

A new genus and new species of the family Issidae (Homoptera: Cicadina) from the West Mediterranean Region

Новый род и новый вид семейства Issidae (Homoptera: Cicadina) из Западного Средиземноморья

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KEY WORDS: Cicadina, Issidae, new genus, new species.

КЛЮЧЕВЫЕ СЛОВА: Cicadina, Issidae, новый род, новый вид.

ABSTRACT. *Numidius litus* gen.n. et sp.n. (Homoptera, Cicadina, Issidae) is described from the Pantelleria Island (Italy) and Tunisia.

РЕЗЮМЕ. *Numidius litus* gen.n. et sp.n. (Homoptera, Cicadina, Issidae) описан с острова Пантеллерия (Италия) и Туниса.

Introduction

During the study of issid material from the Pantelleria Island (Italy) a new species belonging to a new genus was discovered. Comparison of the male genitalia of the new species with the Linnavuori's [1971] figures (figs 10d, e) of *Hysteropterum algiricum* Lucas from Tunisia, shows that Linnavuori had to do with the new species rather than with *Hysteropterum algiricum* Lucas, 1849. The last species is distinguished by the short hind wings and single tooth of metatibia [Lucas, 1849: figs 9a–f]. All material recorded from Pantelleria Island [D'Urso & Guglielmino, 1995] and Tunisia [Linnavuori, 1971] under the name *Hysteropterum algiricum* belongs to the new species described below.

The material examined is deposited in the following collections: CAG — Collection of Prof. Dr. A. Guglielmino (Viterbo, Italy); CVDU — Collection of Prof. Dr. V. D'Urso (Catania, Italy); ZIN — Zoological Institute of the Russian Academy of Sciences (St. Petersburg, Russia).

Systematic part

Numidius gen.n.

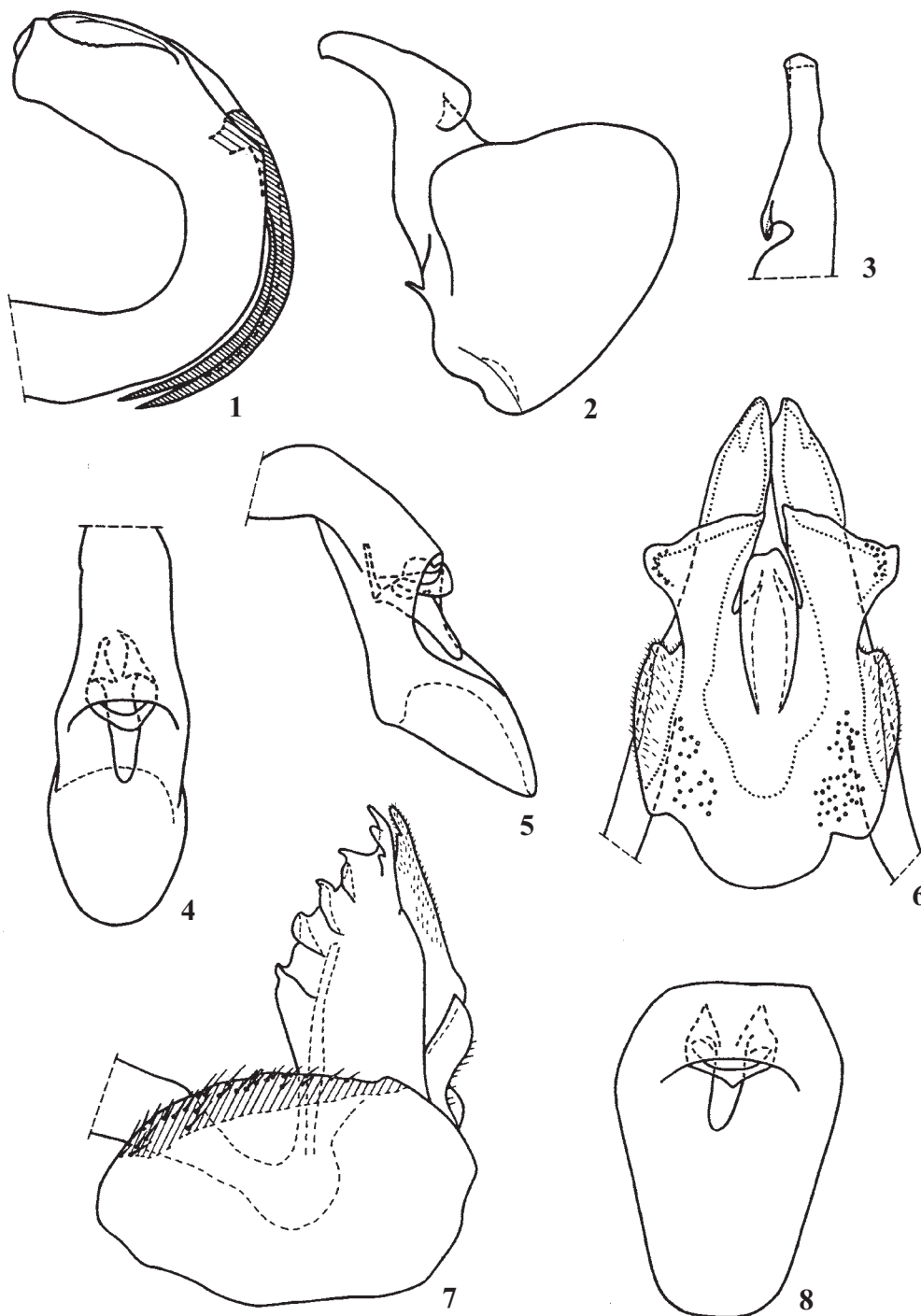
Type species: *Numidius litus* sp.n.

DESCRIPTION. Body ovate (dorsal view). Coryphe transverse, twice as wide as long; anterior margin convex, hind margin concave. Metope slightly longer than wide, with

distinct median keel, which weakens before clypeus; sublateral keels indistinct. Pronotum 1.3 times as long as coryphe; its anterior margin strongly protruding. Scutum + scutellum longer than pronotum, with 3 concavities. Fore wing twice as long as wide, weakly narrowing to apex with broad hypocostal plate; apical margin gently rounded. Radius bifurcated or trifurcated; Mediana trifurcated; Cubitus anterior simple; veins well marked. Hind wing entire. Hind tibia with 2 lateral teeth and 6–7 intermediate socle setae apically. Metatarsomere I with 7 intermediate socle setae apically.

Male. Hind margin of pygofer weakly concave medially. Anal tube long, narrow, subcylindrical, with rounded apex (dorsal view). Ventral side of anal tube concave, hemispherical. Anal column relatively long (0.25 times as long as anal tube), narrow. Penis strongly curved (lateral view). Dorsolateral lobes of phallobase weakly enlarged apically, with a pair of hemicircular apical processes (lateral view). Ventral lobe of phallobase relatively long, narrowing to apex. Aedeagus with a pair of long (half as long as phallobase) ventral hooks, which do not reach the base of phallobase. Aedeagal hooks flattened, gently curved, gradually narrowing to apex. Stylus with weakly convex hind margin; caudo-dorsal angle widely rounded. Stylus capitulum long, narrow, not narrowed apically (dorsal view). Apical tooth of stylus large, turned down; subapical tooth wide, lobe-shaped.

Female. Sternum VII with broadly concave hind margin. Anal tube elongate, broad basally, slightly narrowing to broadly rounded apex (dorsal view). Anal column narrow. Gonopods with weak transverse keels on surface. Furca and adjacent fields of gonopods distinct. Proximal part of posterior connective laminae of gonapophyses IX convex, with notch (lateral view). Distal parts of posterior connective laminae of gonapophyses IX turned at acute angle, with a pair of large teeth in bend places (dorsal view). Median field hemispherically convex (lateral view), with single lobe apically. Lateral fields protrude as short processes. Gonocoxa VIII with lobe-shaped hind margin. Endogonocoxal process gradually narrows to apex, with weak subapical projection. Apical group of anterior connective lamina of gonapophyse VIII consists of 3 teeth; lateral group includes 4 large teeth with keels and 1 small tooth without keel; comb broad.



Figs. 1–8. *Numidius litus* sp.n. 1 — penis, lateral view; 2 — stylus, lateral view; 3 — capitulum of stylus, dorsal view; 4, 5 — male anal tube (4 — dorsal view; 5 — lateral view); 6 — gonapophyses IX, dorsal view; 7 — gonapophyse VIII and gonocoxa VIII, lateral view; 8 — female anal tube, dorsal view.

Рис. 1–8. *Numidius litus* sp.n. 1 — пенис, вид сбоку; 2 — стилус, вид сбоку; 3 — головка стилуса, вид сверху; 4, 5 — анальная трубка самца (4 — вид сверху; 5 — вид сбоку); 6 — гонапофизы IX, вид сверху; 7 — гонапофиз VIII и гонокоса VIII, вид сбоку; 8 — анальная трубка самки, вид сверху.

ETYMOLOGY. The generic name is derived from the Greek name of the province Numidia in North Africa.

REMARKS. Because of the presence of a single apical lobe of gonapophyse median field, *Numidius* gen.n. belongs to the *Bubastia* generic group of the subtribe Hysteropterina [Gnezdilov, 2002].

Numidius litus sp.n.

Figs 1–8.

MATERIAL. Holotype, ♂, Italy, Pantelleria Island, Saltalavecchia, -300 m, 13.V.1996 (A. Guglielmino) (ZIN). Paratypes. Italy, Pantelleria Island: 3♂♂, 3♀♀, as holotype (CAG and ZIN);

1 ♂, Khaggiar, 66 m, 23.IV.1988 (V. D'Urso) (ZIN); 1 ♂, Costa di Vevinicolao c/o Grotta del Bagno Ascitutto, 375 m, 25.IV.1988 (V. D'Urso) (CVDU); 1 ♀, V. ne Fillio, 500 m, 5.IX.1992 (A. Carapezza) (CVDU).

DESCRIPTION. General colour from light-brownish yellow to brown. Metope with a pair of yellowish spots apically by the sides of median keel. Fore wing with 4 brown dots: 3 dots between second Radius branch and first Mediana branch, after first bifurcation of Mediana, and 1 dot between base of Mediana and Cubitus anterior. Teeth and socle setae of hind legs black.

Body length: males 4.7–4.9 mm; females 4.8–5.6 mm.

HABITAT. The specimens from Saltalavecchia were collected on *Olea europea* L. var. *sylvestris* Brot. in an area characterized by dry Mediterranean climate and Mediterranean maquis vegetation with evergreen thermophilous and xerophilous plants, as *Cistus*, *Phyllirea*, *Rosmarinus*, *Erica*, and Gramineae. The specimen from Khaggiar was collected on *Quercus ilex* in a degraded holm-oak wood, where fragments of maquis with *Pistacia lentiscus*, *Arbutus unedo*, *Juniperus phoenicea*, *Erica arborea*, *Erica multiflora*, *Cistus*, *Phyllirea*, and *Lonicera* were presented. The specimen from Costa di Vevinicolao was collected in a grass land where various species of Gramineae, *Galactites tomentosa* and *Chrysanthemum* sp. were abundant.

DISTRIBUTION. Pantelleria Island. NE Tunisia (Korbous) [Linnavuori, 1971].

ETYMOLOGY. The species name is derived from the Latin noun *litus* (sea coast).

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References

- D'Urso V. & Guglielmino A. 1995. Homoptera, Auchenorrhyncha // Arthropoda di Lampedusa, Linosa e Pantelleria (Canale di Sicilia, Mar Mediterraneo) / Naturalista sicil. Vol.19 (Suppl.). P.279–301.
- Gnezdilov V.M. 2002. Morphology of the ovipositor in the subfamily Issinae (Homoptera, Cicadina, Issidae) // Entomol. Obozr. T.81. No.3. P.605–626 [in Russian, with English summary].
- Linnavuori R. 1971. A leafhopper material from Tunisia, with remarks on some species of the adjacent countries // Ann. Soc. ent. Fr. (N.S.). T.7. No.1. P.57–73.
- Lucas H. 1849. Histoire naturelle des animaux articulés // Exploration scientifique de l'Algérie. Parts 3–4. Insectes. P.1–527 and atlas.