

10.1071/ZO20017\_AC

©CSIRO 2019

Australian Journal of Zoology 2019, 67(2), 106-113

## SUPPLEMENTARY MATERIAL

### **First report of nymphs of the introduced pentastomid, *Linguatula serrata*, in red-necked wallabies, *Notamacropus rufogriseus*, in Australia**

Diane P. Barton<sup>A,C</sup>, Megan Porter<sup>A,B</sup>, Ashleigh Baker<sup>A,B</sup>, Xiaocheng Zhu<sup>A,B</sup>, David J. Jenkins<sup>A,B</sup> and Shokoofeh Shamsi<sup>A,B</sup>

<sup>A</sup>School of Animal and Veterinary Sciences, Charles Sturt University, Wagga Wagga, NSW 2678, Australia.

<sup>B</sup>Graham Centre for Agricultural Innovation, Charles Sturt University, Wagga Wagga, NSW 2678, Australia.

<sup>C</sup>Corresponding author. Email: [dibarton@csu.edu.au](mailto:dibarton@csu.edu.au)

Table S1. Geographical locations of red-necked wallabies (*Notamacropus rufogriseus*) and eastern grey kangaroos (*Macropus giganteus*) examined in this study. Refer to Figure 1.

For pentastomes collected in this study, the original code number and subsequent Australian Museum and GenBank (18S and Cox1) deposition numbers are provided.

Host species	Location	Date	No. examined	Infected	Pentastome code number	Museum Number	GenBank Number
<i>Macropus giganteus</i>	Arynile	18/7/19	8	0			
	Moonbah	22/7/19	1	0			
	Moonbah	23/7/19	3	0			
	Moonbah	31/7/19	1	0			
	Grosses Plain	31/7/19	1	0			
	Chimney Ridge	31/7/19	1	0			
	Batlow	3/10/19	1	0			
<i>Notamacropus rufogriseus</i>	Namadgi National Park	19/7/19	1	0			
	Chimney Ridge	19/7/19	1	0			

	Chimney Ridge	23/7/19	1	1	LSM5 LSM5-A^	P.104122 N/A	18S MT367686 18S MT367681
	Chimney Ridge	31/7/19	3	1	LSM1-A LSM1-B LSM1-C	P.104123 P.104124 P.104125	Cox1 MT371890 18S MT367682; Cox1 MT371891 18S MT367683; Cox1 MT371892
	Moonbah	31/7/19	3	2	LSM3 LSM4*	P.104126 N/A	18S MT367684; Cox1 MT371893 18S MT367685; Cox1 MT371894
	Moonbah	28/8/19	2	0			
	Moonbah	29/8/19	1	0			
	Batlow	6/9/19	1	0			
	Moonbah	10/10/19	2	0			

^Specimen LSM5-A destroyed during processing; \*Specimen used for SEM

Table S2. Morphological measurements of *L. serrata* nymphs collected from red necked wallabies (*Notamacropus rufogriseus*) in this study. Measurements are in  $\mu\text{m}$  unless otherwise indicated. Hook measurements for LSM1-A, LSM1-B, LSM1-C, LSM3 were made on hooks dissected from the nymph, placed on a slide in lactophenol; other measurements were based on the whole specimen placed on a slide in lactophenol. Morphological measurements for LSM4 were based on a combination of light and scanning electron microscopy for the whole specimen.

	LSM1-A	LSM1-B	LSM1-C	LSM3	LSM4	LSM5
Sex	Male	Male	Female	Female	Male	Male
Total Body Length (mm)	5.475	3.825	4.125	4.75	5.3	5.450
Maximum Body Width (mm)	1.225	1.025	0.925	1	1.175	1.2
No. of Annuli	90	89	88	83	87	83
Anterior Hooks						
AC	150	-	155	175, 180	-	155
AD	185	-	200	220, 210	-	185
BC	150	140	132.5	155, 145	-	130
CD	80	80	90	100, 100	-	90
AB	85	-	85	95, 95	-	75

