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Revision of the genus *Nesosteropus* Ganglbauer, 1891 (Coleoptera: Carabidae, Pterostichini)

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Abstract
The genus *Nesosteropus* Ganglbauer, 1891, which is part of the *Speluncarius* + *Tapinopterus* complex, is taxonomically reviewed and four new species from Greece are described: *Nesosteropus euboicus* **n. sp.**, *N. confusus* **n. sp.**, *N. montisochae* **n. sp.** and *N. breiti* **n. sp.** *Nesosteropus diadochos* (Lutschnik, 1915) has to be considered the type species of the genus.

Key words: Taxonomy, *Speluncarius* + *Tapinopterus* complex, new species, Greece.

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Introduction

As anticipated in the recent generic-level revision of the *Speluncarius* + *Tapinopterus* complex (Coleoptera, Carabidae, Pterostichini) (Giachino et al. 2024), here we propose a first contribution to the knowledge of the genera within the *Tapinopterus* complex (*sensu* Giachino et al. 2024), dedicated to the genus *Nesosteropus*.

Ganglbauer (1891), in his "Catalogus Coleopterorum Europeae, Caucasi et Armeniae Rossicae", described *Nesosteropus* as a subgenus of *Tapinopterus* Schaum, 1858. Apfelbeck (1904) considered *Nesosteropus* Ganglbauer, 1891 as a "section" of *Tapinopterus* (regarded at that time as a subgenus of *Pterostichus*). Jeannel (1953), as well as all subsequent authors, considered *Nesosteropus* as a synonym of *Tapinopterus*. Finally, *Nesosteropus* is elevated to genus, distinct from *Tapinopterus*, in the taxonomic arrangement proposed by Giachino et al. (2024).

Material and methods

Material

The majority of material considered in this contribution, totalling about 450 specimens, derives from the collecting expeditions to Greece coordinated and carried out by two of the authors (PMG and DV).

Other study material was added from private collections of friends and colleagues, or consists in types of the species already known from museum collections.

The specimens studied or mentioned in the text are deposited in the following Museums and private Collections, with their relative acronyms:

HNHMB: Hungarian Natural History Museum, Budapest, Hungary
MCSNG: Museo Civico di Storia Naturale "Giacomo Doria", Genova, Italia
MCSNM: Museo Civico di Storia Naturale, Milano, Italia
MNUHB: Museum für Naturkunde der Universität Humbolt, Berlin, Germany
MRSN: Museo Regionale di Scienze Naturali, Torino, Italia
NHMB: Naturhistorisches Museum, Bern, Switzerland
NHMBA: Naturhistorisches Museum, Basel, Switzerland
NHMW: Naturhistorisches Museum, Wien, Austria
SMNS: Staatliches Museum für Naturkunde, Stuttgart, Germany.
CAl: Collection Gianni Allegro, Moncalvo (AT), Italia
CLo: Collection Roman Lohaj, Pezinok, Slovakia
CCa: Collection Achille Casale, Torino, Italia
CGi: Collection Pier Mauro Giachino, San Martino Canavese TO), Italia
CGu: Collection Borislav V. Guéorguiev, Sofia, Bulgaria
CJu: Collection Bernard Junger, Dogneville, France

Figs 1-7 – Habitus of *Nesosteropus* **spp.**: **1**, *N. ovicollis*, **HT** ♂, and its label; **2**, *N. diadochos*, ♂ from O. Dirfis [=Mount Dírfi]; **3**, *N. euboicus* **n. sp**. PT ♂; **4**, *N. confusus* **n. sp.** HT ♂; **5**, *N. montisochae* **n. sp.** PT ♀; **6**, *N. continentalis* ♂ from O. Pilio [=Mount Pilion]; **7**, *N. breiti* **n. sp.** PT ♂.

CPi: Collection Luca Picciau, Torino, Italia
CSc: Collection Riccardo Sciaky, Milano, Italia
CSk: Collection Vladimir Skoupý, Praha, Czech Republik
CVa: Collection Dante Vailati, Brescia, Italia
CVi: Collection Augusto Vigna Taglianti, now at MCSNG, Italia

Methods

The specimens have only been examined from a morphological point of view. Molecular analysis was not possible due to the presence of NaCl as a preservative in the traps used to collect subterranean specimens.

The images of the habitat were taken over a period of thirty years, keeping up with advances in camera technology. An Olympus OM1 camera with a 50 mm lens (PMG) and a Nikon F100 camera with a 18/105 mm lens (PMG) were used in the first phase of the project. A digital Canon 20D camera with a 17/85 mm lens (PMG) was used later.

The pictures of habitus and genitalia were taken by GA using a Leica DFC295 camera attached to a Leica M205C stereomicroscope at the CREA-FL in Casale Monferrato (AL).

The drawings of the specimens and their anatomical details were carried out using Wild M3 and Wild M5 stereomicroscopes equipped with a *camera lucida* or micrometric eyepiece (PMG, DV and Luca Picciau) and using a Leica MZ12.5 equipped with a *camera lucida* (PMG). The anatomical preparations of the male genitalia, after extraction from the abdomen by means of manipulated needles transformed into micro scalpels, were cleaned in 10% KOH and mounted dry on a tag placed under the specimen. The specimens to be photographed were previously softened in water, washed in aviation gasoline, and re-prepared on a transparent acetate tag.

The measurements of Holotypes were taken directly using a Leica M205C microscope, or using a micrometric slide in some other cases. All values were rounded to the first decimal place.

The acronyms used for measurements are as follows:
PMW: maximum pronotum width
PBW: width of pronotum base
EL: maximum length of elytra, from shoulder to apex
EW: maximum width of elytra

Other used acronyms are:
HT: Holotype
PT(T): Paratype(s)
ST: Syntype
LT: Lectotype
PLT(T): Paralectotype(s)

Acronyms used in labels of type material:
nom.: Prefecture
str.: road
vers.: slope
env.: surroundings

Systematics

The genus *Nesosteropus* Ganglbauer, 1891 and its included species, in the sense of Giachino et al. (2024), presents a quite complex nomenclatorial situation that can be schematized as follows.

Reitter (1884) described *Steropus ovicollis* upon two female specimens from Euboea, without specifying a restricted typical locality of provenance.

Lutshnik (1915) considered the taxon *Steropus ovicollis* Reitter, 1884 as pertinent to the genus *Platysma*, subgenus *Tapinopterus*, junior homonym of *Sarticus ovicollis* Motschulsky, 1866 (without specifying that he considered *Sarticus* Motschulsky, 1866 as a subgenus or synonym of *Platysma*!). As a direct consequence, Lutshnik (1915) proposed the name *diadochos* in place of *ovicollis*. The name *diadochos* is still in use, while *ovicollis* is cited in the catalogues as a homonym. Based on article 59.3 of ICZN the valid name, being in use, is *diadochos* (Lutshnik 1915).

The examination of a female type of *Steropus ovicollis*, deposited at the Budapest Museum (HNHMB), which is indicated as a Holotypus and labelled with the data cited by Reitter (1884) in the original description, allowed us to ascertain that it conforms to one of the two species of *Nesosteropus* present on Oros Dirfis [=Mount Dírfi].

The specimens of *Nesosteropus* from Oros Óhi, often indicated in the collections with the name "*ovicollis*", therefore belong to an unpublished species that we will name herein as *Nesosteropus confusus* **n. sp.**

It should also be noted that Kirschenhofer (1997) described the species *Tapinopterus kerberos* (loc. typ. Tsangarada, Magnissía) from Oros Pílio [=Mount Pilion], which is very similar in habitus, right paramere and median lobe of aedeagus in lateral view, but different in the apex of aedeagus in dorsal view (Figs 32, 34), to the specimens treated in the present paper as *Nesosteropus diadochos* from Oros Dírfi. Kirschenhofer (1997) compared *Tapinopterus kerberos*, a species of *Nesosteropus*, with *Tapinopterus meschniggi*, a species today ascribed to the genus *Pseudorambousekiella* Schweiger, 1967 (Giachino et al. 2024), confirming their taxonomic diversity. Actually, Kirschenhofer was unaware of the subspecies *Pterostichus* (*Nesosteropus*) *continentalis* Breit, 1923 known from Oros Pílio, of which *T. kerberos* is a synonym.

Genus ***Nesosteropus*** Ganglbauer, 1891
Type species: *Platysma diadochos* Lutschnik, 1915
Note: In the recent revision of the *Speluncarius* + *Tapinopterus* complex (Giachino et al. 2024), *Steropus ovicollis* was erroneously indicated as the type species of the genus, while, according to ICZN (art. 59.3), the replacement name *diadochos* proposed by Lutshnik (1915) should be used.

The following species are currently included in this genus:
Nesosteropus diadochos (Lutschnik, 1915)
Nesosteropus euboicus **n. sp.**
Nesosteropus confusus **n. sp.**
Nesosteropus montisochae **n. sp.**
Nesosteropus continentalis (Breit, 1923)
Nesosteropus breiti **n. sp.**

Nesosteropus diadochos (Lutshnik, 1915)
(Figs 1, 2, 8, 14, 20, 22, 24)

Steropus ovicollis Reitter, 1884
Loc. Typ.: Greece, Euboea

Platysma diadochos Lutshnik, 1915: 427
Tapinopterus (Sect. *Nesosteropus*) *diadochus* (Lutshnik, 1915): Csiki 1930: 112
Tapinopterus diadochos diadochos (Lutshnik, 1915): Bousquet in Löbl & Smetana 2003: 519
Tapinopterus diadochos (Lutshnik, 1915): Lorenz 2005: 288
Tapinopterus diadochos Lutshnik, 1915: Bousquet in Löbl & Löbl 2017: 753

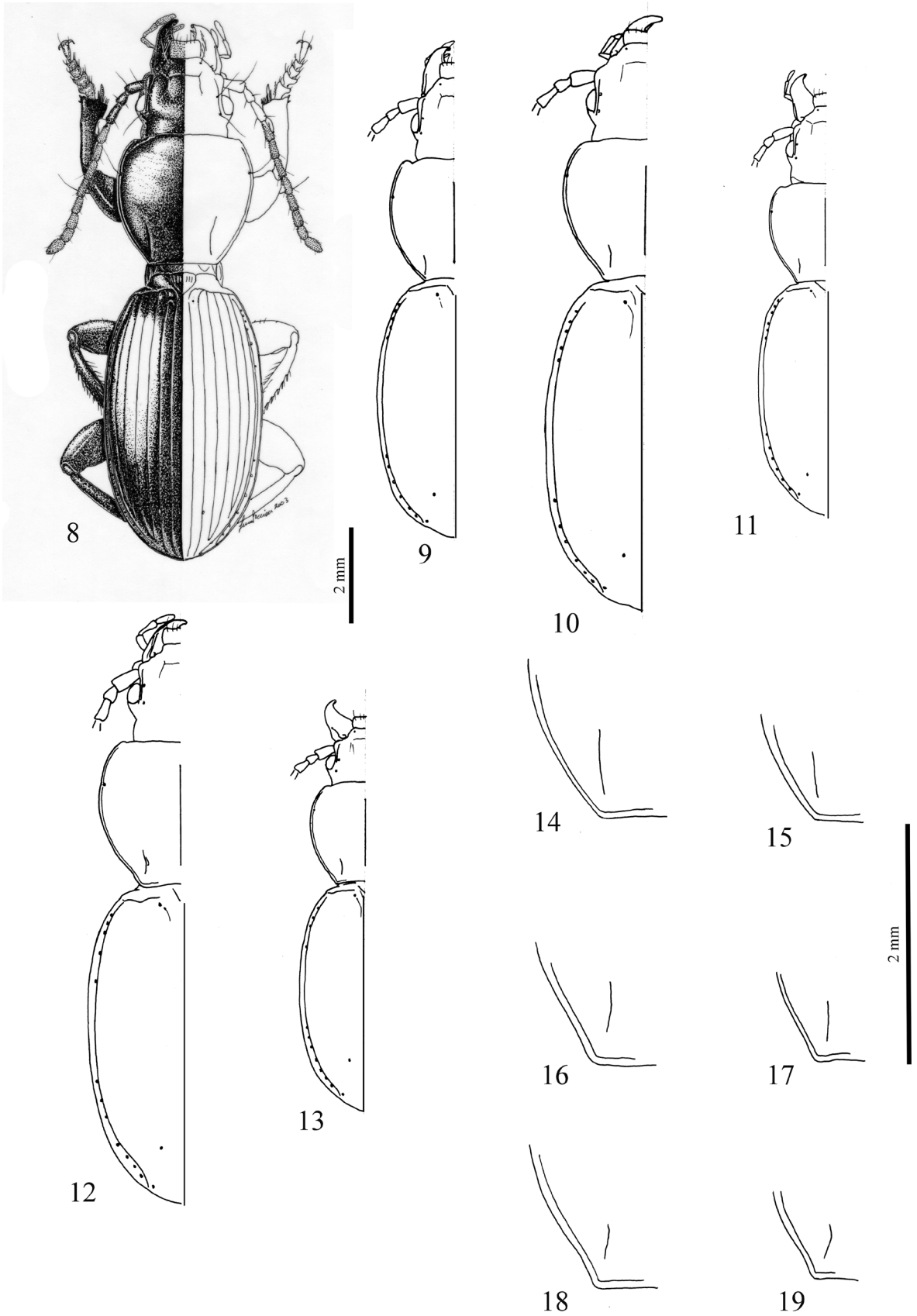
Type Series: HT ♀, **[Greece]**: Euboea (white, handwritten); Coll. Reitter (white, printed), St. ovicollis m. (white, handwritten); Holotypus ♀ Steropus ovicollis Reitter, 1884 (white label with red margins, printed and handwritten) (HNHMB).

Other examined material:
Greece: 1 ♂ 1 ♀, Euvoia isl., Steni surroundings, m 1100, 24.IV.2007, Z. Košrál lgt. (CLo); 2 ♂♂ 1 ♀, Gr. Euvoia isl., Steno env., m 1100, 24.4.07, Skoupý leg. (CSk); 1 ♂ 1 ♀, Greece, Eubea, Mt. Dirfis, 2.IV.83, Zoia (CSc); 2 ♂♂ 1 ♀, Mt. Dirfis, 1200 m, Eubée, 10.4.61, H. Henrot (CVi); 9 ♂♂ 17 ♀♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni, snowfield at m 1080, W slope, 9.V.1998/6.VI.1999, Giachino & Vailati leg.; 1 ♂, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni, snowfield at m 1080, W slope, 29.V.1998, Giachino & Vailati leg.; 9 ♂♂ 13 ♀♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni, snowfield at m 1080 W slope, 6.VI.1999/17.VI.2000, Giachino & Vailati leg.; 25 ♂♂ 23 ♀♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni m 1000, ENE slope, 19.VI.2000/9.VI.2002, Giachino & Vailati leg.; 5 ♂♂ 4 ♀♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni, m 1100, W slope, 1.VI.2003, Giachino & Vailati leg.; 38 ♂♂ 39 ♀♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni ENE slope, m 1100, 10.VI.2002/17.VI.2004, Giachino & Vailati leg.; 10 ♂♂ 4 ♀♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni, snowfield at m 1080, W slope, 17.VI.2004/7.VI.2005, Giachino & Vailati leg.; 1 ♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni, snowfield at m 1080, W slope, 7.VI.2005, Giachino & Vailati leg.; 6 ♂♂ 6 ♀♀, Greece, pref. Évia (Seta), O. Pirghari, Katavothra, N 38°34'56.0'' E 23°55'58.7'', m 1080, 7.VI.2010/26.V.2011, Giachino & Vailati leg.; 1 ♂, Greece, pref. Évia, Seta, O. Lamna, m 910, N 38°33'41.5'' E 23°55'12.6'', 7.VI.2010/26.V.2011, Giachino & Vailati leg.; 1 ♂ 4 ♀♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni, snowfield at m 1080, W slope, 6.VI.2006, Giachino & Vailati leg.; 1 ♂ 4 ♀♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni m 1080, ENE slope, 19.VI.2000/9.VI.2002, Giachino & Vailati leg.; 1 ♀, Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni, ENE slope, m 1000, 7.VI.2012/8.VI.2014, Giachino & Vailati leg.; 1 ♀, Greece, pref. Évia, O. Xerovoúni (O. Dírfi), m 1100 N slope, 7.VI.1999/8.VI.2002, Giachino & Vailati leg. (MRSN, CAl, CCa, CGi, CVa).

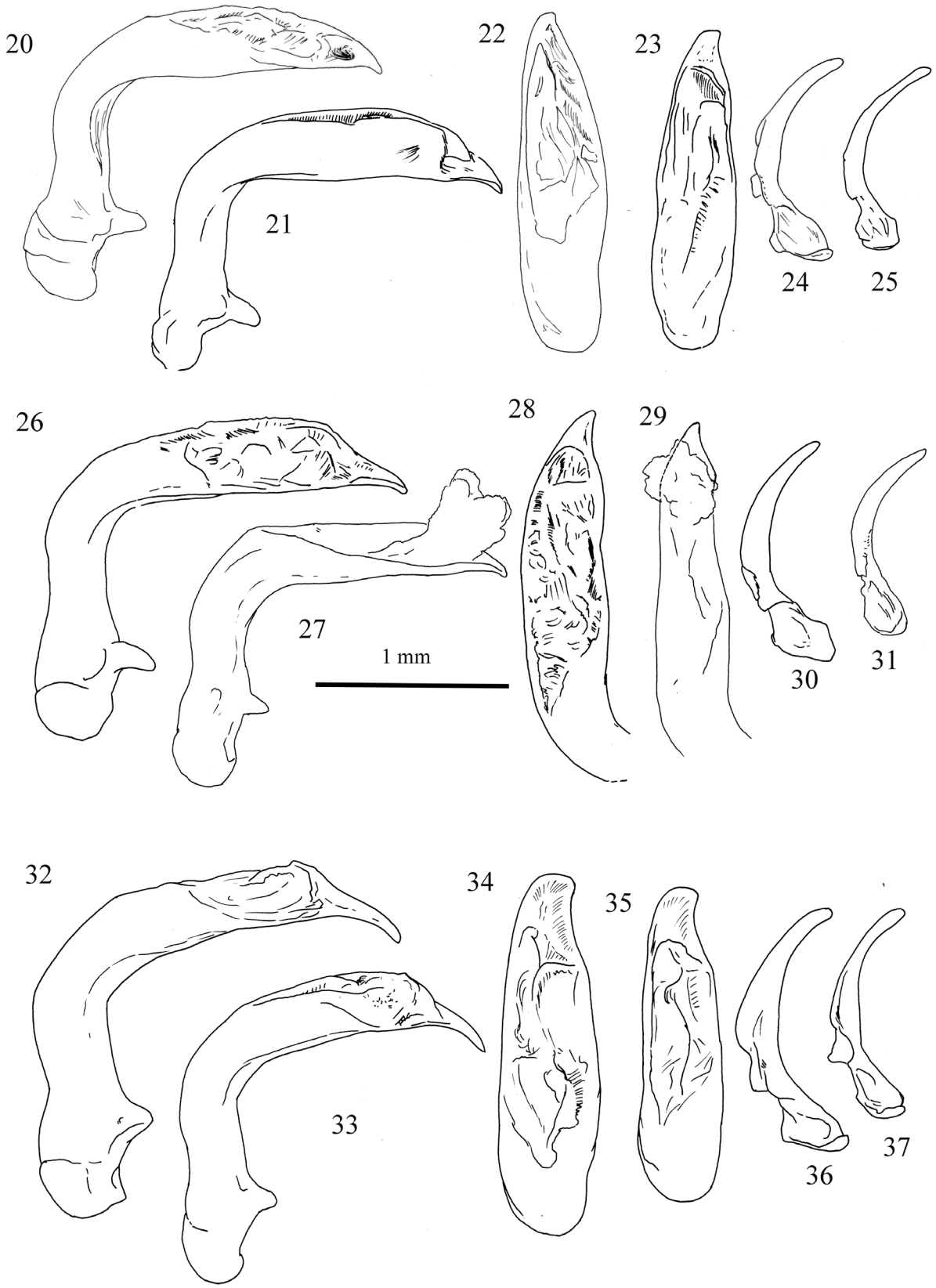
Diagnosis
A relatively large *Nesosteropus* (10.6-12.8 mm) closely related to *Nesosteropus euboicus* **n. sp.** on account of the shape of aedeagus and, in particular, of the apex of median lobe which, in dorsal view, appears narrow, subtriangular, slightly truncated and curved to the left, and on account of the non-sinuated, regularly curved lateral margin of pronotum before basal angles. It differs from *N. euboicus* **n. sp.** by larger size, by median lobe of aedeagus, in lateral view flexed at 90° exactly at middle, by apical blade of aedeagus, in dorsal view less distinctly truncated, with a less sinuated left preapical margin, and by right paramere shorter and regularly curved, not subrectilinear at apical fourth. It differs from *N. continentalis* and *N. breiti* **n. sp.** by apical blade of aedeagus narrower in dorsal view, and by sides of pronotum not sinuated posteriorly. It differs from *N. ovicollis* and *N. montisochae* **n. sp.** by apical blade of aedeagus less sharp in dorsal view and by sides of the pronotum not sinuated posteriorly.

Description
Total body length mm 11.2-11.7 ♂♂, 10.6-12.8 ♀♀.
Head relatively large, with two shallow frontal furrows, distinctly diverging posteriorly, extending approximately to anterior margin of eye. Temples moderately convex, collar constriction evident. Eyes moderately reduced, slightly protruding, with a developed supraorbital carina receding forward. Mouth parts dark ferruginous. Antennae short, reaching, extended backwards, the base of elytra.

Pronotum subtrapezoidal (PML/PMW ratio 0.87-0.92 ♂♂, 0.88-0.90 ♀♀), relatively large, with maximum width approximately at anterior third. Sides regularly and long arcuate, not sinuate, such as to give an ovoid appearance to pronotum. Anterior margin moderately curved outwards with anterior angles not prominent and obtuse. Base rectilinear, posterior angles obtuse. Disc smooth with scarcely distinct median groove, lateral groove narrow; basal impressions shallow, simple and smooth, slightly elongated forwards. One marginal seta on each side, placed at anterior third.



Figs 8-19 – Habitus and posterior angle of pronotum in *Nesosteropus* **spp.**: **8, 14,** *N. diadochos***,** ♂ from O. Dirfis [=Mount Dírfi]; **9**, **15**, *N. euboicus* **n. sp.** PT ♂; **10**, **16**, *N. confusus* **n. sp.** HT ♂; **11**, **17**, *N. montisochae* **n. sp.** HT ♂; **12**, **18**, *N. continentalis* ♂ from O. Pilio [=Mount Pilion]; **13**, **19**, *N. breiti* **n. sp.** PT ♂.



Figs 20-37 – Median lobe of aedeagus (lateral and dorsal view) and right paramere in *Nesosteropus* **spp.: 20**, **22**, **24**, *N. diadochos*, ♂ from O. Dirfis [=Mount Dírfi]; **21**, **23**, **25**, *N. euboicus* **n. sp.** PT ♂; **26**, **28**, **30**, *N. confusus* **n. sp.** HT ♂; **27**, **29**, **31**, *N. montisochae* **n. sp.** HT ♂; **32**, **34**, **36**, *N. continentalis* ♂ from O. Pilio [=Mount Pilion]; **33**, **35**, **37**, *N. breiti* **n. sp.** PT ♂.

Elytra oval, elongated (EL/EW ratio 1.67-2.03 ♂♂, 1.67-1.76 ♀♀) with maximum width approximately at half length; elytral base wider than base of pronotum with nearly rounded and non-dentate humeri. Juxtascutellar stria sometimes absent, when present it is placed between the first and second stria; an umbilicated pore at base of the second stria; elytral striae shallow and smooth, intervals subflat. Umbilicated series consisting of 12 pores, briefly interrupted in the median area, with a hint of aggregation at humeral area (4 pores) and at apical area (6 pores). Lateral groove of elytra narrow. Elytral disc with a single seta on the third interval, leaning against the second stria, and placed approximately at apical fifth (Fig. 8).

Aedeagus relatively slender and elongated (Fig. 20). Median lobe, in lateral view, flexed at almost 90° at about middle, subrectilinear at apical third; basal bulb relatively large; basal part subcylindrical. Apical blade narrow, very short and, in lateral view, ventrally moderately bent; in dorsal view very short and subtruncated at apex (Fig. 22). Right paramere slender, elongated, slightly and regularly arcuate, conical in appearance at apex, squat and slightly convex at basal part, with a small convex protuberance approximately at middle. Left paramere broad and subquadrate, with a concavity at middle and without median carina. Gonosomite (IX abdominal segment invaginated) ellipsoidal with small and curved proximal apophysis.

Distribution

Nesosteropus diadochos is currently recorded only from Oros Dírfi (Fig. 39) and its southern foothills, in the island of Euboea, where it was collected in syntopy with *Nesosteropus euboicus* **n. sp.** near melting snowfields and by means of traps at an altitude of 1080 m (Fig. 38).

***Nesosteropus euboicus* n. sp.**

(Figs 3, 9, 15, 21, 23, 25)

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Loc. Typ.: Greece, pref. Évia, O. Dírfi, road S. Dirfios-A. Iríni, snowfield at m 1080, W slope.

Type Series: HT ♂, **[Greece]**: Grecia nom. Évia, O. Dírfi str. S. Dirfios-A. Iríni, nevaio a [snowfield at] m 1080, vers. W, 6.VI.1999/17.VI.2000, Giachino & Vailati leg. (CGi).

PTT: 2 ♂♂, GR. Euvoia isl., Steni env., m 1100, 24.IV.2007, Z. Košrál lgt. (CLo); 8 ♂♂, Gr. Euvoia isl., Steno env., m 1100, 24.4.07, Skoupý leg. (CSk, CGi); 1 ♀, Grecia, Eubea, pend. ["slope"] M. Dirfis, 3.IV.83, Zoia. (CSc); 1 ♀, Grecia, Eubea, M. Dirfis, 2.IV.83, Zoia (CSc); 2 ♂♂, Grecia, Evvia, 1100 m, M. Dirfis, pend. ["slope"] E, 1.III.83, Zoia. (CVi); 3 ♂♂ 2 ♀♀, Mt. Dirfis, 1200 m, Eubée, 10.4.61, H. Henrot (CVi); 1 ♂ 3 ♀♀ Grecia nom. Évia, O. Dírfi str. S. Dirfios-A. Iríni, nevaio a ["snowfield at"] m 1080, vers. W, 29.V.1998/6.VI.1999, Giachino & Vailati leg.; 6 ♀♀ Grecia nom. Évia, O. Dírfi str. S. Dirfios-A. Iríni, nevaio a ["snowfield at"] m 1080, vers. W, 6.VI.1999/17.VI.2000, Giachino & Vailati leg.; 1 ♂ 1 ♀, Grecia, nom. Évia, O. Dírfi, str. S. Dirfios-A. Iríni, nevaio a ["snowfield at"] m 1080, vers. W, 6.VI.2006, Giachino & Vailati leg.; 3 ♂♂ 1 ♀, Grecia, nom. Évia, O. Dírfi, str. S. Dirfios-A. Iríni m 1000, vers. ENE, 19.VI.2000/9. VI.2002, Giachino & Vailati leg.; 10 ♂♂ 9 ♀♀, Grecia, nom. Évia, O. Dírfi, str. S. Dirfios-A. Iríni vers. ENE, nevaio a ["snowfield at"] m 1100, 10.VI.2002/17.VI.2004, Giachino & Vailati leg.; 3 ♂♂ 2 ♀♀, Grecia, nom. Évia, O. Dírfi, str. S. Dirfios-A. Iríni, nevaio a ["snowfield at"] m 1080, vers. W, 6.VI.2006, Giachino & Vailati leg.; 3 ♂♂ 1 ♀, Grecia, nom. Évia, O. Dírfi, str. S. Dirfios-A. Iríni vers. ENE, nevaio a ["snowfield at"] m 1100, 17.VI.2000/10. VI.2002, Giachino & Vailati leg.; 2 ♂♂, Grecia, nom. Évia, O. Dírfi, str. S. Dirfios-A. Iríni, nevaio a ["snowfield at"] m 1080, vers. W, 17.VI.2004/7.VI.2005, Giachino & Vailati leg.; 3 ♂♂ 1 ♀, Grecia, nom. Évia (Seta), O. Pirghari, Katavothra, N 38°34'56.0'' E 23°55'58.7'', m 1080, 7.VI.2010/26.V.2011, Giachino & Vailati leg. (CAl, CCa, CGi, CPi, CVa, MRSN)

Diagnosis

A small *Nesosteropus* (mm 8.5-10.0) closely related to *Nesosteropus diadochos* on account of the shape of aedeagus and, in particular, of the apex of median lobe which, in dorsal view, appears narrow, subtriangular, slightly truncated and curved to the left, and on account of the non-sinuated, regularly curved lateral margin of pronotum before basal angles. It differs from *N. diadochos* by smaller size, by median lobe of aedeagus, in lateral view flexed at 90°, but with distal part clearly longer than basal part, by apical blade of aedeagus, in dorsal view clearly truncated, with a sinuated left pre-apical margin, by right paramere longer and sub-rectilinear at apical fourth, not regularly arcuate. It differs from *N. continentalis* and from *N. breiti* **n. sp.** by apical blade of aedeagus narrower in dorsal view, and by sides of pronotum not sinuated posteriorly. It differs from *N. confusus* **n. sp.** and *N. montisochae* **n. sp.** by apical blade of aedeagus not pointed in dorsal view, and by sides of pronotum not sinuated posteriorly.

Description

Total body length mm 9.5 ♂, 8.5-10.0 ♀♀.

Head relatively large, with two shallow frontal furrows, distinctly diverging posteriorly, extending approximately to anterior margin of eye. Temples moderately convex, collar constriction evident. Eyes moderately reduced, slightly protruding, with supraorbital keel developed and receding forward. Mouth parts dark ferruginous. Antennae short, reaching, stretched backwards, the base of elytra.

Pronotum subtrapezoidal (PML/PMW ratio 0.9 ♂, 0.86-0.88 ♀♀), relatively large, with maximum width approximately at anterior third. Sides regularly arcuate, not sinuate, such as to give an ovoid appearance to pronotum. Anterior margin moderately curved outwards with

anterior angles not prominent and obtuse. Base rectilinear, posterior angles obtuse. Disc smooth with scarcely distinct median groove, lateral groove narrow; basal impressions shallow, simple and smooth, slightly elongated forward. One marginal seta on each side, placed at anterior third.

Elytra oval, elongated (EL/EW ratio 1.67 ♂, 1.59-1.63 ♀♀) with maximum width approximately at mid length; elytral base wider than base of pronotum with nearly rounded and non-dentate humeri. Juxtascutellar stria present, sometimes anastomosed with the first stria, placed between the first and second stria; an umbilicated pore at base of the second stria; elytral striae shallow and smooth, intervals slightly convex. Umbilicated series consisting of 11 pores, briefly interrupted in the median area of elytron, with a hint of aggregation at humeral area (5 pores) and at apical area (6 pores). Lateral groove of elytra narrow. Elytral disc with a single seta placed on the third interval, leaning against the second stria, and placed approximately at apical fifth (Fig. 9).

Aedeagus relatively slender and elongated (Fig. 21). Median lobe, in lateral view, abruptly flexed at almost 90° about at middle, with distal part clearly longer than basal part, sub-rectilinear at apical third; basal bulb relatively large; basal part sub-cylindrical. Apical blade narrow, very short and ventrally curved in lateral view; in dorsal view short and sub-truncated at apex, with left margin moderately curved inwards (Fig. 23). Right paramere slender, elongated, markedly arcuate, without protuberances at margins, subrectilinear at apical fourth, squat and slightly convex at basal part. Left paramere broad and subquadrate, with a concavity at middle and without median carina. Gonosomite (IX abdominal segment invaginated) ellipsoidal with small and curved proximal apophysis.

Etymology
From Euboea island, where Oros Dirfi is found.

Distribution
Nesosteropus euboicus **n. sp.** is currently known only from Oros Dírfi (Fig. 39) and its southern foothills, on the island of Euboea, where it was collected in syntopy with *N. diadochos* near melting snowfields and by means of traps at an altitude of 1000-1200 m (Fig. 38).

Note
The occurrence of some specimens of smaller size, but morphologically very similar to *N. diadochos*, living in syntopy with this, initially led us to consider them as simple size variations of *N. diadochos*. The subsequent analysis of the morphology of aedeagus revealed the presence of small, but constant morphological differences, associable with other external diacritical characters, which led us to consider the two forms as distinct taxa. A similar situation, very interesting from the zoogeographical point of view (see Final Remarks), can be found in the other species of the genus *Nesosteropus*, which are present in "pairs" (one larger and one smaller species) on Oros Óhi (*N. confusus* n. sp and *N. montisochae* **n. sp.**) and on Oros Pílio (*N. continentalis* and *N. breiti* **n. sp.**).

***Nesosteropus confusus* n. sp.**
(Figs 4, 10, 16, 26, 28, 30)

urn:lsid:zoobank.org:act: XXX
Loc. Typ.: Greece, South-Euboea, Mt. Ocha.

Type series: HT ♂, **[Greece]**: Süd-Euboea Berg Ocha v. Oertzen. (white, printed), 83635 (white, handwritten) (MNUHB).

PTT: 1 ♀, same data as HT (MNUHB); 1 ♀, Grecia nom. Évia, O. Óhi m 900, 8.VI.2005/5.VI.2006, Giachino & Vailati leg. (CGi); 2 ♂♂ 1 ♀, Süd-Euboea Berg Ocha, v. Oertzen, ovicollis (NHMW, CGi);

Other examined material
1 ♂ **Greece**: Euboea (NHMW).

Diagnosis
A *Nesosteropus* of relatively large body size (mm 11.6-12.5), closely related to *Nesosteropus montisochae* **n. sp.** on account of the shape of aedeagus, in particular of the apex of median lobe which, in dorsal view, appears narrow, triangular, pointed and curved towards left, and on account of the very scarcely sinuate lateral margins of pronotum before basal angles.

It differs from *N. montisochae* **n. sp.** by larger body size and by median lobe of aedeagus, which in lateral view is flexed at approximately 90°, with the distal part longer than basal part and stockier in dorsal view, with a bisinuate left margin; moreover, by apical blade of aedeagus, in dorsal view longer and with a more sinuate left preapical margin. It differs from *N. continentalis* and *N. breiti* **n. sp.** by apical blade of aedeagus, which is narrower and more pointed in dorsal view, and by sides of pronotum which are less sinuated posteriorly. It differs from *N. diadochos* and *N. euboicus* **n. sp.** by apical blade of aedeagus, which is pointed in dorsal view, and by sides of pronotum, which are very scarcely sinuated posteriorly.

Description
Total body length mm 11.6 ♂, 12.5 ♀.
Head relatively large, with two shallow frontal furrows distinctly diverging posteriorly, extending approximately to anterior margin of eye. Temples moderately convex, collar restriction distinct. Eyes moderately reduced, slightly protruding, with supraorbital carina developed and receding forward. Mouth parts dark ferruginous. Antennae short, reaching, stretched backwards, the base of elytra.

Pronotum subtrapezoidal (PML/PMW ratio 0.86 ♂, 0.86 ♀), relatively large, of ovoid appearance, with maximum

width approximately at anterior third. Sides regularly arcuate at anterior two thirds, weakly sinuate towards base. Anterior margin moderately curved outwards with anterior angles not prominent and obtuse. Base with margin moderately curved inward, posterior angles moderately obtuse. Disc smooth, with scarcely distinct median groove, and a narrow lateral groove; basal impression shallow, simple and smooth, slightly elongated forward. One marginal seta at each side, located at anterior third.

Elytra oval, elongated (EL/EW ratio 1.78 ♂, 1.73 ♀) with maximum width approximately at half-length; elytral base wider than base of pronotum, with elusive and non-dentate humeri. Juxtascutellar stria anastomosed with the first stria and located between the first and second stria; one umbilicated pore at base of the second stria; elytral striae shallow and smooth, intervals slightly arcuate. Umbilicated series consisting of 11 pores, briefly interrupted in the median area, with a hint of aggregation at humeral area (5 pores) and at apical area (6 pores). Elytra with a narrow lateral groove. Elytral disc with a single seta, placed on the third interval, leaning against the second stria and placed approximately at apical fifth (Fig. 10).

Aedeagus relatively slender and elongated (Fig. 26). Median lobe, in lateral view, flexed at almost 90° about at middle, sub-rectilinear at apical third; basal bulb relatively large, with basal part sub-cylindrical. Apical blade narrow, in lateral view very short and moderately curved ventrally; in dorsal view short, acuminate and with left margin slightly curved inwards (Fig. 28). Right paramere slender, elongated, slightly and regularly arcuate, conical in appearance at apex, squat and slightly convex at basal part. Left paramere broad and sub-quadrate, with a concavity at middle and without median carina. Gonosomite (IX invaginated abdominal segment) ellipsoidal with small and curved proximal apophysis.

Etymology
The name refers to the confusion that occurred with respect to this taxon.

Distribution
Nesosteropus confusus **n. sp.** is currently recorded only from Oros Óhi, in the Island of Euboea (Fig. 38).

***Nesosteropus montisochae* n. sp.**
(Figs 5, 11, 17, 27, 29, 31)
urn:lsid:zoobank.org:act: XXX

Loc. Typ.: Greece, South-Euboea, Mt. Ocha.

Type series
HT ♂, **[Greece]**: Süd -Euboea Berg Ocha v. Oertzen (white, printed), 83635 (white, printed), Nesosteropus ovicollis Reittr. (white, handwritten), S. Sporaden (white, handwritten) (MNUHB).

PTT: 1 ♀ Süd-Euboea Berg Ocha v. Oertzen. (white, printed), 83635 (white, printed), Nesosteropus ovicollis Reittr. (white, handwritten) (CGi); 1 ♂ Süd-Euboea Berg Ocha, v. Oertzen, ovicollis (NHMW)

Other examined material:
7 ♂♂ 2 ♀♀ **Greece**: Euboea, dr. Krüper, Collect. Hause (NHMW)

Diagnosis
A *Nesosteropus* of medium-small size (9.2-9.4 mm), closely related to *Nesosteropus confusus* **n. sp.** on account of the shape of aedeagus and, in particular, of the apex of median lobe which is, in dorsal view, narrow, triangular, acuminate, curved towards left, and on account of the lateral margin of the pronotum indistinctly sinuate before basal angles. It differs from *N. confusus* **n. sp.** by smaller size, by median lobe of the aedeagus which is, in lateral view, flexed at about 105°, exactly at half length, and in dorsal view more slender and subtriangular, with left margin not bisinuate, and by apical blade of aedeagus which is shorter in dorsal view. It differs from *N. continentalis* and *N. breiti* **n. sp.** by apical blade of the aedeagus, which is narrower and more pointed in dorsal view, and by sides of pronotum, which are less sinuated posteriorly. It differs from *N. diadochos* and *N. euboicus* **n. sp.** by apical blade of the aedeagus, which is pointed in dorsal view, and by sides of pronotum, which are indistinctly sinuated posteriorly.

Description
Total body length mm 9.4 ♂♂, 9.2 ♀.
Head relatively large with two shallow frontal furrows, distinctly diverging posteriorly, extending approximately to anterior margin of eye. Temples moderately convex, collar restriction distinct. Eyes moderately reduced, slightly protruding, with developed supraorbital carina receding forward. Mouth parts dark ferruginous. Antennae short, reaching, stretched backwards, the base of elytra.

Pronotum subtrapezoidal (PML/PMW ratio 1.00 ♂, 0.85 ♀), relatively large, ovoid in appearance, with maximum width approximately at anterior third. Sides regularly arcuate at anterior two thirds, weakly sinuate at base. Anterior margin moderately curved outwards, with relatively prominent and obtuse anterior angles. Base rectilinear, posterior angles moderately obtuse. Disc smooth, with scarcely distinct median groove, lateral groove narrow; basal impressions shallow, simple and smooth. One marginal seta on each side, located at anterior third.

Elytra oval elongate (EL/EW ratio 1.67 ♂, 1.64 ♀) with maximum width approximately at middle; elytral base wider than base of pronotum with elusive and non-dentate humeri. Juxtascutellar stria barely distinct and placed between the first and second stria; one umbilicated pore at base of the second stria; elytral striae shallow and smooth, intervals slightly convex. Umbilicated series consisting of

12 pores, briefly interrupted in the median area of elytron, with hint of aggregation at humeral area (6 pores) and at apical area (6 pores). Lateral groove of elytra narrow. Elytral disc with a single seta on the third interval, leaning against the second stria and placed approximately at apical fifth (Fig. 11).

Aedeagus relatively slender and elongated (Fig. 27). Median lobe, in lateral view, flexed at approximately 105° about at middle, sub-rectilinear at apical third; basal bulb relatively large; basal part sub-cylindrical. Apical blade narrow, very short and ventrally moderately curved in lateral view; short, acuminate, with left margin slightly curved inwards in dorsal view (Fig. 29). Right paramere slender, elongated, slightly and regularly arcuate, conical in appearance towards apex, squat and slightly convex at basal part. Left paramere broad and sub-quadrate, with a concavity at amiddle and without median carina. Gonosomite (IX invaginated abdominal segment) ellipsoidal with small and curved proximal apophysis.

Distribution
Nesosteropus montisochae **n. sp.** is currently recorded only from Oros Óhi, in the isle of Euboea (Fig. 38).

Note
Similarly to what we reported for *N. diadochos* and *N. euboicus* **n. sp.**, also on Oros Óhi a "pair" of morphologically very homogeneous species is present (*N. confusus* **n. sp.** and *N. montisochae* **n. sp.**). Only the examination of the morphology of aedeagus allowed us to ascertain that the smallest specimens of *Nesosteropus* found on Oros Óhi in syntopy with *N. confusus* **n. sp.** actually belong to a distinct species.

Nesosteropus continentalis (Breit, 1923)
(Figs 6, 12, 18, 32, 34, 36)

Pterostichus (*Nesosteropus*) *diadochos continentalis* Breit, 1923: 144.
Tapinopterus diadochos continentalis **(**Breit, 1923): Lorenz 2005: 288
Tapinopterus diadochos continentalis [Breit, 1923]: Bousquet in Löbl & Löbl 2017: 753

Loc. Typ.: Greece, Thessaly, Mount Pelion.
Type series:
LT ♂ **[Greece]**: Pelion Thessalien (white, printed), TYPE (pink, printed), Nesosteropus ovicollis Reitter v. continentalis Breit (white, handwritten), Paratypoid (red, printed), Coll. G. Frey NMB (blue, printed) Lectotypus ♂ P. (Nesosteropus) ovicollis continentalis Breit, 1923, P.M. Giachino et al. des. 2024 (red, printed) (NHMBA).

PLTT: 1 ♂ Pelion Thessalien (white, printed), TYPE (pink, printed), Nesosteropus ovicollis Reitter v. continentalis Breit (white, handwritten), Lectotype 1956 det. Kamp (white, handwritten), Nesosteropus diadochus Luts = ovicollis Rttr ssp. continentalis Breit, Coll. G. Frey NMB (blue, printed), Paralectotypus ♂ P. (Nesosteropus) ovicollis continentalis Breit, 1923, P.M. Giachino et al. des. 2024 (red, printed) (NHMBA); 5 ♂♂ 6 ♀♀ Pelion Thessalien (white, printed), TYPE (pink, printed), Nesosteropus ovicollis Reitter v. continentalis Breit (white, handwritten), Paratypoid (red, printed), Coll. G. Frei NMB (blue, printed), Paralectotypus ♂ P. (Nesosteropus) ovicollis continentalis Breit, 1923, P.M. Giachino et al. des. 2024 (red, printed) (NHMBA); 1 ♂, Thessalien, Pelion, 1914, (unreadable) (white, with red margins, handwritten); TYPE (red, printed); Coll. Piesbergen (white, printed); Paralectotypus ♂, P. (Nesosteropus) ovicollis continentalis Breit, P.M. Giachino des. 2009 (red, handwritten and printed) (SMNS).

Other examined material:
4 ♂♂ 1 ♀ **Greece**: Pelion Thessaly [Thessalien] (white, printed), T. diadochus continentalis (white, handwritten) Coll. G. Frei NMB (blue, printed) (NHMBA, CGi); 1 ♂ 1 ♀ Pelion Thessaly [Thessalien], collectio Paganetti (NHMW, CGi); 1 ♂ 1 ♀, Thessaly [Thessalien], Pelion (MCSNM, CGi); 1 ♀ Gr. Mt. Pelio, Gipfelregion 1500 m, 3.V.2003, C. Huber, 39°23,7 23°02,6 (NHMB); 1 ♂ 1 ♀, GR. (Thessaly) [Thessalia], Pilion, st. de ski, 1300 m, 14/05/19, Junger leg. (CJU); 2 ♂♂, GR. (Thessaly) [Thessalia], Pilion, rd. before Chania, 1500 m, 14/05/19, Junger leg. (CJu, CGi); 1 ♀, Greece, n. Magnissía, Mt. Pílio m 1100, small gully in *Fagus* forest, 7.VI.1992, Giachino & Vailati leg. (CGi); 1 ♂, Greece, Volos, Mt. Pilio, 24.V.89, Sciaky. (CSc); 1 ♀, Pelion, Thessaly [Thessalien] (MRSN); 2 ♀♀, Pelion, Thessaly [Thessalien] (MNUHB); 2 ♂♂, GR Mt. Pelion, 1500 m, Gipfelregion, 3.5.2003, leg. W. Marggi, dez. 39.40+23.05 (CMa).

Diagnosis
A *Nesosteropus* of relatively large body size (10.0-12.4 mm), closely related to *Nesosteropus breiti* **n. sp.** on account of the shape of aedeagus and, in particular, of the apex of median lobe which, in dorsal view, is broad, squat, relatively rounded, with the left margin more or less curved inwards, and on account of the lateral margin of pronotum moderately sinuate before basal angles. It differs from *N. breiti* **n. sp.** by larger size, by median lobe of aedeagus, which in lateral view is flexed at about 100° at middle, by apical blade of aedeagus, which in dorsal view is less distinctly sinuate at left margin and ventrally less curved in lateral view, and by right paramere equipped with a small, convex expansion, approximately at middle. It differs from *N. diadochos* and *N. euboicus* **n. sp.** by apical blade of aedeagus wider in dorsal view and by sides of pronotum moderately sinuated posteriorly. It differs from *N. confusus* **n. sp.** and *N. montisochae* **n. sp.** by apical blade of aedeagus blunt in dorsal view and by angles of pronotum more sinuated posteriorly.

Description

Total body length mm 10.1-12.4 ♂♂, 10.0-12.3 ♀♀.

Head relatively large, with two shallow frontal furrows, distinctly diverging posteriorly, extending approximately to anterior margin of eye. Temples moderately convex, collar constriction distinct. Eyes moderately reduced, slightly protruding, with supraorbital keel well developed and receding forward. Mouth parts dark ferruginous. Antennae short, reaching, stretched backwards, the base of elytra.

Pronotum subtrapezoidal (PML/PMW ratio 0.85-0.88 ♂♂, 0.82-0.85 ♀♀), relatively large, of ovoid appearance, with maximum width approximately at middle. Sides

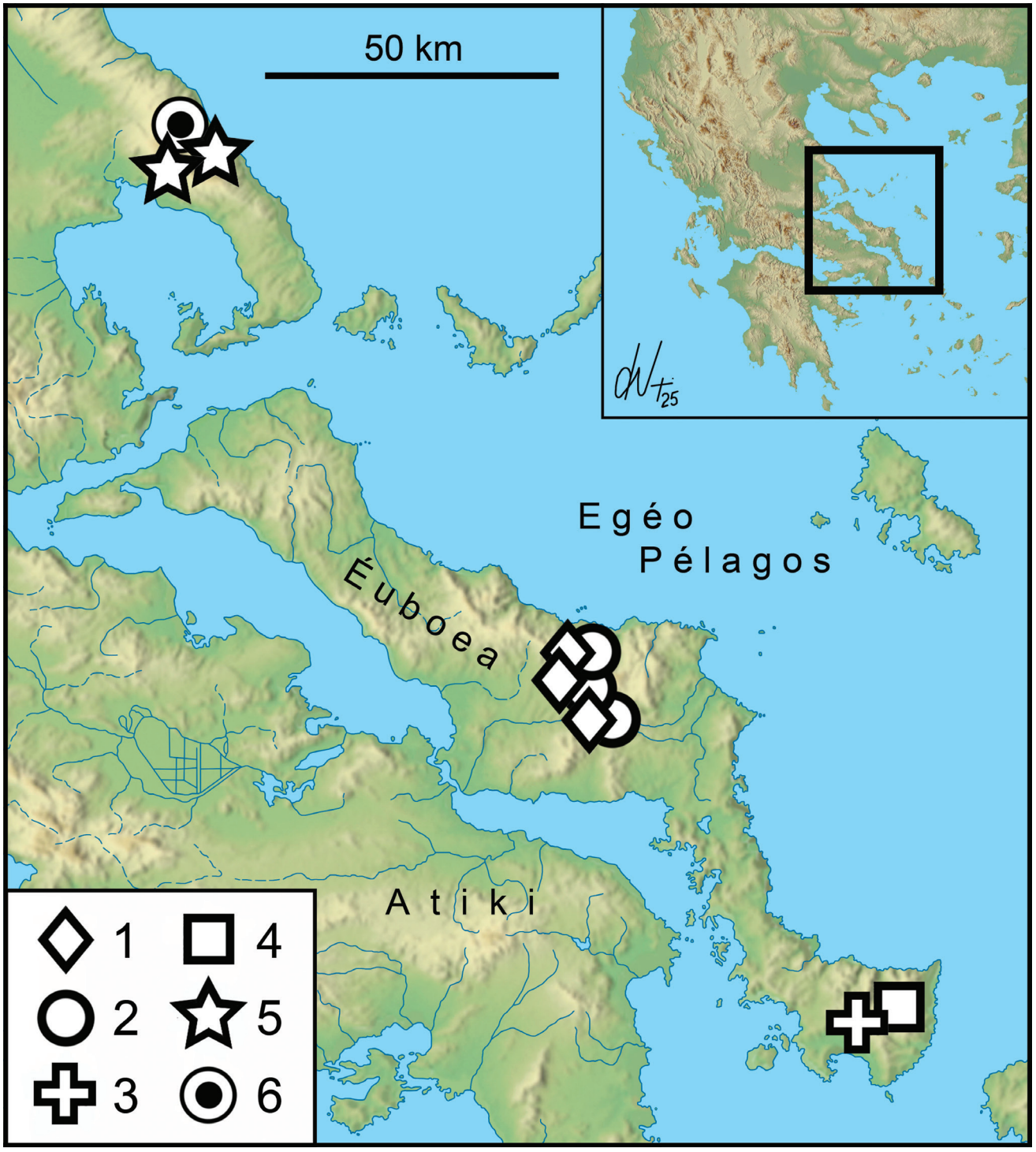

Fig. 38 – Distribution map of genus *Nesosteropus*. **1**, *N. diadochos*; **2**, *N. euboicus* **n. sp.**; **3**, *N. confusus* **n. sp.**; **4**, *N. montisochae* **n. sp.**; **5**, *N. continentalis*; **6**, *N. breiti* **n. sp.**

regularly arcuate, moderately sinuate at base. Anterior margin straight, with anterior angles not prominent and obtuse. Base moderately curved inwards, posterior angles obtuse. Disc smooth, with median groove scarcely distinct, lateral groove narrow; basal impressions shallow, simple and smooth. One marginal seta on each side, placed at anterior third.

Elytra oval, elongated (EL/EW ratio 1.68-1.72 ♂♂, 1.64-1.68 ♀♀) with maximum width approximately at anterior third; elytral base wider than base of pronotum with humeri nearly rounded and non-dentate. Juxtascutellar stria placed between the first and second stria, with an umbilicated pore at base; elytral striae shallow and smooth, intervals subconvex. Umbilicated series consisting of 12 pores, briefly interrupted in the median area, with a hint of aggregation at humeral area (5 pores) and at apical area (7 pores). Elytral lateral groove narrow; disc with a single seta on the third interval, leaning against the second stria, and placed approximately at apical fifth (Fig. 12).

Aedeagus relatively slender and elongated (Fig. 32). Median lobe, in lateral view, flexed approximately at 100° about at middle, arcuate at apical third; basal bulb relatively large; basal part subcylindrical. Apical blade broad, relatively long and ventrally curved in lateral view; in dorsal view, relatively long and subtruncated at apex, with left margin moderately curved inwards (Fig. 34). Right paramere slender, elongated, slightly and regularly curved, conical at apex, squat and slightly convex at basal part, with a convex expansion approximately at half length. Left paramere broad and subquadrate, with a concavity at middle and without median carina. Gonosomite (IX abdominal segment invaginated) ellipsoidal, with small and curved proximal apophysis.

Distribution

Nesosteropus continentalis is currently recorded only from Oros Pílio [Mount Pelion or Pilion], in Thessaly (Fig. 38).

Note

The examination of the type series of *N. continentalis*, deposited in the Frey collection at NHMBA, allowed us to ascertain the validity of this taxon, which must be considered at the rank of a distinct species. At the same time, the examination of the whole type series allowed us to ascertain the presence of a second distinct species within it, afterwards described under the name of *Nesosteropus breiti* **n. sp.**

Kirschenhofer (1997) described *Tapinopterus kerberos* (typ. loc. Tsangarada, Magnissía) from Oros Pílio: this species is very similar, on account of the shape of habitus, of right paramere and of median lobe of aedeagus in lateral view, to *Nesosteropus continentalis*. The author compared *T. kerberos* with *Tapinopterus meschniggi* Schatzmayr, 1928, a species today ascribed to the genus *Pseudorambousekiella* Schweiger, 1967, confirming their taxonomic diversity. The author was evidently unaware of *Nesosteropus continentalis* (Breit, 1923), living on Oros Pílio too, of which *Tapinopterus kerberos* Kirschenhofer, 1997 is a synonym. For this reason, we propose the following synonymy:
Tapinopterus kerberos Kirschenhofer, 1997 = *Pterostichus* (*Nesosteropus*) *diadochos continentalis* Breit, 1923.

***Nesosteropus breiti* n. sp.**
(Figs 7, 13, 19, 33, 35, 37)
urn:lsid:zoobank.org:act: XXX

Loc. Typ.: Greece, Mt. Pelion, Thessaly.
Type series:
HT ♂, **[Greece]**: Pelion Thessalien (white, printed), TYPE (pink, printed), Nesosteropus ovicollis Reitter v. continentalis Breit (white, handwritten), paratypoid (red, printed) (NHMBA).

PTT: 3 ♂♂ Pelion Thessalien (white, printed), TYPE (pink, printed), Nesosteropus ovicollis Reitter v. continentalis Breit (white, handwritten), paratypoid (red, printed) (NHMBA, CGi); 1 ♀ Pelion Thessalien (white, printed), T. diadochus continentalis (white, handwritten) (NHMBA); 1 ♂ Pelion Thessalien, Collectio Paganetti (NHMW); 1 ♀ Thessalia, collect. Plason, Molops ovicollis (NHMW); 1 ♀ Thessalia, ovicollis (NHMW); 1 ♀, Pelion Thessalien, Tap. (Nesosteropus) diadochos continentalis, det. A. Casale 1994 (CGu); 1 ♀ Gr. Mt. Pelio, Gipfelregion 1500 m, 3.V.2003, C. Huber, 39°23,7 23°02,6 (NHMB); 1 ♀, GR. (Thessalia), Pilion, rd. before Chania, 1500 m, 14/05/19, Junger leg. (CJu); 1 ♀, Pelion, Thessalien (MNUHB); 1 ♂, Greece, Pelion, Tsangarada, 27.3.1984, 450 m, leg. J. Frisch Fulda (MNUHB).

Diagnosis

A *Nesosteropus* of small body size (mm 8.6-9.9), closely related to *Nesosteropus continentalis* Breit, 1923 on account of the shape of aedeagus and, in particular, of the apex of median lobe which, in dorsal view, appears broad, squat, relatively rounded, with the left margin more or less curved inwards, and on account of the moderately sinuate lateral margin of pronotum before basal angles. It differs from *N. continentalis* by smaller size, median lobe of aedeagus, in lateral view flexed at about 90° at middle, by apical blade of aedeagus, in dorsal view distinctly sinuate at left margin and, in lateral view, ventrally more curved, and by right paramere without convex expansion at middle. It differs from *N. diadochos* and *N. euboicus* **n. sp.** by apical blade of aedeagus wider in dorsal view, and by sides of pronotum moderately sinuate posteriorly. It differs from *N. confuses* **n. sp.** and *N. montisochae* **n. sp.** by apical blade of aedeagus blunt in dorsal view, and by sides of the pronotum more sinuated posteriorly.

Description

Total body length mm 8.6-9.9 ♂♂, 9.8 ♀.

Head relatively large with two shallow frontal furrows, distinctly diverging posteriorly, extending approximately to the anterior margin of eye. Temples moderately convex, collar constriction evident. Eyes moderately reduced, slightly protruding, with a developed supraorbital carina receding forward. Mouth parts dark ferruginous. Antennae short, reaching, stretched backwards, the base of elytra.

Pronotum subtrapezoidal (PML/PMW ratio 0.85-0.90 ♂♂, 0.92 ♀), relatively large with ovoid appearance, with maximum width approximately at half-length. Sides regularly arcuate anteriorly, moderately sinuate at base. Anterior margin straight, with anterior angles not prominent and obtuse. Base with margin moderately curved inwards, posterior angles obtuse. Disc smooth, with scarcely distinct median groove, lateral groove narrow; basal impressions shallow, simple and smooth. One marginal seta on each side, placed at anterior third.

Elytra oval, elongated (EL/EW ratio 1.65-1.75 ♂♂, 1.66 ♀) with maximum width approximately at middle; elytral base wider than base of pronotum with nearly rounded and non-dentate humeri. Juxtascutellar stria sometimes anastomosed with the first stria, and placed between the first and second stria with an umbilicated pore at base; elytral striae shallow and smooth, intervals slightly convex. Umbilicated series consisting of 11 pores, briefly interrupted in the median area, with a hint of aggregation at humeral area (4 pores) and at apical area (7 pores). Lateral groove of elytra narrow. Elytral disc with a single seta on the third interval, leaning against the second stria and placed approximately at apical fifth (Fig. 13).

Aedeagus relatively slender and elongated (Fig. 33). Median lobe, in lateral view, flexed at almost 90° about at middle, arcuate at apical third; basal bulb relatively large; basal part subcylindrical. Apical blade broad, relatively long and, in lateral view, ventrally curved; in dorsal view long and subtruncated at apex, with left margin markedly curved inwards (Fig. 35). Right paramere slender, elongated, slightly and regularly curved, conical at apex, squat and slightly convex at the basal part, without convex protuberance. Left paramere broad and subquadrate, with a concavity at middle and without median carina. Gonosomite (IX abdominal segment invaginated) ellipsoidal with small and curved proximal apophysis.

Etymology

We dedicate this new species to the memory of Josef Breit, descriptor of the other species of *Nesosteropus* recorded from Oros Pílio.

Distribution

Nesosterospus breiti **n. sp.** is currently recorded only from Oros Pílio [=Mount Pelion or Pilion], in Thessalia (Fig. 38).

Note

The specimens of *N. breiti* **n. sp.** were identified within the type series of *N. continentalis*. At present it is not known whether the two species are not only sympatric but also syntopic.

Final remarks

As already highlighted in the discussion about the distribution of single species, the genus *Nesosteropus* shows a curious distribution of pairs of species on each of the three mountains concerned by its population ranges (Fig. 38). On each of the three mountain massifs, Ohi, Dirfi and Pílio, the following pairs of species are respectively present in sympatric or syntopic condition: *confusus* **n. sp.** and *montisochae* **n. sp.**, *diadochos* and *euboicus* **n. sp.**, *continentalis* and *breiti* **n. sp.** Each pair of species is composed by a larger species (*confusus* **n. sp.**, *diadochos* and *continentalis*) and a smaller one (*montisochae* **n. sp.**, *euboicus* **n. sp.** and *breiti* **n. sp.**). This curious situation could be likely interpreted as the current outcome of allopatric speciation phenomena, which occurred under the pressure of Pleistocenic climate changes, followed by the subsequent recolonization of the original areas, with extensive overlapping phenomena (see map at Fig. 38).

Another interesting data emerging from the examination of the distribution map of *Nesosteropus* (Fig. 38) is the presence of two non-insular species (*continentalis* and *breiti* **n. sp.**) distributed on Oros Pílio. This phenomenon is easily understandable on a geographic basis: the examination of a map of the area highlights that the mountain massifs of Euboea (Óhi and Dirfi) are part, together with Pílio, of the same mountain ridge, now partly submerged by the Pegasus Gulf in the stretch south of Volos.

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