hoch & Remane (1985), Anufriev & Emeljanov (1988), Emeljanov (2015).

Hyalesthes (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov.

(Figs 11–16, 18–21)

Type material – Holotype: male, "North Macedonia, Bogoslovec, 8–9. VII.2007 leg. E. Kondorosy", card-mounted. Paratype: one male, same label data, card-mounted.

Description – Male (Figs 11–16, 18–21).

Total length 3.76 mm. Transition of frons to vertex abrupt, vertex and frons joined at obtuse angle in lateral view (Fig. 12). Vertex narrow, 1.8× as long as wide, with convexly angular anterior, straight lateral and deeply concave posterior margins, and with a well-developed median carina reaching middle of vertex (Fig. 11). Frons narrow above eyes, 0.4× as wide as at middle, enlarged to postclypeus. Median carina of frons well-developed, reaching epistomal suture (Fig. 13). Middle ocellus indistinct. Rostrum projecting beyond middle coxae. Eyes large. Pedicel globular. Pronotum short, with two postocular carinae, posterior margin concave. Mesonotum large, nearly as long as wide, with five longitudinal carinae. Middle and pair of lateral carinae as long as mesonotum,

pair of intermediate carinae only reaching one-third of mesonotum posteriorly. Tegula large. Femora thin but wider than tibiae. Hind tibia in profile with three, nearly equidistantly spaced, minor spines in proximal half. Hind tibia with six major spines apically, two lateral ones more robust and longer than middle ones. First tarsomere of hind tarsus 1.75× as long as second tarsomere, both with six spines apically, lateral spines larger and longer than middle ones.

Colouration: Vertex entirely yellow, continuously from posterior margin of vertex to almost upper half of frons. Frons with yellow lateral margins, lower half black, median carina yellow. Postclypeus black with pale yellow margins, anteclypeus dark brown. Rostrum yellowish. Pedicel dark yellow. Tegula light yellow. Pronotum yellow, paranotal lobes light brown with yellow margins. Mesonotum mostly dark with light yellowish brown spots especially on carinae and lateral margins. Scutellum white. Forewings transparent, with yellow veins darkened to brownish apically. Pterostigma distinct, mostly white, interrupted with a brown line. Thorax dark brown. Hind leg entirely yellow. Spines on legs apically black, claws dark brown.

Genitalia: Anal tube wide posteriorly and narrow anteriorly (Fig. 21). Anal column long, 0.4× as long as whole anal tube, thick and posteriorly slightly globular. Pygofer symmetrical with thick lateral margins (Figs 18, 20). Process on lower margin of pygofer thick, tongue-shaped, with two subapical carinae (Fig. 18). Capitulum of genital style hook-shaped, shaft with sparse setae (Fig. 19). Aedeagus asymmetrical, with six different appendages (Figs 14–16): two long, parallel appendages originating dorsally on distal part of aedeagus, extending beyond right side; a shorter appendage originating dorsally above appendages "a" and "b", running oppositely to left (Fig. 16); behind appendages "a" and "b" originating appendage "d" having wide, plate-like basal part clearly visible in left lateral view, and a moderately long and curved tip visible ventrally (Figs 14–15); two appendages originating on ventral side of aedeagus, appendage "f" on right side, behind tips of the two dorsal parallel appendages, slightly curved ventrally, and appendage "e" on the left side, behind distal part of aedeagus close to appendage "d" but originating differently, almost straight (Fig. 14). Tips of appendages "a" and "b" visible also in ventral view (Fig. 14).

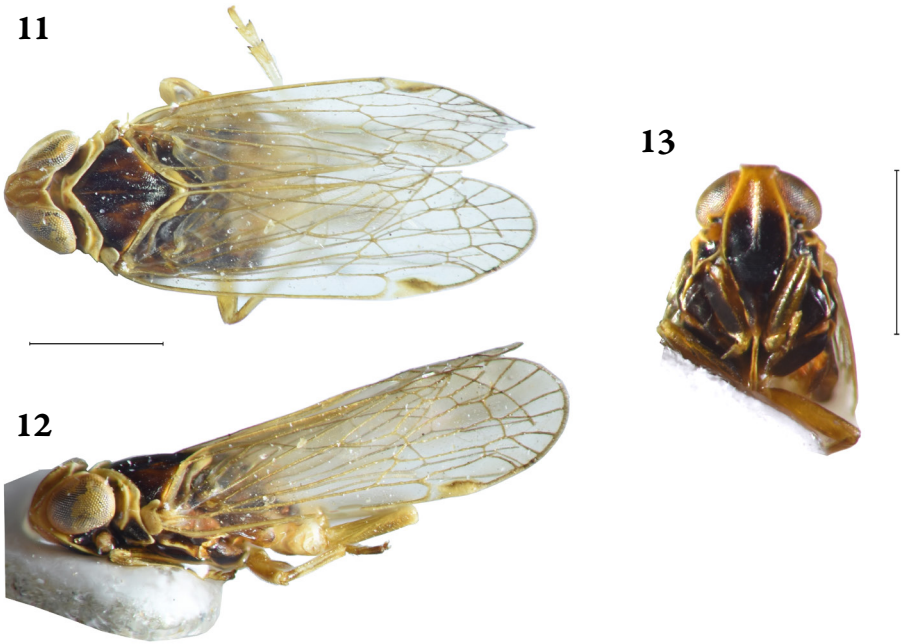
Female: Unknown.

Distribution – North Macedonia, Bogoslovec.

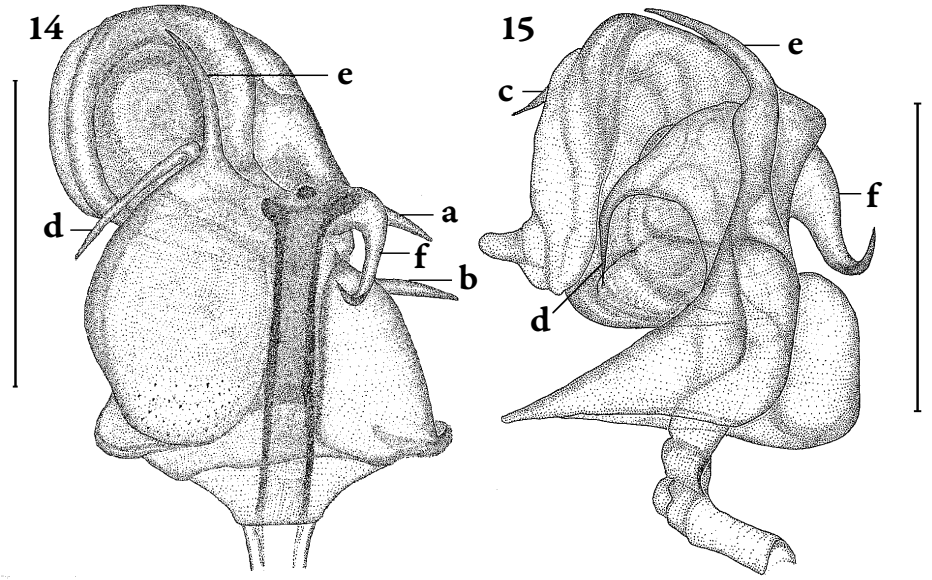
Etymology – The new species is dedicated to Attila Podlussány, devoted coleopterist, one of the most dedicated insect collectors in HNHM, who greatly contributed to the richness of insect collections of the HNHM. The specific epithet is proper noun in the genitive case.

Diagnosis – *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov. is placed in the subgenus *Homalesthes* Emeljanov, 2015 based on the abrupt transition between the vertex and frons and because of the two subapical carinae on the process of the lower margin of the pygofer (Emeljanov 2015). The median carina of frons is distinct.

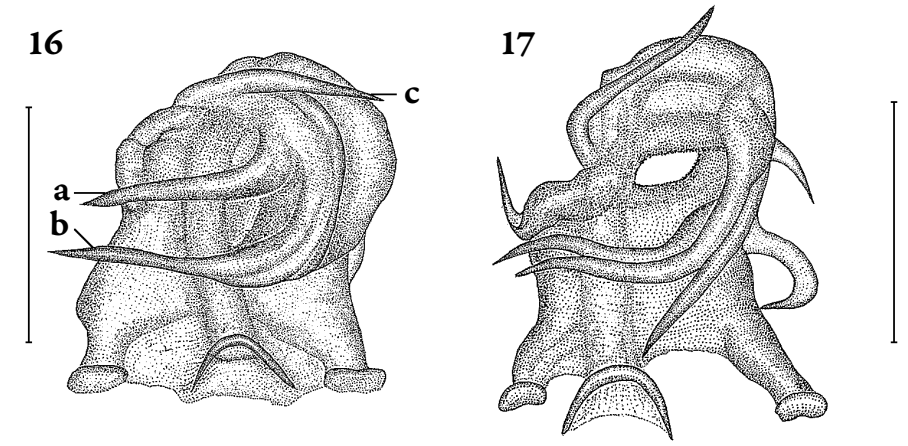
The species belongs to the *Hyalesthes luteipes* group sensu Hoch & Remane (1985) based on the presence of a distinct median carina on vertex, longitudinal carinae of mesonotum, and the general shape of the aedeagus and pygofer. Prior to this study, this group included six species: *Hyalesthes* (*Homalesthes*) *luteipes* Fieber, 1876, *Hyalesthes* (*Homalesthes*) *scotti* Ferrari, 1882, *Hyalesthes ponticorum* Hoch, 1986, *Hyalesthes* (*Homalesthes*) *philesakis* Hoch, 1986, *Hyalesthes* (*Homalesthes*) *aylanus* Hoch, 1986, *Hyalesthes* (*Homalesthes*) *veyseli* Hoch, 1986. *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov. is most similar to *Hyalesthes* (*Homalesthes*) *philesakis* Hoch, 1986 due to the general shape of the aedeagus, especially in ventral view; however the latter species has seven appendages in total, furthermore three appendages originate on the distal part of the aedeagus in dorsal view, the one positioned at extreme right side is almost straight, forming a right angle with the other two appendages, while the latter two are parallel, running from right to left (Fig. 17).



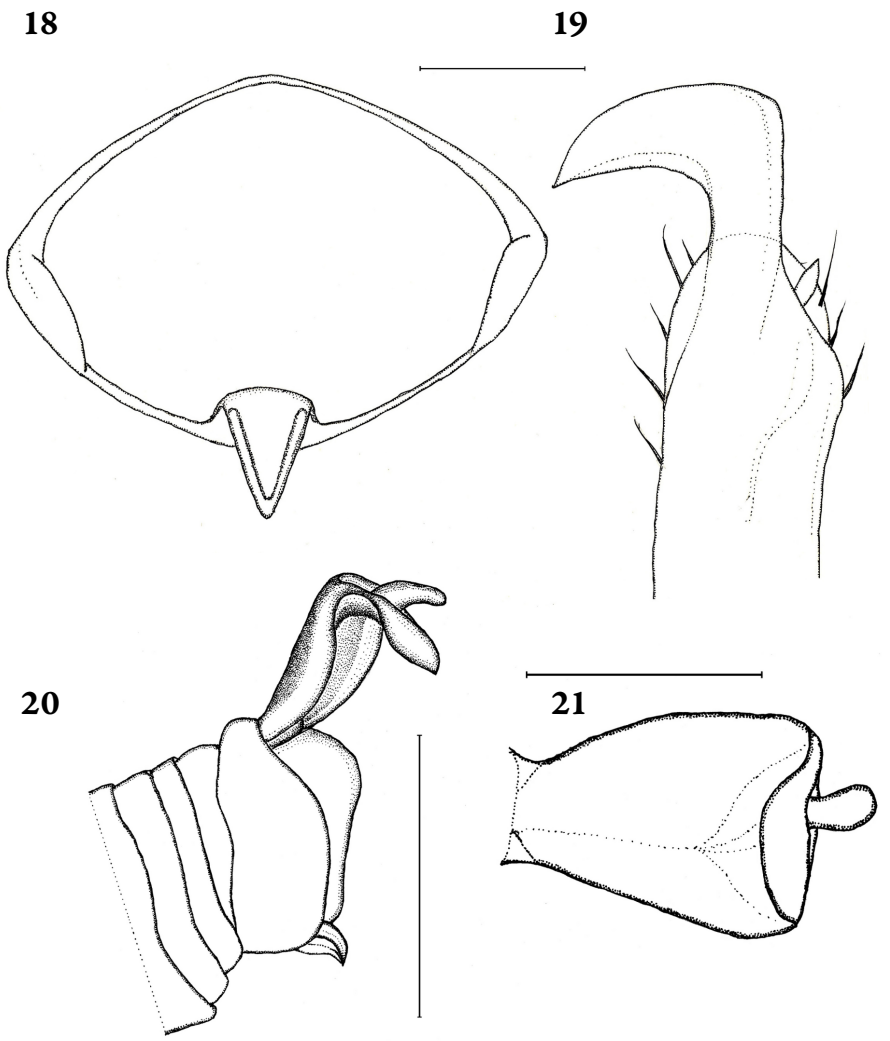
Figs 11–13. *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov., holotype male, habitus, 11 = dorsal view, 12 = lateral view, 13 = frontal view. Scale bar = 1 mm (photos by Anna Ágnes Somogyi)



Figs 14–15. *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov., aedeagus, 14 = ventral view, 15 = left lateral view. Abbrevations (a–f): appendages of the aedeagus. Scale bar = 0.2 mm (line drawings by András Orosz)



Figs 16–17. Aedeagus of *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov. and that of *Hyalesthes* (*Homalesthes*) *philesakis* Hoch, 1986 in dorsal view, 16 = *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov, 17 = *Hyalesthes* (*Homalesthes*) *philesakis*. Abbrevations (a–c): appendages of the aedeagus. Scale bar = 0.2 mm (line drawings by András Orosz)



Figs 18–21. *Hyalesthes* (*Homalesthes*) *podlussanyi* Orosz et Schlitt, sp. nov., male genitalia, 18 = pygofer process (lower margin), 19 = style, 20 = left pygofer in lateral view, 21= anal tube in ventral view. Scale bars = 0.15 mm (Figs 18–19), 0.5 mm (Fig. 20), 0.3 mm (Fig. 21) (line drawings by András Orosz)

Faunistics

Hyalesthes (*Hyalesthes*) *thracicus* Hoch, 1986
(Fig. 22)

Material examined – Syria: As Suwayda Province, 1211 m, Salkhad, 15 km E of Bosra, 21.V.2007, leg. Gy., Ib. & I. Rozner, one male.

Remarks – First record from Syria. It was recorded from Greece and Turkey by Hoch & Remane (1985) as well as from Jordan by Orosz & Dér (2004). The examination of the Syrian specimen and comparison with figures of the holotype provided by Hoch (1986) concluded that the species should be placed in the subgenus *Hyalesthes* Signoret, 1865 based on the presence of a single carina on the lower appendage of the pygofer (cf. Hoch 1986: fig. 1a–d).

Hyalesthes (*Hyalesthes*) *hani* Hoch, 1986
(Fig. 23)

Material examined – Syria: Latakia Province, Jabal An Nusayriyah, Al Maesrat, 600 m, 29.V.2004, leg. K. Székely, one male.

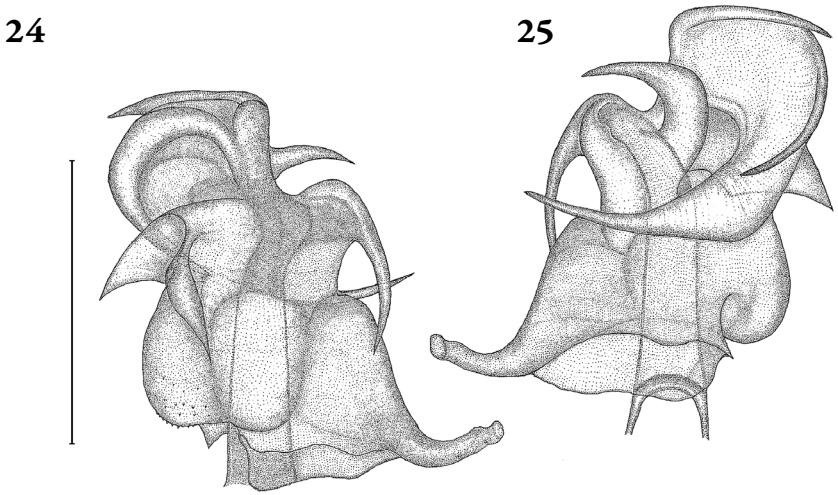
Remarks – First record from Syria. It was described and so far it has been know only from Lebanon. The examination of the Syrian specimen and comparison with figures of the holotype presented by Hoch (1986) concluded that the species should be placed in the subgenus *Hyalesthes* Signoret, 1865 based on the presence of a single carina on the process of the lower margin of the pygofer (cf. Hoch 1986: fig. 9a–d).

Hyalesthes (*Homalesthes*) *scotti* Ferrari, 1882
(Figs 24–25)

Material examined – Croatia: Crikvenica, 1.VII.2001 leg. K. Székely, six males, three females.

Remarks – The species is distributed in the Mediterranean area of the Western Palaearctic Region (Hoch & Remane 1985). The examination of the Croatian specimens and comparison with figures and photos of the lectotype provided by Hoch (1986) concluded that the species should be placed in the subgenus *Homalesthes* Emeljanov, 2015 based on the well-developed, long carina on the frons (cf. Hoch & Remane 1985: fig. 54b) and the double carinae on the appendage of the lower margin of the pygofer (cf. Hoch & Remane 1985: figs 55–57b, pl. 2b). Additional drawings of the male genitalia are provided in Figs 24–25.

Figs 22–23. *Hyalesthes* (*Hyalesthes*) spp. males, habitus, dorsal view, 22 = *Hyalesthes thracicus* Hoch, 1986, 23 = *Hyalesthes hani* Hoch, 1986. Scale bar = 1 mm (photos by Anna Ágnes Somogyi).



Figs 24–25. *Hyalesthes* (*Homalesthes*) *scotti* Ferrari, 1882, aedeagus, 24 = ventral view, 25 = dorsal view. Scale bar = 0.2 mm (line drawings by András Orosz)

Hyalesthes (*Homalesthes*) *philesakis* Hoch, 1986
(Fig. 17)

Material examined – Hungary: Budapest, 9.VII.1899, leg. Uhlig, one male (det. Á. Soós in 1952); Budapest, Budafok, Sztudva, 7.VII.1902, leg. G. Horváth, one male (det. G. Horváth); Budapest, Buda, 29.VI.1886, leg. G. Horváth, two males (det. G. Horváth); Budapest, date unknown, leg. Bartkó, one male (det. Á. Soós in 1952); Tihany, 11.VII.1928, one male (det. L. Tóth in 1936 and Á. Soós in 1952); Simontornya 19.VII.1933, leg. F. Pillich, one male (det. W. Wagner in 1934 and Á. Soós in 1952); Budapest, 30.VII.1902 leg. Uhlig, four males, one female (det. G. Horváth). Romania: Déva [= Deva], 1916, leg. G. Horváth, three males, three females (det. Á. Soós in 1952); Báziás [= Baziaş], date unknown, leg. Újhelyi, three males (det. Á. Soós in 1952); Nagyenyed [= Aiud], 19.VI.1895, leg. G. Horváth, one male (det. G. Horváth); Mehádia [= Mehadia], 1909, leg. Újhelyi, seven males, three females (det. Á. Soós in 1952). Serbia: Vrdnik, leg. J. Pável, two males (det. G. Horváth).

Remarks – Specimens from Hungary, Serbia and Romania, deposited in the Hemiptera Collection of the HNHM, identified as "*Hyalesthes luteipes* var. *scotti*" by Géza Horváth, Árpád Soós, László Tóth and Wilhelm Wagner have been examined and revised in course of the present study. Identifications of all specimens by the aforementioned workers were based on external morphological characters only. Examinations of the male genitalia of these specimens revealed that they pertain to *Hyalesthes* (*Homalesthes*) *philesakis* Hoch, 1986. In lack of voucher specimens *Hyalesthes* (*Homalesthes*) *scotti* Ferrari, 1882 is deleted from the checklist of Hungary, but its presence in the country is expected.

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Acknowledgements – The authors are grateful to Anna Ágnes Somogyi (HNHM) for taking photos of the specimens and for her contributions to our work in the Hemiptera Collection. Our sincere thanks are expressed to Előd Kondorosy (MATE Georgikon Campus, Keszthely) for information about specimens collected by him, and to Vladimir Gnezdilov (Zoological Institute of Russian Academy of Sciences, St. Petersburg) and Dávid Rédei (National Chung Hsing University, Taichung) for their valuable comments and corrections on the manuscript. Special thanks to Zoltán Vas (HNHM) and Viktória Szőke (HNHM) for their corrections provided to the manuscript, as well as for their endless patience throughout the revision process.

REFERENCES

Anufriev G. A. & Emeljanov A. F. 1988: Suborder Cicadinea – (Auchenorrhyncha). – In: Ler P. A. (ed.): *Keys to the insects of the Far East of the USSR Volume II.* Nauka, Leningrad, pp. 12–495.

Dlabola J. 1994: Ergänzungen zur iranischen, israelischen und benachbarten Zikadenfaunen mit Beschreibungen 30 neuer Taxone (Homoptera, Auchenorrhyncha). – *Acta musei Nationalis Pragae*, *Series B, Historia Naturalis* **49**(1–4): 41–110.

Dmitriev D. A. *et al.* 2025: *Hyalesthes* Signoret, 1865. World Auchenorrhyncha Database. TaxonPages. Available from: https://hoppers.speciesfile.org/otus/27076/overview (accessed 1 February 2025)

Emeljanov A. F. 1974: Proposals on the classification and nomenclature of areals. –*Entomological Review* **53**(3): 11–26.

Emeljanov A. F. 2015: *Planthoppers of the family Cixiidae of Russia and adjacent territories.* – KMK Scientific Press Ltd, St. Petersburg, 252 pp.

Emeljanov A. F. & Shcherbakov D. E. 2025: A remarkable new genus of Cixiidae (Homoptera) from Malaysia. – *Entomological Review* **104**(7): 443–453. https://doi.org/10.1134/s0013873824070029

Hoch H. & Remane R. 1985: Evolution und Speziation der Zikaden-Gattung Hyalesthes Signoret, 1865 (Homoptera Auchenorrhyncha Fulgoroidea Cixiidae). – *Marburger Entomologische Publikationen* **2**(2): 1–427.

Hoch H. 1986: Acht neue Arten der Gattung Hyalesthes Signoret, 1865 (Homoptera Fulgoroidea Cixiidae) aus dem ostlichen Mittelmeergebiet. – *Marburger Entomologische Publikationen* **2**(3): 87–122.

Remane R. & Hoch H. 1986: Sechs neue Arten der Gattung Hyalesthes Signoret, 1865 (Homoptera Fulgoroidea Cixiidae) von den Mittelatlantischen Inseln und aus dem Irak. – *Marburger Entomologische Publikationen* **2**(3): 123–154.

Gnezdilov V. M. & Orlov O. V. 2024: A new species of the genus Hyalesthes Signoret, 1865 (Hemiptera: Fulgoroidea: Cixiidae) from the Russian Black sea coast – Western Mediterranean faunal element in the Caucasus. – *Animal Taxonomy and Ecology* **70**(2): 123–130. https://doi.org/10.1556/1777.2024.00001

Gnezdilov V. M., Orlov O. V. & Neimorovets V. V. 2024: New records of the planthopper genus Hyalesthes Signoret, 1865 (Hemiptera, Fulgoromorpha: Cixiidae) from Krasnodar Territory of Russia. – *Entomological Review* **104**(1): 30–35. https://doi.org/10.1134/s0013873824010044

Orosz A. & Dér Zs. 2004: Újdonságok és kiegészítő adatok a Hyalesthes (Homoptera: Auchenorrhyncha, Cixiidae) fajok elterjedésének ismeretéhez. (New records and supplementary data on the distribution of the species of the genus Hyalesthes (Homoptera: Auchenorrhyncha, Cixiidae).) – *Folia entomologica hungarica* **65**: 244–248.

Ossiannilsson F. 1978: The Auchenorrhyncha (Homoptera) of Fennoscandia and Denmark. Part 1: Introduction, infraorder Fulgoromorpha. – In: Lyneborg L. (ed.): *Fauna Entomologica Scandinavica vol. 7.1.* Scandinavian Science Press, Klampenborg, 222 pp.