

On the subspecies of *Scantius aegyptius* (Linnaeus) (Heteroptera: Pyrrhocoridae)

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Lodosiana Ahmad & Abbas, 1986 is synonymized with *Scantius* Stål, 1866. *S. aegyptius* is subdivided into two subspecies: *S. ae. aegyptius* (Linnaeus, 1758) (= *Lodosiana noshkiensis* Ahmad & Zaidi, 1989 = *L. turbatensis* Ahmad & Zaidi, 1989, synn. n.) and *S. ae. rossii* nom. n. (= *italicus* Rossi, 1790, nom. praeocc., non Müller, 1766). The first of them is distributed in the Iberian Peninsula, North Africa with adjacent small Italian islands and Malta, Arabian Peninsula, Near East, Iraq, Iran, SW Turkmenistan, S Afghanistan and S. Pakistan, the second one in S Europe from France to N Caucasus, in Transcaucasia, W and N Turkey, NW Iran, E Turkmenistan, Tadzhikistan, Uzbekistan, Kirgizia, S Kazakhstan and N Afghanistan. Populations more or less intermediate between the two subspecies are described.

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Genus *Scantius* Stål, 1866

Scantius Stål, 1866: 4, 10. Type species *Cimex forsteri* Fabricius, 1781.

Lodosiana Ahmad & Abbas, 1986: 72, syn. n. Type species *Cimex aegyptius* Linnaeus, 1758.

Ahmad & Abbas (1986) erected the genus *Lodosiana* as monotypic for *Scantius aegyptius* (L.). They distinguished *Lodosiana* from *Scantius* mainly by the coloration of the corium (red with black spot; in the type species of *Scantius*, brown to black with narrowly red margin) and obligate macroptery (the type species of *Scantius* is pterygodimorphic). Both characters are of little value in the classification of Pyrrhocoridae. Similar differences in the coloration of the corium are present in the closely related genus *Pyrhocoris* (e. g. *P. apterus* L. and *P. marginatus* Kol.). Many genera of Pyrrhocoridae include both obligately macropterous and pterygodimorphic species. *S. aegyptius* is not the single macropterous species of *Scantius*: *S. aurantiacus* Signoret and some other species from Madagascar, obviously not closely related to *S. aegyptius*, are obligately macro-

pterous as well. The male genitalia of *S. aegyptius* (see Pluot, 1978, the figure of paramere misnumbered) and *S. forsteri* are similar in all principal details. We consider therefore that *Lodosiana* is synonymous with *Scantius*.

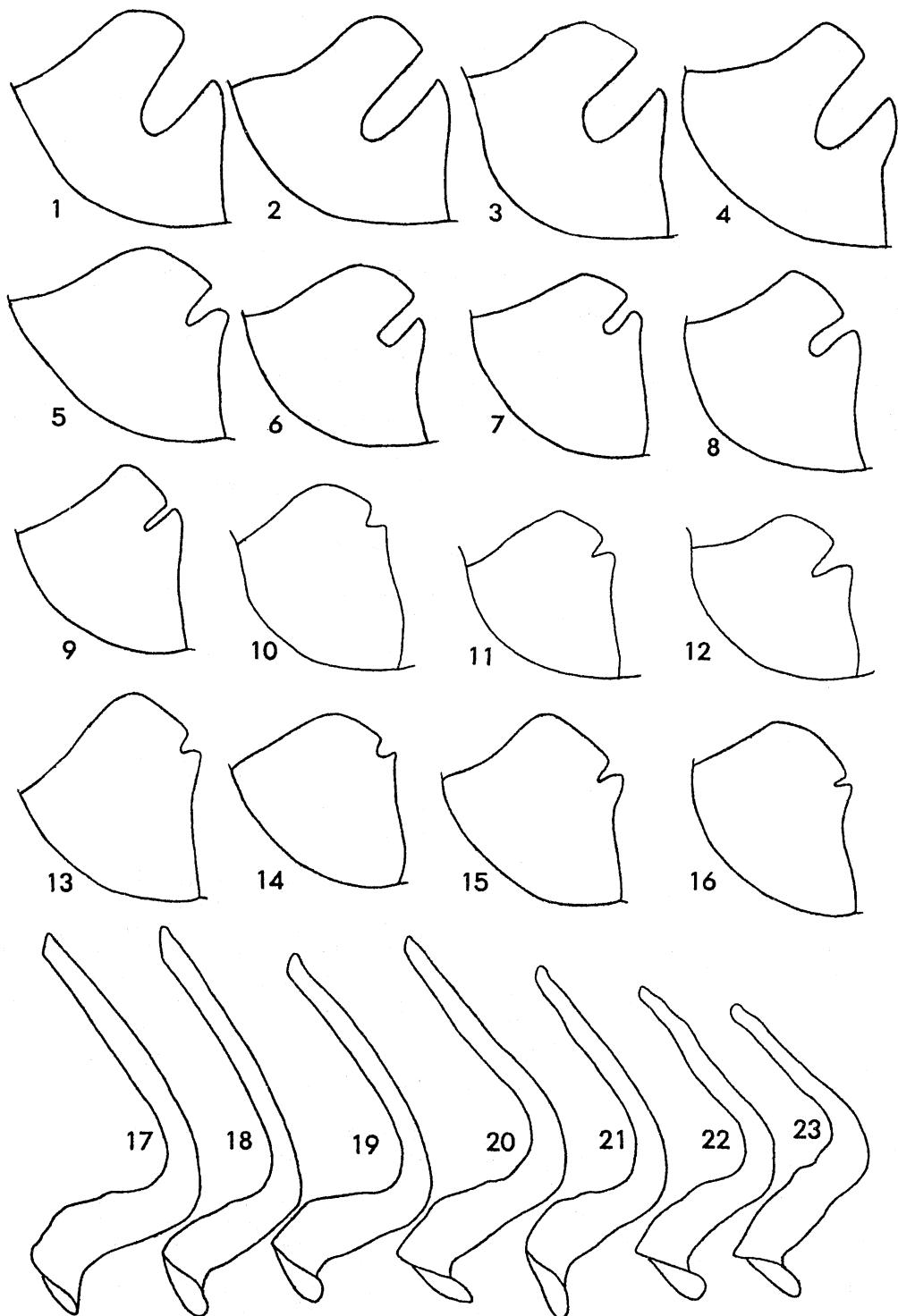
As shown by Carapezza (1995), *S. aegyptius* may be subdivided into two subspecies readily distinguished by the structure of the male and female genitalia. In this paper, the distribution of the two subspecies is refined, intermediate populations described, new synonymies established and a new name given to replace the preoccupied *S. aegyptius italicus* Rossi.

Scantius aegyptius aegyptius (Linnaeus, 1758) (Figs 1-9, 17-20)

Cimex aegyptius Linnaeus, 1758: 447. Egypt.
Scantius aegyptius iraquensis Blöte, 1933: 597 (syn. Carapezza, 1995: 246). Iraq, Hinaida [= Hinaidi nr Baghdad].

Lodosiana noshkiensis Ahmad & Zaidi, 1989: 58, syn. n. Pakistan, Baluchistan, Noshki.

Lodosiana turbatensis Ahmad & Zaidi, 1989: 58, 61, syn. n. Pakistan, Baluchistan, Turbat.



This subspecies differs in the deep and wide incision on the inner margin of each first gonocoxite and large parameres. *Lodosiana noshkiensis* and *L. turbatensis* were distinguished from *Scantius aegyptius* (as *Lodosiana aegyptius*) by the black coloration of pronotum not prolonged on the hind lobe; they were separated from each other by the dentition of femora. Specimens with uniformly red hind lobe of pronotum are common in *S. ae. aegyptius* (extremely rare in *S. ae. rossii*), and dentition of femora in *S. aegyptius* is rather variable. The figures of the male and female genitalia in the original description of *L. noshkiensis* and *L. turbatensis* fit well the characters of *S. ae. aegyptius*.

Distribution. The whole Iberian Peninsula (partly based on information from J. Ribes), North Africa (Canary Islands, Morocco, Algeria, Tunesia, Libya, Egypt), Italian islands adjacent to North Africa (Pantelleria, Lampedusa, Linosa), Malta, Yemen, Saudi Arabia, Israel, Jordan, Lebanon, Syria, Cyprus, SE Turkey, Iraq, Kuwait, Iran (except for the north-west), NW Turkmenistan, S Afghanistan (information from J. Stehlík), S Pakistan (Baluchistan).

Populations from the Canary Islands, Iberian Peninsula, NE Iran (Espaneh; Khorasan Prov.) and SW Turkmenistan (Balkhan and Kopetdagh Mts) are more or less intermediate between the two subspecies. The incision on the first gonocoxite of the female is narrower and shorter than in the typical *S. ae. aegyptius*; the sizes of parameres either do not differ from the typical ones (Canary Islands) or are transitional between this and the second subspecies (Turkmenistan).

Scantius aegyptius rossii nom. nov.

(Figs 10-16, 21-23)

Cimex italicus Rossi, 1790: 241 (junior primary homonym of *Cimex italicus* Müller, 1766). N Italy.
Scantius aegyptius italicus: Carapezza, 1995: 246.

In this subspecies, the incision on the first gonocoxite of female is shallow and narrow.

Figs 1-23, *Scantius aegyptius* L., 1-16: left first gonocoxite: 1-9, *S. ae. aegyptius* (1-4, typical; 5-9, transitional to *S. ae. rossii*): 1, Morocco; 2, Israel, estuary of Jordan; 3, SE Turkey, Diyarbakir; 4, SE Iran, Sistan; 5, Canary Is., Gomera; 6, Spain, Toledo; 7, NE Iran, Espaneh; 8, 9, SW Turkmenistan, Chandyr R., Ak; 10-16, *S. ae. rossii* nom. n.: 10, France, Pyrénées-Orientales, Baillaurie R.; 11, Crete, Hierapetra; 12, Crete, Herakleion; 13, SE Turkmenistan, Takhta-Bazar; 14, NW Iran, Tebriz; 15, NE Caucasus, Dagestan, Makhachkala; 16, NW Caucasus, Gelendzhik; 17-23, left paramere: 17-20, *S. ae. aegyptius*: 17, Algeria, Ighil Izane; 18, Canary Is., Gomera; 19, Iran, Sistan; 20, SW Turkmenistan, Chandyr R., Ak; 21-23, *S. ae. rossii*: 21, SE Turkmenistan, Iolatan'; 22, Tadzhikistan, Dushanbe; 23, NW Caucasus, Gelendzhik.

The paramere is distinctly smaller than in *S. ae. aegyptius*.

Distribution. S France, Italy (up to Sicily in the south), the whole Balkan Peninsula, Ukraine (southern Crimea), Russia (N Caucasus), Georgia, Armenia, Azerbaijan, W and N Turkey, NW Iran (Tebriz), E Turkmenistan (from the river Murgab in the west), Tadzhikistan, Uzbekistan, Kirgizia, S Kazakhstan, N Afghanistan. Hoberlandt (1960) recorded *S. aegyptius* from N Pakistan based on one 3rd instar nymph. The record needs confirmation; it may refer to *S. ae. rossii* rather than to *S. ae. aegyptius*.

References

- Ahmad, I. & Abbas, N. 1986. *Pyrrhocoris* group (Hemiptera: Pyrrhocoridae: Pyrrhocorinae) with description of a new genus and a new species from Indo-Pakistan subcontinent and their relationships. *Türk. Bitki Koruma Derg.*, 10(2): 67-87.
- Ahmad, I. & Zaidi, R.H. 1989. A revision of the genus *Lodosiana* Ahmad and Abbas (Hemiptera: Pyrrhocoridae) with description of two new species from Baluchistan and their relationship. *Pakistan J. Zool.*, 21: 57-63.
- Blöte, H.C. 1933. New Pyrrhocoridae in the collection of the British Museum (Natural History). *Ann. Mag. nat. Hist.* (10), 11: 588-602.
- Carapezza, A. 1995. Heteroptera. In: Arthropoda di Lampedusa, Linosa e Pantelleria (Canale di Sicilia, Mar Mediterraneo). *Naturalista Siciliano* (4), 19, suppl.: 199-278.
- Hoberlandt, L. 1960. Spedizione Italiana al Karakorum ed al Hindu-Kush (1954-1955). Primi risultati dello studio delle raccolte zoologiche. Hemiptera-Heteroptera. *Atti Mus. civ. Stor. nat., Trieste*, 22: 55-65.
- Linnaeus, C. 1758. *Systema naturae per regna tria naturae, secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis. Editio decima, reformata: i-v, 1-824. Salvii, Holmiae.*
- Rossi, P. 1790. *Fauna Etrusca, sistens insecta quae in provinciis Florentina et Pisana praesertim colligit, 2: i-xii, 1-348. Masi, Liburni.*
- Stål, C. 1866. *Hemiptera Africana*, 3: 1-200. Norstedt, Holmiae.

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