

Character from Yang et al. 2015	Original coding	Our decay-informed coding	Our conservative coding	Notes
12. Nature of first post-ocular (deutocerebral) appendage	(?) ambiguous	<b>(0) lobopodous ambulatory limb</b>	(?) ambiguous	Taphonomic analysis indicates lack of jaws is real, not result of decay
13. Inner blade of deutocerebral jaw with diastema	(?) ambiguous	<b>(-) inapplicable: deutocerebral jaw (Character 12) absent</b>	(?) ambiguous	Taphonomic analysis indicates lack of jaws is real, not result of decay
14. Deutocerebral limb pair structurally differentiated from rest of trunk appendages	(?) ambiguous	<b>(0) undifferentiated, or reduced in size only</b>	(?) ambiguous	Taphonomic analysis indicates lack of jaws is real, not result of decay
15. Nature of second post-ocular (tritocerebral) appendage	(1) specialized papillae	<b>(0) undifferentiated lobopodous limb</b>	<b>(?) ambiguous</b>	<i>Helenedora</i> lacks slime papillae
24. One or more pairs of appendages located anteriorly relative to the mouth opening	(1) present	<b>(?) ambiguous</b>	<b>(?) ambiguous</b>	<i>Helenedora</i> does not preserve a mouth, so this position is ambiguous
36. Annulations	(?) ambiguous	<b>(1) present</b>	<b>(1) present</b>	Present in new material
38. Organization of trunk annulation	(?) ambiguous	<b>(0) homonomous</b>	<b>(0) homonomous</b>	Present in new material
46. Sclerites consist of a stack of constituent elements	(?) ambiguous	<b>(-) inapplicable: terminal claws on limbs (Character 64) absent</b>	(?) ambiguous	Taphonomic analysis indicates lack of claws is real, not result of decay
52. Serially repeated mid-gut glands	(0) absent	<b>(?) ambiguous</b>	<b>(?) ambiguous</b>	No internal anatomy is preserved
62. Papillae on lobopodous limbs	(1) present	<b>(?) ambiguous</b>	<b>(?) ambiguous</b>	Features describe as papillae are treated here as equivocal
64. Terminal claws on trunk limbs	(1) present	<b>(0) absent</b>	<b>(?) ambiguous</b>	Taphonomic analysis indicates lack of claws is real, not result of decay
65. Terminal claws with multiple branches	(0) absent	<b>(-) inapplicable: terminal claws (Character 64) absent</b>	<b>(?) ambiguous</b>	Taphonomic analysis indicates lack of claws is real, not result of decay
66. Number of claws on trunk limbs (0)	(1) two	<b>(-) inapplicable: terminal claws (Character 64) absent</b>	<b>(?) ambiguous</b>	Taphonomic analysis indicates lack of claws is real, not result of decay
67. Differentiated distal foot in lobopodous trunk limbs	(?) ambiguous	<b>(0) absent</b>	<b>(0) absent</b>	Limb morphology clear in new material
75. Limbless posterior extension of the lobopodous trunk beyond last appendage pair	(?) ambiguous	<b>(1) present</b>	<b>(1) present</b>	Posterior morphology clear in new material
80. Claws on posterior appendages directed anteriad	(?) ambiguous	<b>(-) inapplicable: terminal claws (Character 64) absent</b>	(?) ambiguous	Taphonomic analysis indicates lack of claws is real, not result of decay