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***Grammognata euphratica* (Dejean, 1822) new for Senegal**

(Coleoptera: Cicindelidae)
Studies of Tiger Beetles CLII

Fabio CASSOLA

Abstract: *Grammognata euphratica* (Dejean, 1822) is recorded for the first time from northern Senegal (Djoudj National Park), thus extending its known geographical range a bit further South in Western Africa.

Riassunto: *Grammognata euphratica* (Dejean, 1822) viene segnalata per la prima volta del Senegal settentrionale (Parco Nazionale Djoudj), allargando così sia pur di poco a sud la sua distribuzione geografica in Africa Occidentale.

Zusammenfassung: *Grammognata euphratica* (Dejean, 1822) wird erstmals aus dem Norden des Senegal (Djoudj Nationalpark) gemeldet. Hierdurch erweitert sich die bislang bekannte Verbreitung in Westafrika etwas nach Süden.

Results

The tiger beetle fauna of Senegal was duly revised in 1996 by WERNER, who listed 37 species. However, one additional species was collected in that very same year in northern Senegal (Djoudj National Park) by my German colleagues Michael GEISTHARDT and Peter SCHÄFER. The total number of the tiger beetle species known so far from Senegal is thus raised up to 38 species (Table I), what definitely makes Senegal to be the richest country in Western Africa, as far as tiger beetles are concerned (CASSOLA & PEARSON 2000). The specimens mentioned here are in SCHÄFER's (PSC) and in author's (FCC) collections.

***Grammognata euphratica euphratica* (Dejean, 1822)**

Megacephala euphratica Dejean, in LATREILLE & DEJEAN, 1822:37
Grammognata euphratica; MOTSCHULSKY, 1850:15
Tetracha euphratica; CHAUDOIR, 1850:7
Tetracha euphratica; LACORDAIRE, 1854:13
Tetracha euphratica; THOMSON, 1857:29
Tetracha euphratica; CHAUDOIR, 1860:334
Tetracha euphratica; FLEUTIAUX, 1892:19
Megacephala (Grammognatha) euphratica; HORN, 1926:65
Megacephala (Grammognatha) euphratica; WIESNER, 1992:44
Grammognata euphratica; HUBER, 1994:73
Megacephala (Grammognatha) euphratica; CASSOLA & RIHANE, 1996:198
Megacephala (Grammognatha) euphratica; CASSOLA & SCHNEIDER, 1997:248
Megacephala (Grammognatha) euphratica; FRANZEN, 2001:87

Material: N. Senegal: Djoudj National Park, 15 October 1996, M. GEISTHARDT leg., 2 ♂♂ 1 ♀; P.N. des Oiseaux du Djoudj, October 1996, P. SCHÄFER leg., 1 ♂ 8 ♀♀.

Grammognata euphratica is a well known and widespread halophilous nocturnal beetle, the only Megacephaline species of the Palaearctic, which usually occurs in salty situations such as saltflats, lagoons and saltworks. Firstly found by A.G. OLIVIER on the banks of River Euphrates in Mesopotamia (DEJEAN, in LATREILLE & DEJEAN 1822), it is known to have a very large but scattered geographical distribution, which covers the Middle Orient (Iraq, Syria, southern Turkey, Israel, Kuwait), the Arabian peninsula (Jordanian, Saudi Arabia, Arab Emirates, Oman, Yemen), the whole of North Africa from Egypt to Morocco, the Atlantic coast from Morocco to Mauritania, the Mediterranean islands of Cyprus, Rhodos and Crete, as well as the SE Spain coastal area from Santa Pola to Almeria (AL-HOUTY 1989; BASILEWSKY 1970; CASSOLA 1973a,b, 1981, 1999; CASSOLA & RIHANE 1996; CASSOLA & SCHNEIDER 1997; CROVETTI 1966; FRANZEN 2001; HORN 1926; JEANNE 1986; JEANNE & ZABALLOS 1986; KORELL & CASSOLA 1987; NUSSBAUM 1987; REYMOND 1955; WERNER 1991; WIESNER 1992, 1993, 1996, 1998; ZABALLOS & JEANNE 1994). Moreover, *G. euphratica* occurs from Iran to Beluchistan, Afghanistan and central Asia with a bluish subspecies, *armenica* CASTEL-

NAU, 1834 (KRYZHANOVSKIJ *et al.* 1995), and on both sides of the Red Sea, down to Gibuti (where a ssp. *aida* Mandl, 1959, has been described from) and Yemen (Aden) (MANDL 1959; WRANIK *et al.* 1991). However, its occurrence in Eritrea and in northern Somalia (Somaliland), although possible and even probable, has not been recorded in so far (CASSOLA & MISKELL 1990).

The finding locality of *G. euphratica* in Senegal was the Djoudj National Park, an outstanding wetland area of approximately 16,000 hectares, which lies at some 50 kms W of Richard Toll and represents the fossil delta of the River Senegal. The occurrence of *G. euphratica* in such an area, South of the present-day course of the River Senegal (which by itself draws the boundary line between Senegal and Mauritania), is far from surprising, as the species was already known from Rosso in southern Mauritania (BASILEWSKY 1970), but anyway it constitutes a nice southern range extension for the species.

Table I: Tiger beetle species known so far from Senegal.

1. <i>Megacephala quadrisignata</i> Dejean, 1829	
2. <i>Megacephala bocandei</i> Guérin, 1848	
3. <i>Megacephala megacephala</i> (Olivier, 1790)	
4. <i>Grammognatha e. euphratica</i> Dejean, 1822	new for Senegal
5. <i>Prothyma concinna</i> (Dejean, 1831)	
6. <i>Prothyma leprieurii</i> (Dejean, 1831)	
7. <i>Euryarthron festivum</i> (Dejean, 1831)	
8. <i>Prothymidia vuilletoorum</i> (W. Horn, 1914)	
9. <i>Elliptica lugubris</i> (Dejean, 1825)	
10. <i>Elliptica deyrollei</i> (Guérin, 1849)	
11. <i>Ropaloteres vittatus</i> (Fabricius, 1801)	
12. <i>Ropaloteres feisthamelii</i> (Guérin, 1849)	
13. <i>Ropaloteres nysa</i> (Guérin, 1849)	
14. <i>Ropaloteres cinctus</i> (Olivier, 1790)	
15. <i>Ropaloteres flavosignatus</i> (Castelnau, 1835)	
16. <i>Hipparidium caternaultii</i> (Guérin, 1849)	
17. <i>Hipparidium interruptum</i> (Fabricius, 1775)	
18. <i>Calochroa flavomaculata</i> (Hope) ssp. <i>sexsignata</i> (Mandl, 1954)	
19. <i>Calomera aulica</i> (Dejean, 1831)	
20. <i>Calomera fimbriata</i> (Dejean, 1831)	
21. <i>Calomera asperula</i> (Dufour, 1821)	
22. <i>Lophyra (Lophyra) n. neglecta</i> (Dejean, 1825)	

23. *Lophyra* (*Lophyra*) *senegalensis* (Dejean, 1825)
24. *Lophyra* (*Lophyra*) *escheri* (Dejean, 1831)
25. *Lophyra* (*Stenolophyra*) *luxerii* (Dejean, 1831)
26. *Lophyra* (*Eriolophyra*) *arnoldi* (W. Horn, 1904)
27. *Habrodera nitidula* (Dejean, 1825)
28. *Habrodera leucoptera* (Dejean, 1831)
29. *Chaetodera regalis* (Dejean, 1831)
30. *Cylindera octoguttata* (Fabricius, 1787)
31. *Myriochila* (*Monelica*) *flavidens* (Guérin, 1849)
32. *Myriochila* (*Monelica*) *vicina* (Dejean, 1831)
33. *Myriochila* (*Monelica*) *dorsata* (Brullé, 1834)
34. *Myriochila* (*Monelica*) *dumolinii* (Dejean, 1831)
35. *Myriochila* (*Myriochila*) *plurinotata* (Audouin & Brullé, 1839)
36. *Myriochila* (*Myriochila*) *m. melancholica* (Fabricius, 1798)
37. *Cratochaerea brunet* (Gory, 1833)
38. *Cratochaerea chrysopyga* (W. Horn, 1892)

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Author:

Dr. Fabio CASSOLA, Via Fulvio Tomassucci 12/20, I-00144 Roma, Italy.

E-mail: fabiocassola@skynet.it

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