Bulletin of the British Myriapod Group 12 (1996)

MELOGONA VOIGTI (VERHOEFF) FROM THE LOTHIANS: A MILLIPEDE NEW TO THE BRITISH ISLES.

G.B. Corbet

Little Dumbarnie, Upper Largo, Leven, Fife, KY8 6JQ.

INTRODUCTION

The published map for *Melogona gallica* (Latzel) in the British Isles shows a strongly southwestern distribution, concentrated in Wales and Devon, with only one Scottish locality (British Myriapod Group, 1988). However the Scottish record, from Stirling Castle (NS 79), has subsequently been found to be an error for *Melogona scutellare* (P. Harding, in litt.). It was therefore a little surprising to obtain subsequent records at several sites in Fife and the Lothians, in the driest part of Scotland. These were mostly females, but close scrutiny of a male collected by Bob Saville at Dunbar, East Lothian on 28 April 1995 showed that it was not *Melogona gallica* but *M. voigti* (Verhoeff), not hitherto recorded in the British Isles. On the continent *M. voigti* occurs from southern Sweden through Denmark, northern Netherlands and Germany south to the northern Alps, east of the Rhine; it is replaced by *M. gallica* west of the Rhine and in west Belgium and France (Kime, 1990).

Search at other known sites for 'M. gallica' in eastern Scotland has so far found male M. voigti at Thornton Glen, East Lothian, but confirmed M. gallica at one of the three sites in Fife. Re-examination of specimens collected by C. Rawcliffe in Edinburgh in 1988 revealed a further male M. voigti. Details of these records are given below.

SCOTTISH RECORDS OF MELOGONA VOIGTI

East Lothian: Dunbar. NT 6878 (VC 82).

28 April 1995, 1 adult male. Deciduous woodland and scrub with sparse herb layer, and much rubble, including concrete, close to buildings. Other scarce species at this site were *Brachychaeteuma bagnalli* and *Ophiodesmus albonanus*.

East Lothian: Thornton Glen. NT 7373 (VC82).

19 May 1995, 1 adult male; (12 April 1994, 2 adult females, possibly this species). This is a steep-sided 'dean' of mixed broad-leaved woodland surrounded by arable land, but like most such sites has suffered from the tipping of rubbish.

Edinburgh: Dean Gardens. NT 2474 (VC 83).

9 January 1988, 1 adult male collected by C. Rawcliffe (plus 1 female, probably the same species). These are private gardens on the banks of the Water of Leith, within the city.

SCOTTISH RECORD OF MELOGONA GALLICA s.s.

Fife: Glenrothes, Riverside Park. NO 2601 (VC 85).

16 May 1995, 2 adult males under stone in mixed deciduous woodland (with 1 female and 2 immatures); (7 January 1994, 1 adult female; 19 March 1994, 2 adult females, possibly same species).

OTHER SCOTTISH SITES FOR MELOGONA GALLICA/VOIGTI

Fife: Springfield Wood. NO 334 130 (VC 85).

28 May 1989, beech litter, C. Rawcliffe.

Fife: Charlestown. NT 063 835 (VC 85).

6 December 1993, female under stone in scrub at disused lime-kilns, G.B. Corbet; 6 March 1996 details as above.

Midlothian: Edinburgh, Drumbrae South. NT 192 735 (VC 83). 24 May 1995, adult female, garden, B. Saville.

RECOGNITION OF MELOGONA VOIGTI

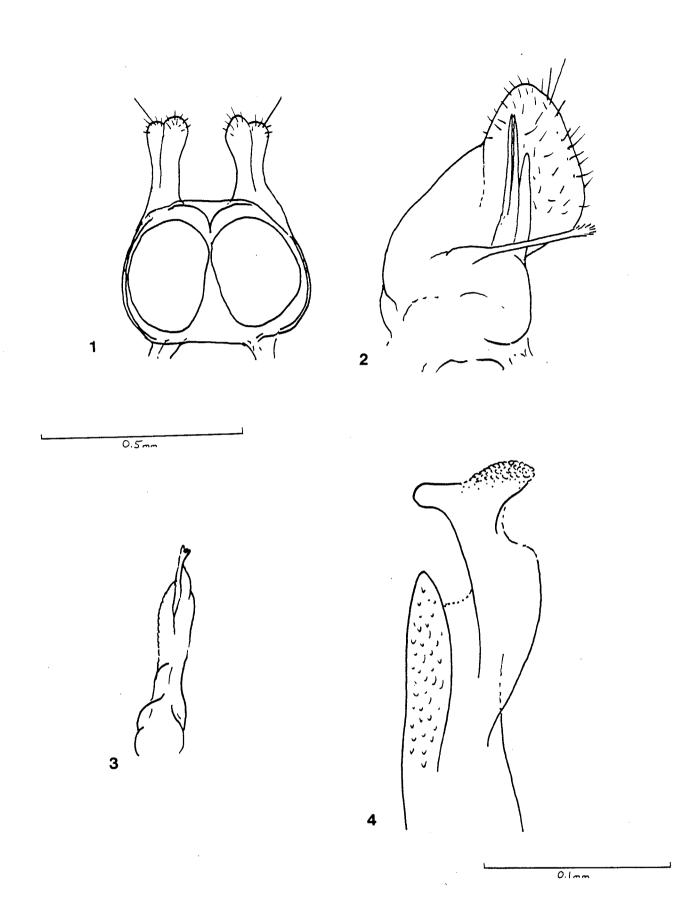
Superficially *M. voigti* is very similar to *M. gallica*, with 30 rings in the adult and similar ocelli, but perhaps a little more strongly pigmented. In the key to British species of Chordeumatidae in Blower (1985: 86) *M. voigti* will therefore key out with *M. gallica*. Adult males can be recognised by the form of the gonopods (Figures 1-4), especially the posterior paragonopods which are only slightly bilobed in *M. voigti* (Figure 1), but with conspicuously divergent lobes in *M. gallica*; and by the processes on the proximal segments of leg 12, i.e. immediately behind the paragonopods. In *M. voigti* the process on the coxa is larger than that on the (more distal) trochanter; the reverse is true in *M. gallica*. The median plate between the peltogonopods is apiculate as in *M. gallica*, not rounded as in *M. scutellare*. A detailed description was given by Brolemann (1935: 349-351) under the name *Microchordeuma voigti*.

CONCLUSION

Although all available material of 'M. gallica' from the British Isles should be re-examined, it seems likely that the majority will prove to be M. gallica s.s.. This is certainly the case with the most easterly record in southern England, from Keston Bog, Bromley, London (TQ 417 642, 29 November 1980, G.B. Corbet).

Although M. voigti is likely to have been introduced to Scotland through trade with the continent, the wide separation of the known localities suggests that any such introduction has not been recent.

The specimens from Edinburgh have been deposited in the Royal Musem of Scotland, Edinburgh (no. NMSZ 1995.201).



- Melagona voigti:
 Figure 1. Posterior paragonopods (modified limb pair 11).
 Figure 2. Right gonopod (limb pair 9) internal view.
 Figure 3. Right peltogonopod (limb pair 8) front view.
 Figure 4. Right peltogonopod (limb pair 8) side view.

ACKNOWLEDGEMENTS

Thanks are due to Charles Rawcliffe for discovery of the millipede-rich site at Dunbar and for providing specimens and data from other sites; to Bob Saville (Lothian Biological Records Centre) for collection and loan of the Dunbar specimen; and to Dick Jones for the illustrations.

REFERENCES

Blower, J.G. (1985): *Millipedes*. Synopses of the British Fauna (n.s.) 35. Brill/Backhuys.

British Myriapod Group (1988): Preliminary atlas of the millipedes of the British Isles. Biological Records Centre, Huntingdon.

Brölemann, H.W. (1935): Diplopodes (Chilognathes I). Faune de France 29 368 pp.

Kime, R.D. (1990): A provisional atlas of European myriapods, part 1. Fauna Europaea Evertebrata. Vol. 1. Luxembourg.