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Scolopendromorph centipedes (Chilopoda: Scolopendromorpha) collected in northern Iraq by Dr Hywel Roberts with a review of previous records

Сколопендроморфные губоногие многоножки (Chilopoda: Scolopendromorpha), собранные в северном Ираке д-ром Хайэлом Робертсом, с обзором предыдущих находок

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КЛЮЧЕВЫЕ СЛОВА: губоногие многоножки, Scolopendromorpha, Ирак, таксономия, зоогеография, суточная активность.

ABSTRACT: Five species of scolopendromorph centipedes are recorded from northern Iraq and previous record for the country reviewed. Specimens previously identified as *Scolopendra morsitans* L., 1758 by Chamberlin are either *S. canidens* Newport, 1844 or *S. mirabilis* (Porat, 1876): his records of *S. morsitans* from Iraq should be disregarded. *Trachycormocephalus occidentalis iraquensis* Turk is a junior synonym of *S. mirabilis.*

РЕЗЮМЕ: В северном Ираке найдено 5 видов сколопендроморфных губоногих многоножек; дан обзор предыдущих находок. Экземпляры из Ирака, определенные ранее Чемберленом как *Scolopendra morsitans* L., 1758, являются *S. canidens* Newport, 1844 или *S. mirabilis* (Porat, 1876). Установлен новый синоним: *Trachycormocephalus occidentalis iraquensis* Turk, 1951 = *S. mirabilis*.

Introduction

Recent work on the centipedes of the Arabian Peninsula [Lewis, 1986b, 1989, 1996, Lewis and Gallagher, 1993, Lewis and Wranik, 1990], of Israel and Palestine [Negrea, 1997, Zapparoli, 1991] and of Iran [Zaparolli, 1986] have markedly increased knowledge of the distribution of scolopendromorph centipedes in the Middle East. Data are here presented based on a collection of scolopendromorph centipedes collected in northern Iraq in 1971 by Dr Hywel Roberts (HR), then a FAO forestry entomologist. The specimens will be deposited in the Natural History Museum, London (BMNH). Material identified by Chamberlin [1958] and in the collection of the Zoologisches Institut und Zoologisches Museum, Hamburg (ZMH) has been re-examined as have the types of *Trachycormocephalus occidentalis iraquensis* Turk, 1951 from the Natural History Museum, London. Errors in identification have been corrected and previous records incorporated. Localities are shown in Fig 1.

Systematics

Family Scolopendridae

Scolopendra cingulata Latreille, 1829

Previous records: Tal Afar area, W. of Mosul [Chamberlin, 1944]. — Cucklauva, Geli Alibek [Chamberlin, 1958].

Material examined: 1 spm, 89 mm. Kope Quara Dagh, 10.05.1971 HR. — 2 spms, 94 and 107 mm, large black specimens crossing Arbil-Mosul road in numbers, 10.05.1971, HR. — 2 spms, Cuklauva, Geli Alibek, 21 & 26.04.1958, C. Kosswig leg., R. V. Chamberlin det. et publ. 1958 (ZMH).

REMARKS: A circum-mediterranean species extending eastwards into Iran and Tadjikistan but not southwards into Saudi Arabia. Also recorded from Madagascar, the Andamans, Nicobars and the Malay Peninsula. Chamberlin's identification for two specimens is confirmed as correct.

Scolopendromorphs are not normally diurnally active so Roberts' observation is very interesting. In a letter dated 18.02.1981 he wrote: "the large black centipede was present at a density of one per meter of road length. All were crossing from North to South and the crossing time was about mid-morning. There were certainly sufficient numbers of centipedes to make me think at the time that it was some kind of migration. I do not recall the same movement again and I must have been that road monthly during the 18 months I was there. The weather was dry and cool, not dry and hot."

Scolopendra canidens Newport, 1844

Previous records. 1 spm Kope Quara Dagh [Lewis, 1986a].

Fig. 1. Map of Iraq showing localities for Scolopendromorpha.
Рис. 1. Карта Ирака; показаны местонахождения Scolopendromorpha.

Material examined: 4 spms 52–62 mm, Kope Quara Dagh, 10.05.1971, HR. — 1 spm 58 mm, Sulaimanyia, 15.03.1971, HR. — 7 spms, 25–46 mm, Cuklauva, Geli Alibek or Geli ollibeg, 21 04.1958. — 1 spm, 50 mm, Mosul-Agra, 18.04.1958. — 2 spms, Hit-Haditha, 9 and 10.04.58, C. Kosswig leg., R. V. Chamberlin det et publ 1958 (labelled *Scolopendra morsitans*) (ZMH).

REMARKS: *Scolopendra canidens* occurs in the southern Mediterranean and the Balkans. It extends southwards into Saudi Arabia and Yemen and eastwards to Iran and Afghanistan, the eastern Caucasus to Tadjikistan.

Scolopendra mirabilis (Porat, 1876)

Cormocephalus mirabilis Porat, 1876
Trachycormocephalus mirabilis, Kraepelin, 1903
Trachycormocephalus occidentalis iraquensis Turk, 1951
Scolopendra mirabilis, Lewis, 1986a

Previous records: Amara on Tigris [Brolemann, 1922]. — Bagdad; Nasiriyah; [Chamberlin 1944]. — Habbaniya, [Turk, 1951]. — Zakho [Lewis, 1986a].

Material examined: 1 spm, 50 mm, Penjwin 18.03.1971, HR. — 1 spm, 57 mm, Sulaimanyia, 15.03.1971. — 9 spms, 33−54 mm, Zakho, 8.04.1971, HR. — 4 spms, 43-48 mm, Cuklauva, Geli Alibek or Geli ollibeg, 21 04.1958, C. Kosswig leg., R. V. Chamberlin det et publ 1958. (Labelled *S. morsitans*) (ZMH). — 2 spms, 35 and 45 mm, Habbaniya, 01.1944, coll. Sgt C V Adams. Turk Collection, Reg. no.BMNH 1984.10.1.99. (The types of *Trachycormocephalus occidentalis iraquensis* Turk 1951) (BMNH).

REMARKS: The specimens identified by Chamberlin [1958] as *S. morsitans* are *S. mirabilis* like wise *Trachycormocephalus occidentalis iraquensis*. This was described on the basis of a male and a female now in the Turk Collection at the Natural History Museum, London. Neither specimen has end legs attached but the tube contains one right end leg. Turk's Figure 1 shows the terminal segments and the prefemora of the end legs with the prefemoral process pointing outwards instead of inwards. Presumably this was due to a misinterpretation of the correct orientation of the detached leg(s). When correctly orientated the leg shows the typical spine arrangement of *S. mirabilis*.

Lewis & Gallagher [1993] described a condition in some specimens of *S. mirabilis* from Oman and the United Arab Emirates in which there are ramifying sutures on tergite 1. These are also present on specimens from Israel [Negrea, 1997]. These are either absent or very feebly developed in specimens from Iraq.

The species is common in the Middle East extending into east and north-east Africa and eastwards into Turkmenistan, Tadjikistan and Uzbekistan and through Afghanistan to India. Also recorded from Vietnam.

Scolopendra valida Lucas, 1840

Previous records: Jebel Hamrin, near Ruz, N.E. of Baghdad [Brolemann, 1922]. — Tal Afar area W. of Mosul [Chamberlin, 1944]. — Kope Quara Dagh [Lewis, 1986a].

Material examined: 2 spms 91 and 70 mm, Kope Quara Dagh, 10.05. 1971, HR

REMARKS: The species is recorded from the Canaries and Cameroon, East and North-east Africa, the Arabian peninsula, Iran and into India.

Family Cryptopidae

Cryptops sp.

Previous record: Amara [Brolemann, 1922].

Material examined: 1 spm 24 mm, Kope Quara Dagh, 10.05.1971, HR. The specimen is newly moulted and in poor condition: precluding specific determination.

Chamberlin's records of *Scolopendra morsitans* L., 1758

Chamberlin [1958] referred 29 specimens from Iraq (Cuklauva, Geli Alibek: Mosul-Agra: Hit-Haditha; Zubuk; Mosul; Dyula R.) and one from Bohrain Id., Persian Gulf (presumably Bahrein) to *S. morsitans*. I have examined 13 of them, 11 from Cuklauva, Geli Alibek (also labelled Geli ollibeg) one from Mosul-Agra and one from Hit-Haditha. Four of the specimens from Cuklauva are *S. mirabilis* the remaining seven and the specimens from Mosul-Agra and Hit-Haditha are *S. canidens*. The records are incorporated above. It seems very unlikely that *S. morsitans* occurs in Iraq and Chamberlin's records for that country should be disregarded.

Lewis [1985] gave a map which showed the distribution of five scolopendrids in north-east Africa, the eastern Mediterranean and the Arabian peninsula using Chamberlin's data for Iraq and Bahrein. This map now proves to be erroneous. *S. morsitans* has not been reported from Israel, Lebanon, Jordan, Syria, Iraq, Iran or Saudi Arabia. In this large area there are only two records: from the coasts of Dhofar, Oman and Aden, Yemen [Lewis, 1996b]. Although a very widely distributed species (Attems [1930] describes its distribution as "In all tropics and warm countries of the temporate zone") there are clearly large areas of the tropics and sub tropics from which it is absent.

A note on collection sites

The spellings given for collection sites in the text are those given on the Museum labels. The sites are shown in Figure 1 where the spellings given in The Times Atlas of the World, comprehensive edition 1980 are used. The following localities could not be located: Cuklauva, Geli Alibek or Ollibeg; Kurdi; Zawita and Zubuk. The Dyula River runs into the River Tigris below Baghdad.

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References

Attems G. 1930. Scolopendromorpha // Das Tierreich. Berlin and Leipzig: Walter der Gruyter. Lfg.54. viii+306 S.

Brolemann H. W. 1922. Myriapods collected in Mesopotamia and in N. W. Persia by W. Edgar Evans, B.Sc., late Capt. R.A.M.C. // Proc. R. Soc. Edinb. Vol.42. P.54−74.

Chamberlin R. V. 1944. Chilopods in the collection of the Field Museum of Natural History // Publs. Field Mus.nat. Hist. (Zool. Ser.) Vol.28. P.175−215, pl. 13−17.

Chamberlin R. V. 1958. On chilopods from Iraq // Ent. Mitt. Zool. Inst. Zool. Mus. Hamburg. Nr.18. P.17−20.

Kraepelin K. 1903. Revision der Scolopendriden // Mitt. Nat. Mus. Hamburg. Bd.20. P.1−276.

Lewis J. G. E. 1985. Possible species isolation mechanisms in some scolopendrid centipedes (Chilopoda; Scolopendridae) // Bijdr. Dierk. Vol.55. P.125−130.

Lewis J. G. E. 1986a. The genus *Trachycormocephalus* a junior synonym of *Scolopendra* with remarks on the validity of some genera of the tribe Scolopendrini (Chilopoda: Scolopendromorpha) // J. nat. Hist., London. Vol.20. P.1083−1088.

Lewis J. G. E. 1986b. Centipedes of Saudi Arabia // Fauna of Saudi Arabia. Vol. 8. P.20–30.
Lewis J. G. E. 1989. Centipedes from Oman // J. Oman Stud. Vol.10. P.89–91
Lewis J. G. E. 1996. Further records of scolopendromorph and geophilomorph centipedes from the Arabian peninsula with a note by Dr. E. H. Eason on *Lithobius erythrocephalus cronebergii* Sseliwanoff // Fauna of Saudi Arabia. Vol.15. P.137–156.
Lewis J. G. E. and Gallagher M. D. 1993. Scolopendromorph and geophilomorph centipedes from Oman and the United Arab Emirates // Ibid. Vol.13. P.55–62.
Lewis J. G. E. and Wranik W., 1990. On the centipedes of Yemen // Zoology in the Middle East. Vol.4. P.61–70.
Negrea S. 1997. On the Scolopendromorpha (Chilopoda) of Israel and adjoining regions // Isr. J. Zool. Vol.43. P.279–294.
Porat C. O., von 1876. Om några exotiska Myriopoda // Bih. K. svenska Vetensk.-Akad. Handl. Vol.4. P.1–48.
Turk F. A. 1951. Myriapodological Notes -III, The iatro-zoology, biology and systematics of some tropical "myriapods" // Ann. Mag. nat. Hist. Series 12. Vol.4. P.35–48.
Zapparoli M. 1986. Contributo alla conscenza dei Chilopodi dell' Iran (Chilopoda) // Fragm. Entomol. Roma. Vol.19 P.83–93.
Zapparoli M. 1991. Note su alcune specie di chilopodi della Regione Paestinese // Ibid. Vol.23. P.15–33.