THREE FEMALE GONOPOD SPURS IN A SPECIMEN OF *LITHOBIUS MELANOPS* NEWPORT, 1845

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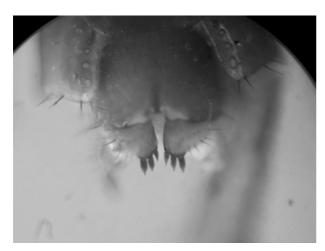
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One of us (MR) had collected a number of specimens of *Lithobius* in the allotment garden area of a house at Slingsby, North Yorkshire in November 2013. Whilst some were obviously *Lithobius melanops* several seemed unusual and one in particular, a female (12 mm body length) was distinguished in having 3 + 3 gonopod spurs - immediately raising the question as to whether it was in fact, an example of *Lithobius tricuspis* (Fig. 1). It was also unusual in having 2 + 3 prosternal teeth on the forcipular coxosternite (Fig. 2). The latter condition is certainly not unknown in *L. melanops* nor is the presence of an extra gonopod spur on one or indeed both sides (see e.g. Barber, 1984). However, it was thought desirable to seek another opinion, especially so since another female had three spurs on one side and what appeared to have been a site where a third one had broken off on the other side.



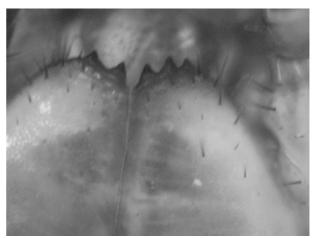


FIGURE 1: showing 3+3 gonopods spurs

FIGURE 2: showing 2+3 prosternal teeth

It should be noted that none of the specimens had the spine 15VaC which is commonly seen in *Lithobius tricuspis*. Both Brölemann (1930) and Iorio (2010) indicate the presence of this spine in *L. tricuspis* but Eason (1965) reported specimens without it on one or both sides as well as those with it present. The latter also reviewed a range of forms of described from various localities in Europe, some with and some without 15VaC (as well as, to perhaps cause further confusion, forms with 2+2 genital spurs or with a simple apical claw on the 15th leg; Iorio refers to occasional forms with 2+2 spurs in populations in Alpes-Maritimes).

The collection site for our specimens was well out of the area where *L.tricuspis* has been recorded previously in Britain. Its main area of occurrence seems to be in mid South Devon but another population has been found in South Wales, and there is an isolated record from the Isle of Wight. There is also a report of it being found in a cave in the Mendips in 1965 (Lee Knight, pers.comm.). Its occurrence in North Yorkshire, although unlikely, could not be completely ruled out.

E.H.Eason (1965) first described the occurrence in Britain of *L. tricuspis* on the basis of specimens collected by the Entomological Section of the Devonshire Association at Fingle Bridge on Dartmoor

(Revell, 1965). Dr Eason compared it with *L. melanops*, noting that males were less easy to distinguish than females, especially if the spine 15VaC was absent and commented on its possible occurrence elsewhere in Britain or Ireland. Brölemann, interestingly, had described its distribution as "Trés commun dans toute la France, notamment dans les fôrets. Grande Bretagne; Europe Centrale".

In the circumstances, we asked Dr Marzio Zapparolli to look at the female and two males and he positively identified them all as *L. melanops*, fitting the description given by Eason in his book (Eason, 1964) although with abnormalities in the female concerned which also showed teratology in the right 14th leg (Fig. 3).

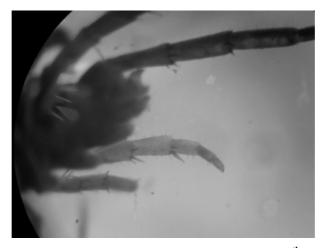


FIGURE 3: showing teratology in the right 14th leg

In South Devon and South Wales, *L. tricuspis* is generally an animal of woodlands and other more or less rural habitats whereas *L. melanops* occurs in a variety of sites in Britain, often quite disturbed ones such as gardens, urban waste ground, seashore, etc, as well as sometimes in woodland. In life, *L. melanops* is, for a *Lithobius*, relatively pale with a broad darker longitudinal stripe along its body whilst *L. tricuspis* tends to a more uniform chestnut brown (personal observations).

ACKNOWLEDGEMENT

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