

# DISTRIBUTION, TAXONOMY AND LECTOTYPE DESIGNATIONS OF *ASIDA* LATREILLE, 1802 (INSECTA: COLEOPTERA: TENEBRIONIDAE) FROM ALGERIA AND TUNISIA

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**Abstract.**— Six species of the genus *Asida* Latreille, 1802, from Algeria and Tunisia, are revised of which five very rare or only known by types. *Asida punica* Kwieton, 1986 and *A. radulicollis* Kwieton, 1986 are redescribed, illustrations of habitus and aedeagus of *A. gambeyi* Allard, 1869, *A. punica* Kwieton, 1986, *A. radulicollis* Kwieton, 1986 and *A. sacculipennis* Kwieton, 1986 are first time presented and distribution maps are given for four little-known *Asida* species from Tunisia. New taxonomic status: *Asida abrupta* ssp. *punica* Kwieton, 1986 is upgraded to *A. punica* Kwieton, 1986, stat. nov. Taxonomical changes: *Asida hispidula* Pic, 1903 and *A. sacculipennis* Kwieton, 1986 are transferred from subgenus *Globasida* Escalera, 1905 to subgenus *Asida* s. str.; *Asida gambeyi* Allard, 1869 is transferred from subgenus *Asida* s. str. to subgenus *Globasida* Escalera, 1905. Lectotype designations: *Asida gambeyi* Allard, 1869; *A. hispidula* Pic, 1903; *A. ruficornis* Solier, 1836.



**Key words.**— Insecta, Coleoptera, Tenebrionidae, *Asida*, Algeria, Tunisia, systematics, taxonomy, geographical distribution.

## INTRODUCTION

The genus *Asida* is little-known in North Africa, especially in Algeria and Tunisia. Few systematic papers about this genus can be recensed for this area: Algeria and Tunisia (Kwieton 1986), Morocco (Cobos 1963, 1965, Ruiz 1998, 2000). In this paper, I study six species of which five very rare and little-known, belonging to three subgenera, the last ones of doubtful validity and which should be phylogenetically revised.

On the basis of the examination of type specimens I can clarify some nomenclature problems, to validate some taxa previously described only on a single specimen, that is very hazardous for *Asida* beetles, and to establish the actual distribution of these little-known taxa.

Lectotypes have been designated when possible from syntypes for the stability of the taxa, to become the unique bearer of the name of each taxon and the standard for its application, according to art. 74.1. (International Commission on Zoological Nomenclature 1999).

## MATERIAL AND METHODS

**Studied material.** Because of the high infraspecific morphological variations in this genus, it is important to study the larger number of specimens. In this work, I studied only 118 voucher specimens, because of the rarity of some taxa. The use of literature data or private lists is hazardous because misidentifications are recurrent. Only voucher specimens should be considered in studies on this little-known tenebrionid genus. The examined material, detailed in the taxonomical part, is from author's collection and following institutional collections, with acronyms utilised in the text: Muséum National d'Histoire Naturelle, Paris, Dr. Claude Girard (MNHN); Centre de Conservation des Collections, Muséum d'Histoire Naturelle, Lyon, Dr. Harold Labrique (MHNL); Mr Fabien Soldati private collection (CFS).

**Preparation of specimens.** *Asida* beetles are always covered by a more or less thick sandy, clayey or grubby lining of substratum. This substratum cover masks

important taxonomic characters. A radical cleaning of specimens is thus necessary before identification, to correctly study costation, sculpture and pilosity of pronotum and elytra. Specimens are sodden for 24–48 hours in a solution of 15% detergent and 85% water, cleaned with a set of 6 different small-sized supple paint-brushes, with brush shortly clipped (about 5 mm in height) to eliminate the grubby cover without rooting up setae.

Male genitalia (aedeagus) usually offer good taxonomic characters. For each specimen, the aedeagus was extracted from the internal abdomen, cleaned with a solution of detergent and water (see above) and glued on a small white card, ventral side visible.

Drawings have been made with the aid of a camera lucida mounted on a Wild® microscope, while photographs have been obtained using a Sony® digital camera.

## TAXONOMY

Genus *Asida* Latreille, 1802

Subgenus *Asida* Latreille, 1802

*Asida (Asida) punica* Kwieton, 1986, stat. nov.  
(Fig. 1)

*Asida abrupta* ssp. *punica* Kwieton, 1986: 10.

This taxon having been described as a subspecies of *Asida abrupta* Fairmaire, 1867, its original description is short for a species level. So, I give below a detailed redescription of *Asida punica* as a valid species.

**Redescription.** Length: 11–13 mm; red brown to dark brown; disc of pronotum and elytra dark brown, lateral margins of the same organs reddish.

Head with a very strong and dense punctation, intervals of points elevated, in relief, granulous; pilosity short and golden, with setae acuminate to apex; antennae slim, with golden setae and with middle antennomeres distinctly longer than broad; mentum with a dense punctation.

Pronotum with a very convex disc, globulous, clearly more elevated than lateral margin tops; disc of pronotum covered by a very dense granulation, without punctation and without longitudinal middle wrinkle (Fig. 5), each granule with a short golden seta, truncated to apex; anterior angles very projecting forward, anterior margin deeply indentated; middle base much more projecting backwards than posterior angle tops, the last ones in rounded angle; propleura with a very strong punctation, intervals of points in relief, forming a true mesh; mesosternum without carina.

Elytra elongated and sub-parallel, with humeri prominent in rounded angles, and with only three costae of which two very elevated; 1<sup>st</sup> costa near elytral suture, fragmented in little tubercles, agglomerated with the 2<sup>nd</sup> costa

on elytral declivity; 2<sup>nd</sup> costa distinctly closer to lateral margin than suture, very high, long, nearly linear but little curved, excessively elevated on elytral declivity, and fragmented in tubercles after; 3<sup>rd</sup> costa close to lateral margin, very fragmented, strongly elevated on elytral declivity in a large granulous relief, as the 2<sup>nd</sup> costa; pilosity on elytral bottom very short and yellowish, with setae acuminate to apex; pilosity of costae and elevations stronger and brown, with setae in paint brush shape, apically truncated; epipleura with a strong and dense granulation; all abdominal segments punctate-granulate.

Legs slim, especially in female, with a golden pilosity.

Sexual dimorphism pronounced, the male shorter and narrower, with elytral costae distinctly more elevated and indicated, with middle base of pronotum rounded (truncated in female), and with stronger legs; aedeagus ordinary, with parameres as long as the phallobase, clearly acuminate to apex (Fig. 9).

**Type material.** Holotype ♂, with following labels: “Holotypus (red label) / Djebel Ahmar, Tunisie, 91 [1891] / *Asida abrupta* ssp. *punica* Kwieton, holotype ♂ (red label)”, MNHN, Paris. It exist a “Djebel El Ahmar” in the Zaghouan area and a “Djebel Amar” near Tunis. Allotype ♀, with following labels: “Allotypus (red label) / Djebel Ahmar, Tunisie, 91 [1891] / *Asida abrupta* ssp. *punica* Kwieton, allotype ♀ (red label)”, MNHN, Paris.

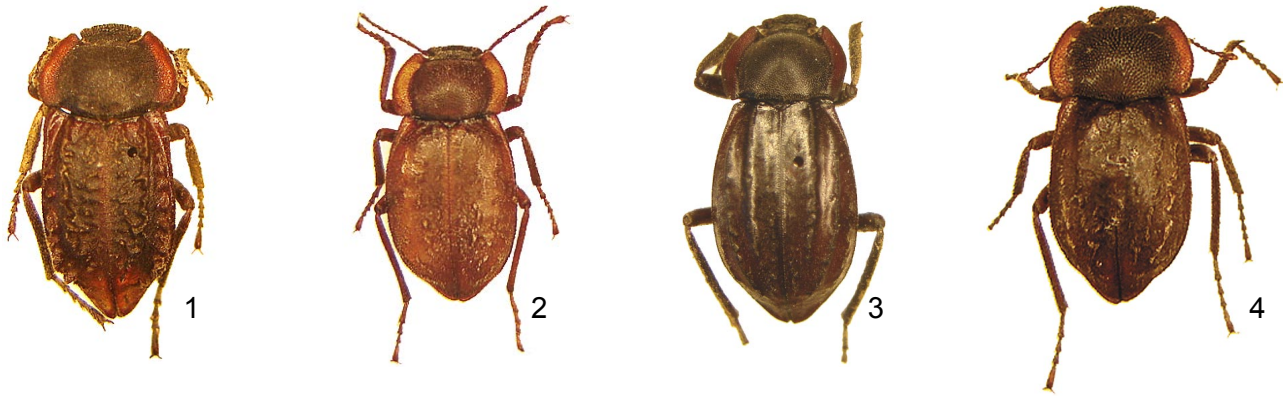
**Additional material.** 1 specimens ♀ labelled: TUNISIA. – Tunis. – Djebel Bou Kornine, IV–1973, P. Dauphin (CFS).

**Geographical distribution.** A very rare species, only known from djebels arround Tunis (Fig. 13).

**Comments.** Described as a subspecies of the very peculiar *Asida abrupta* Fairmaire, 1867, *A. punica* Kwieton, 1986 is a distinct species morphologically well separated:

Distinctly larger (11–13 mm); disc of pronotum very convex, globulous, much more elevated than lateral margin tops, with a very dense and regular granulation (Fig. 5); middle base more prominent backwards than posterior angles, the last ones hardly indicated; lateral sides of the pronotum much more narrow forward than backwards; pilosity of pronotum short and little-visible; costae of elytra covered by a short pilosity . . . . . *punica* Kwieton Shorter (8–9 mm); pronotum little convex, its disc with a longitudinal middle wrinkle and with a sparse granulation and a long pilosity, especially at each side of the middle wrinkle; middle base not more prominent backwards than posterior angle tops, because the last ones acuminate backwards, the base being like that deeply indentated; lateral sides of the pronotum regularly rounded; costae of elytra with a long, erected and very visible pilosity . . . . . *abrupta* Fairmaire

Furthermore, *A. abrupta* and *A. punica* are geographically isolated. *A. abrupta* is a very rare species, appear-



Figures 1–4. Male habitus. (1) *Asida punica* Kwieton (holotype); (2) *A. sacculipennis* Kwieton; (3) *A. gambeyi* Allard (lectotype); (4) *A. radulicollis* Kwieton.

ing strictly endemic to the Constantine area (Jemmapes, Constantine), in Algeria. *A. punica* is endemic to the surroundings of Tunis, in Tunisia (Fig. 13).

I consider here these two taxa as distinct species, belonging to the phylogeographical group of *A. inaequalis* Solier, 1836, with continental and insular Tyrrhenian species of Italy and North Africa.

### *Asida (Asida) hispidula* Pic, 1903

*Asida hispidula* Pic, 1903: 114.

*Asida (Globasida) pilosula* Gebien, 1910: 134.

**Diagnosis.** 7.5–9.5 mm long; red-brown; disc of pronotum sub-globulous, more elevated than lateral margins, the last ones very narrow and elevated; all disc covered by a sparse granulation, without punctation, and by a long and thin golden pilosity; anterior angles very prominent and pointed; middle base of pronotum much more projecting backwards than posterior angles; elytra without costae, covered by a sparse granulation, stronger granules agglomerated in ripples; elytra with long, close and erected golden pilosity, setae very thin and acumi-

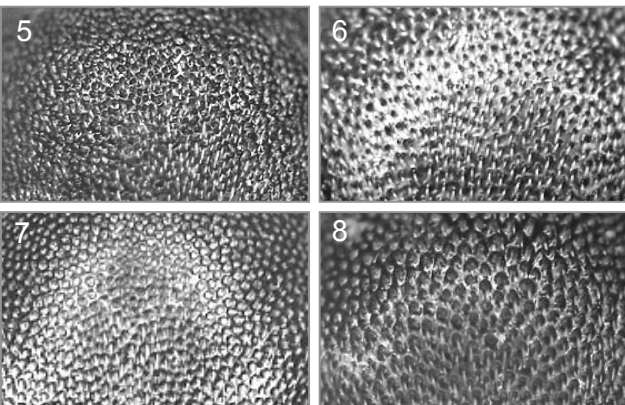
nate; lateral margins with identical setae; legs and antennae very slim, with golden pilosity; sexual dimorphism hardly indicated; aedeagus ordinary, with parameres as long as the phallobase, little acuminate to apex.

**Type material.** Lectotype ♂, here designated: “Entre Gabès et Métameur, juillet 1886, E. Blanc / Type (red label) / Muséum Paris, 1932, coll. Bedel, Soc. Ent. de France / *hispidula* Pic, Type / *Asida hispidula* Pic, lectotype ♂, F. Soldati des. 2005 (red label)”, coll. Bedel, MNHN, Paris. Paralectotype ♀, with the following labels: “Entre Gabès et Métameur, juillet 1886, E. Blanc / Paratype (red label) / Muséum Paris, 1932, coll. Bedel, Soc. Ent. de France / *Asida hispidula* Pic, paralectotype ♀, F. Soldati des. 2005 (red label)”, coll. Bedel, MNHN, Paris. Paralectotype ♀, with the following labels: “Gafsa à Nefzaoua (Blanc) / Type (red label) / *hispidula* Pic / Muséum Paris, coll. M. Pic / *Asida hispidula* Pic, paralectotype ♀, F. Soldati des. 2005 (red label)”, coll. Pic, MNHN, Paris. Paralectotype ♂, with the following labels: “Gafsa à Nefzaoua / *Asida hispidula* Pic, paralectotype ♂, F. Soldati des. 2005 (red label)”, coll. Pic, MNHN, Paris. Paralectotype ♂, with the following labels: “Type (red label) / Tunisie, environs de Gafsa / Muséum Paris, coll. M. Pic / *Asida hispidula* Pic, paralectotype ♂, F. Soldati des. 2005 (red label)”, coll. Pic, MNHN, Paris. Paralectotype ♀, with the following labels: “Type (red label) / *Asida hispidula* Pic / Muséum Paris, coll. M. Pic / *Asida hispidula* Pic, paralectotype ♀, F. Soldati des. 2005 (red label)”, coll. Pic, MNHN, Paris.

**Additional material.** 15 specimens labelled: TUNISIA: Médenine. – Douirat, L. Vibert (MNHN). Tataouine, L. Vibert (MNHN). Zarzis, III–1951, R. Démoflys (CFS).

**Geographical distribution.** This species appears to be endemic to southern sub-saharian Tunisia (Fig. 14). Recorded from Médenine by Normand (1936).

**Comments.** *Asida hispidula* is a species to remove to the *Globasida* phylogeographical group. It is phylogenetically far and donnot have the main characters of the species belonging to this group: apex of the parameres of the aedeagus arrowhead-shaped and curved in lateral view, propleura with strong folds backwards, antennae



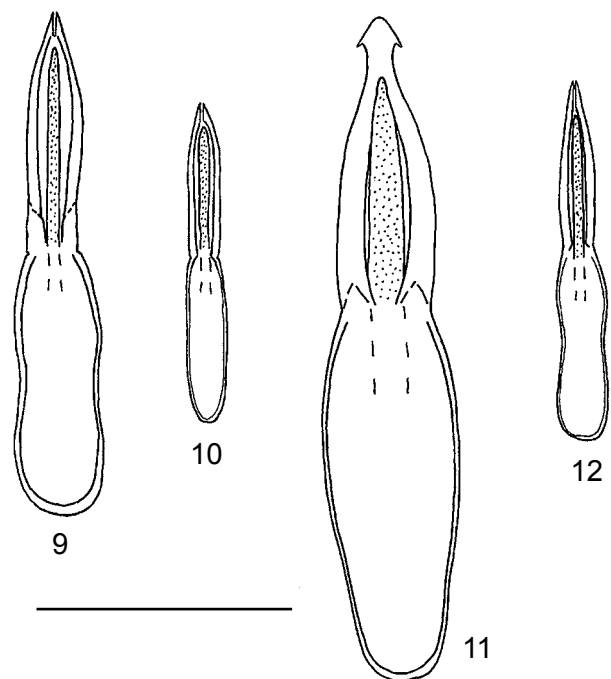
Figures 5–8. Sculpature of the disc of the pronotum (×25). (5) *Asida punica* Kwieton; (6) *A. sacculipennis* Kwieton; (7) *A. gambeyi* Allard; (8) *A. radulicollis* Kwieton.

very slim with middle antennomeres much more long than broad, etc. The sculpture of the disc of the pronotum could be placed *Asida hispidula* as a relative of the species belonging to the *Planasida* phylogeographical group, but its habitus only permit, without phylogenetical analysis, to place this species in a small group within the subgenus *Asida* s. str.

*Asida (Asida) sacculipennis* Kwieton, 1986  
species composita  
(Fig. 2)

*Asida (Globasida) sacculipennis* Kwieton, 1986: 8.

**Diagnosis.** 8–10 mm long; red-brown and not “noire dessus” as indicated in the original description; the reason of this mistake is a thick sandy lining of substratum on the holotype specimen; disc of pronotum sub-globulous, more elevated than lateral margins, the last ones clearly raised; all disc covered by a sparse granulation, without punctuation (Fig. 6); middle base more projecting backwards than posterior angles, the last ones rounded; anterior angles very projecting and anterior margin deeply indented; elytra without costae, covered by a sparse granulation and some stronger granulous elevations with longer setae; legs and antennae slim, pilosity of body, legs and antennae golden yellow; sexual dimorphism hardly indicated; aedeagus ordinary, with parameres as long as the phallobase, little acuminate to apex (Fig. 10).



Figures 9–12. Aedeagus ( $\times 12.5$ ). (9) *Asida punica* Kwieton (holotype); (10) *A. sacculipennis* Kwieton; (11) *A. gambeyi* Allard (lectotype); (12) *A. radulicollis* Kwieton. The black line represent 2 mm.

**Type material.** Holotype ♂, with the following labels: “Bled Thala, Tunisie, Vibert / Holotypus (red label) / *Asida sacculipennis* Kwieton, holotype ♂ (red label)”; MNHN, Paris. Paratype ♀, labelled: “Paratypus (red label) / Muséum Paris, Tunisie, Gafsa, A. Weiss 1904 / *Asida sacculipennis* Kwieton, paratype ♀ (red label) / *Asida radulicollis* Kwieton, Soldati det. 2004”; MNHN, Paris.

**Additional material.** 17 specimens labelled: TUNISIA. – Kasserine. – Thala, L. Vibert (MNHN).

**Geographical distribution.** This species is still only known of the type locality (Thala) (Fig. 15).

**Comments.** The female paratype corresponds to another species, described four pages before by the same author (!), *A. radulicollis* Kwieton. However, it’s with a doubt that Kwieton (1986) assign the female paratype to the male holotype and indicate “non désigné... l’attribution de l’exemplaire féminin au spécimen holotypique est compliquée par le manque de femelles topotypiques”. This female specimen has however a red label “Paratypus” identical to the ones of all type specimens of the taxa described in this publication. Like that, the female paratype has been “designated”. *Asida sacculipennis* was still now only known by the male holotype and the real female of *Asida sacculipennis* has not been described. But I think it is not necessary to give here its description because of the sexual dimorphism hardly indicated in this species. *Asida sacculipennis* is, like *A. hispidula*, incorrectly placed in the *Globasida*, having not the main characters of this phylogeographical group. As the previous species, it should be provisory placed in the same small group of *Asida* s. str. *A. sacculipennis* is a relative of *A. hispidula*, but it can be separated by the following morphological characters. *Asida hispidula* differs by lateral margins of pronotum very narrow and raised, anterior angles pointed and pilosity of pronotum, elytra and lateral margins of the same organs very dense, long and erected, with long and apically acuminate setae (short and truncated in *sacculipennis*, in paint brush shape).

Subgenus *Globasida* Escalera, 1905

*Asida (Globasida) gambeyi* Allard, 1869  
(Fig. 3)

*Asida gambeyi* Allard, 1869: 184.

**Diagnosis.** 13–15 mm long; black-brown, nearly lustrous; disc of the pronotum very convex, globulous, much more elevated than lateral margins, covered by a large and close punctuation, without granules, intervals of points nearly flat (Fig. 7), each point with a thin golden seta apically acuminate; lateral margins narrow and raised, anterior angles prominent and anterior margin deeply indented; posterior angles little projecting backwards, base of pronotum indented at each side, middle base hardly more projecting backwards than posterior angle tops;

propleura with a sparse punctation and with strong folds backwards; elytra oval elongated, clearly narrow forward, with four costae; 1<sup>st</sup> costa hardly indicated by tubercles, stronger on elytral declivity; 2<sup>nd</sup> costa long, linear, crossing each elytron at its middle, fragmented in tubercles on elytral declivity; 3<sup>rd</sup> costa similar to 2<sup>nd</sup> costa but obliterated at base; 4<sup>th</sup> costa reduced to tubercles stronger backwards; elytral bottom with small and little dense pilosity, with golden, short and acuminate to apex setae; epipleura with very thin granulation; legs and antennae slim, middle antennomeres nearly three times longer than broad; sexual dimorphism hardly indicated, the male with narrower elytra; aedeagus with parameres as long as the phallobase, apically very acuminate, arrowhead-shaped and sinuate in profil (Fig. 11): a typical aedeagus of *Globasida* !

**Type material.** Lectotype ♂ here designated: "Algérie / *gambeyi* / Ex. Musaeo Gambey, 1892 / Type (red label) / Muséum Paris, ex. coll. R. Oberthür / *Asida gambeyi* Allard, lectotype ♂, F. Soldati des. 2005 (red label)", MNHN, Paris. Paralectotype ♀, with the following labels: "*gambeyi*, Algérie (circular label) / Type (red label) / Ex. Musaeo E. Allard, 1899 / Muséum Paris, ex. coll. R. Oberthür / *Asida gambeyi* Allard, paralectotype ♀, F. Soldati des. 2005 (red label) / *Asida gambeyi* All., Algérie (large blue label)", MNHN, Paris.

Another ♀ specimen, identical to the other above, has following labels: "Ex. Musaeo Gambey, 1892 / Type (red label) / Muséum Paris, ex. coll. R. Oberthür", MNHN, Paris. It has not been chosen as a paralectotype because, following the original description, the species should have been described only on two specimens, one from coll. Allard and one from coll. Gambey.

**Geographical distribution.** A very rare species, described from "Algeria" and still only known on three specimens. Maybe the type locality is erroneous, this species being a closely relative to *Globasida* species of the *Asida (Globasida) almeriana* Escalera, 1905 group, from south eastern Spain.

**Comments.** Contrary to *Asida hispidula* and *A. sacculipennis*, transferred from *Globasida* to *Asida*, *A. gambeyi* is to remove to the *Asida* s. str. phylogeographical groups. It is phylogenetically very far and possess all the main characters of the species belonging to the *Globasida* group: parameres of the aedeagus apically arrowhead-shaped and curved in lateral view (Fig. 11), propleura with strong folds backwards, antennae very slim with middle antennomeres much more long than broad, disc of the pronotum very convex, globulous. This species must be placed into the *A. almeriana* phylogeographical group within the *Globasida*.

#### Subgenus *Planasida* Escalera, 1907

*Granulasida* Escalera, 1921: 427.  
*Leptasida* Reitter, 1917: 60 (pars).  
*Pseudoplanasida* Escalera, 1921: 360.  
*Trachasida* Reitter, 1917: 62.

#### *Asida (Planasida) ruficornis* Solier, 1836 sensu lato

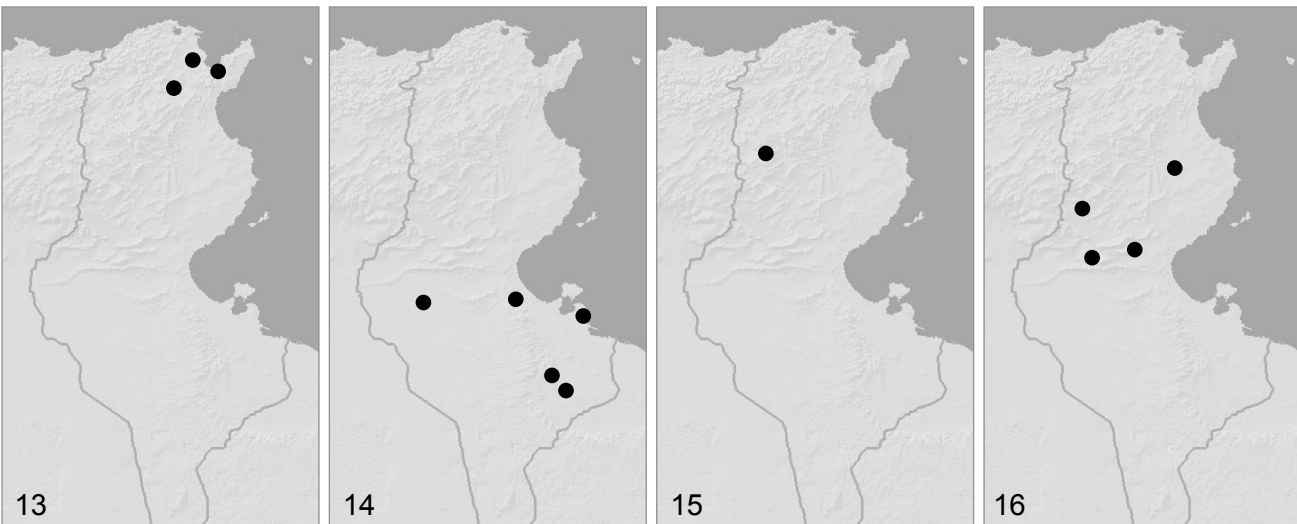
*Asida ruficornis* Solier, 1836: 421.  
*Asida sinuaticollis* Solier, 1836 var. A: 433.  
*Asida complanata* Lucas, 1849: 322.  
*Asida (Trachasida) gebieni* Reitter, 1917: 66.

**Diagnosis.** 7.5–16 mm; red-brown to black-brown; pronotum with disc little convex, covered by a close granulation, intervals of granules in relief, forming a more or less visible mesh; each granule with a thin golden seta apically acuminate; lateral margins broad, raised and more elevated than disc in male, hardly raised in female; middle base nearly projecting backwards than posterior angle tops; anterior angles prominent; propleura with close and large punctation; elytra elongated and sub-parallel, without true costae, covered on bottom by granules and with sparse granulous elevations; lateral margins delicately serrated; humeri rounded; elytral bottom with a dense pilosity, with short, whitish and apically acuminate setae; granulous reliefs with longer and darker setae, apically acuminate too; epipleura with close and thin granulation; legs and antennae slim, with golden pilosity, middle antennomeres nearly two times longer than broad; sexual dimorphism pronounced, the males shorter, flattened, with disc of the pronotum nearly flat, lateral margins raised, and elytra very little convex; aedeagus with parameres as long as the phallobase but clearly narrower, apically little acuminate.

**Type material.** Lectotype ♂, here designated: "*Asida ruficornis*, Oran (blue circular label) / *Asida ruficornis* Solier, lectotype ♂, F. Soldati des. 2004 (red label)", coll. de Marseul (including coll. Solier), MNHN, Paris. Paralectotype ♀, with the following labels: "*Asida ruficornis* Sol., Alger (blue and circular label) / *Asida ruficornis* Solier, paralectotype ♀, F. Soldati des. 2004 (red label)", coll. de Marseul, MNHN, Paris.

*Asida sinuaticollis* var. A, lectotype ♀, with the following labels: "*sinuaticollis* var. A, Type Solier (green label) / *Asida sinuaticollis* Sol. var. A, Barb[arie], T[ype] (blue circular label) / *Asida sinuaticollis* Solier var. A, lectotype ♀, F. Soldati des. 2004 (red label) / = *A. ruficornis* Solier, syn. nov., Soldati det. 2004", MNHN, Paris. Paralectotype ♂: "*sinuaticollis*, Type Solier (green label) / *Asida sinuaticollis* Sol., Barb[arie], T[ype] (blue circular label) / *Asida sinuaticollis* Solier var. A, paralectotype ♂, F. Soldati des. 2004 (red label) / = *A. ruficornis* Solier, syn. nov., Soldati det. 2004", MNHN, Paris.

*Asida sinuaticollis* Solier, 1836 is a **species composita**, its var. A being *Asida ruficornis* Solier, 1836, described twelve pages before ! Solier (1836) itself was



Figures 13–16. Distribution maps. (13) *Asida punica* Kwie-ton; (14) *A. hispidula* Pic; (15) *A. sacculipennis* Kwie-ton; (16) *A. radulicollis* Kwie-ton.

not self-confident with the attribution of the “var. A” to the nominotypical *sinuaticollis*: “an species?”, “la variété A (B by lapsus), qui pourrait bien être une espèce...”.

**Additional material.** 48 specimens labelled in detail (below) plus 16 specimens with a fragmentary labeling: ALGERIA. – Teniet-el-Haad, Aïn Defla (MHNL). Bône, La Calle (CFS). Sahara, Foug el Kheneg, II–1968 (CFS). Alger, La Bouzarea, VI–1893, P. Lesne (MNHN). Colomb Béchar, djebel Antar, XII–1973, C. Girard (MNHN). Sfid, XI–1891, A. Finot (MNHN). Tlemcen, Maghnia, C. Alluaud (MNHN). Sidi Bel Abbès, Le Moulit (MNHN). Oran, Les Puis, Le Moulit (MNHN). Pré-Sahara, Géryville, H. Munier (MNHN). Oran, Lemoyne (MNHN). Alger, L. Bedel (MNHN). Oran, Cap Falcon, 1929, C. Alluaud (MNHN). MOROCCO. – Oujda, Ersaf, V–2004, H. Labrique (MHNL). Oujda, Aklim, V–2004, H. Labrique (MHNL). Oujda, Jbel Mohriss, V–2005, H. Labrique (MHNL). Oujda, Mérijja, V–2005, H. Labrique (MHNL). Oujda, I–1995, G. Chavanon (CFS). *Idem*, XII–2000, G. Chavanon (MHNL). Oujda, Sidi Bouhria, I–1999, N. Zitouni (MHNL). *Idem*, IV–2002, H. Labrique et G Chavanon (MHNL). Oujda, Sidi Maarfa, V–2003, H. Labrique (MHNL). Oujda, Guefaït, V–2003, H. Labrique (MHNL). Tendirara, V–1999, N. Zitouni (MHNL). TUNISIA. – Siliana, El Kesra, VI–1982, J. Picka (MHNL).

**Geographical distribution.** Eastern Morocco, Algeria and Tunisia. The species is recorded from Algeria, Morocco and Spain by Gebien (1937), the citation of Spain being probably a confusion. Several subspecies have been described from Morocco, some of doubtful validity. In Tunisia, indicated from “Le Kef” by Normand (1936).

**Comments.** A very variable species, in size, in color and in sculpture.

***Asida (Planasida) radulicollis* Kwie-ton, 1986**  
(Fig. 4)

*Asida (Globasida) sacculipennis* Kwie-ton, 1986: 9 (♀).

**Redescription.** The holotype being not a ♂ but a ♀ (see below), I give here a redescription of this species, based on the both sexes (♂♀).

Length: 7.5–9.5 mm; red-brown.

Head covered by strong granules, each one with an apically truncated golden seta; punctuation of mentum close; antennae with golden pilosity, middle antennomeres hardly longer than broad (♀) or clearly longer than broad (♂).

Pronotum very transverse, two times broader than long, disc convex, more elevated than lateral margins, anterior angles prominent; middle base hardly more projecting backwards than posterior angle tops; disc of pronotum covered by a very close and strong granulation (Fig. 8), intervals of points flat, each granule with a short, golden and apically truncated seta; propleura with a strong punctuation, intervals of points in relief, forming a mesh; mesosternum without carina.

Elytra sub-parallel, without true costae, only with some granulous reliefs with yellow-brown and apically truncated setae; elytral bottom with small and little close granulation and a very short yellow-brown pilosity, with apically truncated setae; all abdominal segments granulate; legs slim.

Sexual dimorphism pronounced, the male smaller and narrower, with elytra less broad than pronotum at base (broader than pronotum at base in female) and with middle antennomeres clearly longer than broad; aedeagus ordinary, with parameres as long as the phallobase, little acuminate to apex (Fig. 12).

*Asida radulicollis* is a relative of *A. sacculipennis* but its very strong and close granulation on the disc of the pronotum cannot permit a confusion (Fig. 8 versus Fig. 6).

**Type material.** Holotype ♀, with the following labels: “Fériana / Fériana, Bourgeois / holotypus (red label) / *Asida radulicollis* kwieton, holotype ♀ (red label)”, MNHN, Paris. The holotype is a ♀ and not an individual “probablement ♂” as indicated in the original description (Kwieton 1986). The ♀ specimen from “Tébessa”, fortunately not indicated as allotype or paratype, is a female of *Asida curta* Allard, 1869.

**Additional material.** 2 specimens (♂ ♀) labelled: TUNISIA: **Gafsa.** – Sened, L. Vibert (MNHN). **Kairouan.** – Kairouan, L. Vibert (MNHN).

**Geographical distribution.** This species is very rare and endemic to middle Tunisia (Fig. 16).

## DISCUSSION

In this paper, I revise six species of the genus *Asida* from Algeria and Tunisia, of which five little-known and very rare. Only on six species, three are transferred from original subgenera to other more appropriate subgenera. This indicate one more time the recurrent problem of the validity of genera and subgenera in Palearctic Asidini and the classification of the species within. Probably *Asida* is not a natural group and speaking about phylogeographical groups should be better than subgenera. Therefore, all Palearctic Asidini should be phylogenetically revised, that is a long-term study because of the great number of the taxa (actually about 750), the numerous confusions by authors having wrought on Asidini without sufficient material or type examination, and the rarity of the taxa, often endemic to very small geographical areas.

This high taxa biodiversity may be related to the reduced geographical distribution of them. The majority of the species are endemic to small areas, usually a mountain group or an island archipelago. North Africa show significant patterns of micro-endemism, with generally morphologically well-characterized species: *A. maltinii* Ardoin, 1971 of the islet of Galita, north to Tunisia (Ardoin 1971), *A. cossyphoides* Antoine, 1949 of the Touahar pass, western to Taza, north Morocco (Kocher 1958), or *A. punica* Kwieton, 1986 of the Tunis area (this paper). The distribution study of *A. hispidula*, *A. radulicollis* and *A. sacculipennis* shows short areas of occurrence only in a small country like Tunisia where these species seems to be strictly endemic.

Original descriptions, usually short and without illustrations of habitus, are not sufficient for having a real representation of each taxon, because of the complexity and the diversity of sculpture, costation and pilosity. I present in this paper the habitus and the male aedeagus of the following species for the first time: *Asida gambeyi*, *A. punica*, *A. radulicollis* and *A. sacculipennis*. Syntype examination,

which is strongly recommended, indicate one more time that type series can include specimens belonging to different taxa (e.g. *Asida sacculipennis*).

Used taxonomic characters in the descriptions are often the same and not always the best. As in a previous study (Soldati and Leo 2005), I focussed on several little-known taxonomic characters as the shape of setae on elytra and pronotum, or the patterns of punctation and granulation, considered here as characters of specific level. Gridelli (1960, 1972), in his papers on Italian *Asida*, revolutionized the taxonomy in Asidini with a first chaetotaxical approach. So, correctly working on *Asida* needs an accurate cleaning of the studied specimens.

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