

Table S1. Specimens, GenBank accession numbers and coding of morphological characters for the analyzed samples.

* Due to intra-generic polymorphism of sensillus shape in the genera “*Liodes*” and *Eremaeozetes* (Weigmann 2006, Schatz pers. communication) we refrained from assigning a particular morphology to *Liodes* sp. and *Eremaeozetes* sp.

GenBank number	Genus	Species	Lifestyle	Sensillus type
EF091418.2	<i>Achipteria</i>	<i>coleoptrata</i>	tree- and soil-living	slightly clavate
GQ864304.1	<i>Acrogalumna</i>	<i>longipluma</i>	soil	clavate
EU432202.1	<i>Adoristes</i>	<i>poppei</i>	tree- and soil-living	capitate or strongly clavate
GQ864286.1	<i>Adoristes</i>	<i>ovatus</i>	tree- and soil-living	capitate or strongly clavate
HM070344.1	<i>Aeroppia</i>	sp.	soil	clavate
AB818526.1	<i>Alismobates</i>	<i>reticulatus</i>	littoral	clavate
MH285696.1	<i>Alismobates</i>	<i>pseudoreticulatus</i>	littoral	capitate or strongly clavate
AF022025.1	<i>Allonothrus</i>	<i>russeolus</i>	soil	slightly clavate
KR081601.1	<i>Ampullobates</i>	<i>ecuadoriensis</i>	soil	rod-like thin
JQ000048.1	<i>Anachipteria</i>	sp.	soil	slightly clavate
KX397627.1	<i>Aquanothrus</i>	sp.	limnic	rod-like thin
AF022027.1	<i>Archegozetes</i>	<i>longisetosus</i>	soil	rod-like thin
JN585918.1	<i>Archoplophora</i>	<i>rostralis</i>	soil	rod-like thin
EU432216.1	<i>Atopochthonius</i>	<i>artiodactylus</i>	soil	rod-like thin
EF091416.1	<i>Atropacarus</i>	<i>striculus</i>	soil	rod-like thin
KR081602.1	<i>Beckiella</i>	<i>capitulum</i>	soil	slightly clavate
KX397628.1	<i>Beckiella</i>	<i>arcta</i>	soil	slightly clavate
EF081302.1	<i>Camisia</i>	<i>biurus</i>	soil	capitate or strongly clavate
EF091420.1	<i>Camisia</i>	<i>spinifer</i>	tree- and soil-living	clavate
EU432207.1	<i>Camisia</i>	<i>horrida</i>	tree- and soil-living	capitate or strongly clavate
EU432208.1	<i>Camisia</i>	<i>invenusta</i>	soil	clavate
JQ000043.1	<i>Camisia</i>	<i>segnis</i>	tree-living	capitate or strongly clavate
KY922213.1	<i>Camisia</i>	<i>biverrucata</i>	soil	capitate or strongly clavate

KR081603.1	<i>Campachipteria</i>	<i>brevisetosa</i>	soil	slightly clavate
EF093786.1	<i>Carabodes</i>	<i>coriaceus</i>	soil	slightly clavate
KX397629.1	<i>Carabodes</i>	<i>labyrinthicus</i>	tree- and soil-living	capitate or strongly clavate
EU432206.1	<i>Cepheus</i>	<i>latus</i>	tree- and soil-living	clavate
EU432204.1	<i>Ceratoppia</i>	<i>bipilis</i>	soil	rod-like thin
EU432188.1	<i>Chamobates</i>	<i>pusillus</i>	soil	clavate
EU432189.1	<i>Chamobates</i>	<i>voigtsi</i>	soil	clavate
KY922221.1	<i>Charassobates</i>	<i>aff. tuberosus</i>	soil	clavate
KR081604.1	<i>Collohmanna</i>	<i>gigantea</i>	soil	rod-like thin
JQ000040.1	<i>Cosmochthonius</i>	<i>lanatus</i>	soil	clavate
EF081303.1	<i>Crotonia</i>	<i>brachyrostrum</i>	soil	capitate or strongly clavate
KR081605.1	<i>Crotonia</i>	<i>reticulata</i>	soil	capitate or strongly clavate
EU433991.1	<i>Ctenacarus</i>	<i>araneola</i>	soil	rod-like thin
EU432201.1	<i>Cymbaeremaeus</i>	<i>cymba</i>	tree-living	capitate or strongly clavate
KR081606.1	<i>Cyrthermannia</i>	<i>florens</i>	soil	clavate
MH198179.1	<i>Damaeobelba</i>	<i>minutissima</i>	soil	rod-like thin
KR081607.1	<i>Damaeus</i>	<i>clavipes</i>	soil	rod-like thin
KR081608.1	<i>Damaeus</i>	<i>flagelloides</i>	soil	rod-like thin
MH198181.1	<i>Dissorhina</i>	<i>ornata</i>	soil	clavate
MG719344.1	<i>Dolicheremaeus</i>	<i>dorni</i>	tree- and soil-living	clavate
<i>submitted</i>	<i>Dometorina</i>	<i>plantivaga</i> DpGU1	tree-living	capitate or strongly clavate
MH198178.1	<i>Edwardzetes</i>	<i>edwardsi</i>	soil	slightly clavate
EF091428.1	<i>Eniochthonius</i>	<i>minutissimus</i>	soil	with rami
EF203777.2	<i>Eohypochthonius</i>	<i>gracilis</i>	soil	with rami
KR081610.1	<i>Epieremulus</i>	<i>granulatus</i>	soil	clavate
KY922212.1	<i>Epilohmannia</i>	<i>aff. pallida</i>	soil	slightly clavate
EU432187.1	<i>Eremaeozetes</i>	sp.	soil	not specified*
GQ864287.1	<i>Eueremaeus</i>	<i>oblongus</i>	tree- and soil-living	slightly clavate

EF093782.1	<i>Eupelops</i>	<i>hirtus</i>	tree- and soil-living	slightly clavate
EU432192.1	<i>Eupelops</i>	<i>acromios</i>	tree- and soil-living	slightly clavate
KR081611.1	<i>Eupterotegaeus</i>	<i>dentatus</i>	soil	slightly clavate
EF081297.1	<i>Eutegaeus</i>	<i>curviseta</i>	soil	rod-like thin
AF022030.1	<i>Euzetes</i>	<i>globulosus</i>	soil	rod-like thin
AB818525.1	<i>Fortuynia</i>	<i>rotunda</i>	littoral	capitate or strongly clavate
MH285693.1	<i>Fortuynia</i>	<i>longiseta</i>	littoral	capitate or strongly clavate
KX397630.1	<i>Galumna</i>	<i>lanceata</i>	soil	rod-like thin
EU433994.1	<i>Gehypochthonius</i>	<i>urticinus</i>	soil	with rami
KR081612.1	<i>Gittella</i>	<i>variabilis</i>	soil	with rami
KR081613.1	<i>Globoppia</i>	<i>maior</i>	soil	clavate
EU433993.1	<i>Gozmanyina</i>	<i>majesta</i>	soil	rod-like thin
KR081614.1	<i>Gymnodamaeus</i>	<i>bicostatus</i>	tree- and soil-living	slightly clavate
KY922210.1	<i>Haplochthonius</i>	<i>simplex</i>	soil	capitate or strongly clavate
AB818531.1	<i>Hemileius</i>	<i>singularis</i>	tree- and soil-living	slightly clavate
KR081616.1	<i>Hemileius</i>	<i>microclava</i>	tree-living	capitate or strongly clavate
EF091423.1	<i>Heminothrus</i>	<i>paolianus</i>	soil	rod-like thin
EF091426.1	<i>Hermannia</i>	<i>gibba</i>	soil	slightly clavate
KR081617.1	<i>Hermannobates</i>	<i>monstruosus</i>	soil	rod-like thin
EU432196.1	<i>Humerobates</i>	<i>rostromellatus</i>	tree-living	capitate or strongly clavate
AB818523.1	<i>Hydrozetes</i>	<i>confervae</i>	limnic	clavate
EU433987.1	<i>Hydrozetes</i>	<i>lacustris</i>	limnic	capitate or strongly clavate
KX397632.1	<i>Hydrozetes</i>	<i>lemnae</i>	limnic	clavate
EF091427.1	<i>Hypochthonius</i>	<i>rufulus</i>	soil	with rami
EU152475.1	<i>Hypochthonius</i>	<i>luteus</i>	soil	with rami
EU432193.1	<i>Lepidozetes</i>	<i>singularis</i>	tree- and soil-living	clavate
KR081619.1	<i>Liacarus</i>	<i>coracinus</i>	soil	rod-like thin
KR081620.1	<i>Liebstadia</i>	<i>humerala</i>	tree-living	capitate or strongly clavate

KX397634.1	<i>Limnozetes</i>	<i>foveolatus</i>	limnic	slightly clavate
KX397635.1	<i>Limnozetes</i>	<i>onondaga</i>	limnic	slightly clavate
JQ000035.1	<i>Liochthonius</i>	sp.	soil	clavate
AF022035.1	<i>Liodes (Neoliodes ?)</i>	sp.	tree-living	not specified*
MF997503.1	<i>Litoribates</i>	<i>bonairensis</i>	littoral	slightly clavate
MK035021.1	<i>Litoribates</i>	<i>floridae</i>	littoral	slightly clavate
AF022036.1	<i>Lohmannia</i>	<i>banksi</i>	soil	with rami
AB818522.1	<i>Maculobates</i>	<i>bruneiensis</i>	mangrove	clavate
EF081301.1	<i>Mainothrus</i>	<i>badius</i>	soil	slightly clavate
JQ000044.1	<i>Malaconothrus</i>	<i>gracilis</i>	soil	no sensillus present
KR081621.1	<i>Malaconothrus</i>	<i>monodactylus</i>	soil	no sensillus present
KY922217.1	<i>Masthermannia</i>	sp.	soil	rod-like thin
AF287234.1	<i>Meristolohmannia</i>	<i>meristacaroides</i>	soil	with rami
JN585912.1	<i>Mesoplophora</i>	<i>abscondita</i>	soil	rod-like thin
MH198180.1	<i>Metabelba</i>	<i>papillipes</i>	soil	rod-like thin
KR081622.1	<i>Microtegeus</i>	<i>similis</i>	soil	clavate
JN585913.1	<i>Mixacarus</i>	<i>brevipes</i>	soil	with rami
EF081299.1	<i>Mucronothrus</i>	<i>nasalis</i>	limnic	rod-like thin
EU432191.1	<i>Mycobates</i>	<i>parmeliae</i>	tree- and soil-living	clavate
KR081623.1	<i>Nanhermannia</i>	<i>elegantissima</i>	soil	rod-like thin
KR081624.1	<i>Nanhermannia</i>	<i>nana</i>	soil	rod-like thin
EF081308.1	<i>Nehypochthonius</i>	<i>porosus</i>	soil	with rami
JN585914.1	<i>Nesiacarus</i>	<i>granulatus</i>	soil	rod-like thin
EF081306.1	<i>Nothrus</i>	<i>truncatus</i>	soil	rod-like thin
EF091425.2	<i>Nothrus</i>	<i>silvestris</i>	soil	clavate
KR081625.1	<i>Nothrus</i>	<i>willmanni</i>	soil	clavate
KY922216.1	<i>Nothrus</i>	<i>borussicus</i>	soil	clavate
EF081307.1	<i>Novonothrus</i>	<i>flagellatus</i>	soil	clavate

EU432200.1	<i>Odontocepheus</i>	<i>elongatus</i>	soil	slightly clavate
KY922219.1	<i>Odontocepheus</i>	<i>oblongus</i>	soil	capitate or strongly clavate
KR081626.1	<i>Oppiella</i>	<i>nova</i>	soil	clavate
AB818530.1	<i>Oribatula</i>	<i>sakamorii</i>	soil	rod-like thin
EU433990.1	<i>Oribatula</i>	<i>tibialis</i>	tree- and soil-living	capitate or strongly clavate
AB818532.1	<i>Oripoda</i>	sp.	soil	capitate or strongly clavate
EU432194.1	<i>Oromurcia</i>	<i>sudetica</i>	soil	capitate or strongly clavate
EF204472.2	<i>Palaeacarus</i>	<i>hystricinus</i>	soil	capitate or strongly clavate
KR081627.1	<i>Parabelbella</i>	<i>meridiana</i>	soil	with rami
<i>submitted</i>	<i>Paraleius</i>	sp.5 - Pop09B_14	tree-living	clavate
<i>submitted</i>	<i>Paraleius</i>	sp.1 - Pop32F_12	tree-living	with rami
<i>submitted</i>	<i>Paraleius</i>	sp.6 - SIR36_1	tree-living	capitate or strongly clavate
<i>submitted</i>	<i>Paraleius</i>	sp.4 - Pop55B_03	tree-living	clavate
EU432215.1	<i>Parhypochthonius</i>	<i>aphidinus</i>	soil	rod-like thin
AB818529.1	<i>Peloribates</i>	<i>acutus</i>	soil	rod-like thin
EU432212.1	<i>Perlohmannia</i>	sp.	soil	slightly clavate
EU432198.1	<i>Phauloppia</i>	<i>lucorum</i>	tree- and soil-living	slightly clavate
KR081628.1	<i>Pheroliodes</i>	sp.	soil	rod-like thin
EF091422.2	<i>Platynothrus</i>	<i>peltifer</i>	soil	slightly clavate
KR081630.1	<i>Platynothrus</i>	<i>castaneus</i>	soil	rod-like thin
AB818528.1	<i>Protoribates</i>	<i>hakonensis</i>	soil	rod-like thin
JN585915.1	<i>Prototritia</i>	<i>major</i>	soil	clavate
HM070341.1	<i>Pseudotocepheus</i>	<i>amonstruosus</i>	soil	clavate
EU432214.1	<i>Pterochthonius</i>	<i>angelus</i>	soil	capitate or strongly clavate
MH198175.1	<i>Punctoribates</i>	<i>punctum</i>	soil	capitate or strongly clavate
KR081632.1	<i>Rhynchoribates</i>	<i>mirus</i>	soil	clavate
EF091417.2	<i>Rhysotritia</i>	<i>duplicata</i>	soil	capitate or strongly clavate
HM070342.1	<i>Rostrozetes</i>	<i>ovulum</i>	tree- and soil-living	clavate

KR081633.1	<i>Rostrozetes</i>	<i>nebulosus</i>	soil	clavate
EU433989.1	<i>Scapheremaeus</i>	<i>palustris</i>	tree- and soil-living	capitate or strongly clavate
LC367334.1	<i>Scapheremaeus</i>	<i>nakanoshimensis</i>	tree-living	rod-like thin
AB818527.1	<i>Scheloribates</i>	<i>pallidulus</i>	soil	clavate
EU432199.1	<i>Scheloribates</i>	<i>ascendens</i>	tree-living	rod-like thin
HM070345.1	<i>Schusteria</i>	<i>littorea</i>	littoral	rod-like thin
GQ864305.1	<i>Scutovertex</i>	<i>sculptus</i>	soil	rod-like thin
MH198174.1	<i>Sellnickochthonius</i>	<i>zelawaiensis</i>	soil	capitate or strongly clavate
<i>submitted</i>	<i>Siculobata</i>	<i>sicula</i> SsBI02	tree-living	capitate or strongly clavate
KR081634.1	<i>Solenozetes</i>	<i>carinatus</i>	soil	capitate or strongly clavate
JN585916.1	<i>Sphaerochthonius</i>	sp.	soil	clavate
MG719345.1	<i>Spinotocepheus</i>	sp.	soil	clavate
AF022040.1	<i>Steganacarus</i>	<i>magnus</i>	soil	clavate
GQ864301.1	<i>Steganacarus</i>	<i>applicatus</i>	soil	rod-like thin
EU433992.1	<i>Stomacarus</i>	<i>ligamentifer</i>	soil	slightly clavate
KR081635.1	<i>Tecteremaeus</i>	<i>incompletus</i>	soil	slightly clavate
EF093776.1	<i>Tectocepheus</i>	<i>sarekensis</i>	soil	slightly clavate
EF093778.1	<i>Tectocepheus</i>	<i>minor</i>	soil	clavate
EF093779.1	<i>Tectocepheus</i>	<i>velatus</i>	tree- and soil-living	rod-like thin
MK035018.1	<i>Thalassozetes</i>	<i>balboa</i>	littoral	slightly clavate
MK035020.1	<i>Thalassozetes</i>	<i>barbara</i>	littoral	clavate
MF997501.1	<i>Thasecazetes</i>	<i>falcidactylus</i>	littoral	rod-like thin
EF081300.1	<i>Trhypochthoniellus</i>	<i>crassus</i>	soil	rod-like thin
HQ661380.1	<i>Trhypochthonius</i>	<i>silvestris</i>	soil	clavate
HQ711367.1	<i>Trhypochthonius</i>	<i>japonicus</i>	soil	clavate
HQ711370.1	<i>Trhypochthonius</i>	<i>tectorum</i>	tree- and soil-living	clavate
EU432195.1	<i>Trichoribates</i>	<i>trimaculatus</i>	tree- and soil-living	clavate
KY922215.1	<i>Trimalaconothrus</i>	<i>novus</i>	soil	clavate

KR081636.1	<i>Unguizetes</i>	<i>incertus</i>	soil	capitate or strongly clavate
KR081637.1	<i>Xenillus</i>	<i>tegeocranus</i>	soil	rod-like thin

Table S2. Literature used for the character coding of morphological characters.

Genus	Species	Source
<i>Achipteria</i>	<i>coleoprata</i>	Weigmann 2006
<i>Acrogalumna</i>	<i>longipluma</i>	Weigmann 2006
<i>Adoristes</i>	<i>poppei</i>	Arroyo et al. 2009
<i>Adoristes</i>	<i>ovatus</i>	Weigmann 2006, Erdmann et al. 2006
<i>Aeroppia</i>	sp.	Ermilov 2016
<i>Alismobates</i>	<i>reticulatus</i>	Karasawa & Aoki 2005
<i>Alismobates</i>	<i>pseudoreticulatus</i>	Pfingstl 2015
<i>Allonothrus</i>	<i>russeolus</i>	Wallwork 1960
<i>Ampullobates</i>	<i>ecuadoriensis</i>	Ermilov et al. 2013
<i>Anachipteria</i>	sp.	Weigmann 2006
<i>Aquanothrus</i>	sp.	Norton & Franklin 2018
<i>Archegozetes</i>	<i>longisetosus</i>	Alberti et al. 2011
<i>Archoplophora</i>	<i>rostralis</i>	Liu, D. 2016
<i>Atopochthonius</i>	<i>artiodactylus</i>	Weigmann 2006
<i>Atropacarus</i>	<i>striculus</i>	Weigmann 2006
<i>Beckiella</i>	<i>capitulum</i>	Balogh & Mahunka 1978
<i>Beckiella</i>	<i>arcta</i>	Perez-Inigo. & Baggio 1986
<i>Camisia</i>	<i>biurus</i>	Weigmann 2006
<i>Camisia</i>	<i>spinifer</i>	Weigmann 2006
<i>Camisia</i>	<i>horrida</i>	Weigmann 2006
<i>Camisia</i>	<i>invenusta</i>	Weigmann 2006
<i>Camisia</i>	<i>segnis</i>	Weigmann 2006
<i>Camisia</i>	<i>biverrucata</i>	Weigmann 2006
<i>Campachipteria</i>	<i>brevisetosa</i>	Ermilov et al. 2013
<i>Carabodes</i>	<i>coriaceus</i>	Weigmann 2006
<i>Carabodes</i>	<i>labyrinthicus</i>	Weigmann 2006
<i>Cepheus</i>	<i>latus</i>	Weigmann 2006
<i>Ceratoppia</i>	<i>bipilis</i>	Weigmann 2006, Aoki 1973
<i>Chamobates</i>	<i>pusillus</i>	Weigmann 2006
<i>Chamobates</i>	<i>voigtsi</i>	Weigmann 2006
<i>Charassobates</i>	<i>aff. tuberosus</i>	Balogh & Mahunka 1981
<i>Collohmanna</i>	<i>gigantea</i>	Weigmann 2006
<i>Cosmochthonius</i>	<i>lanatus</i>	Weigmann 2006
<i>Crotonia</i>	<i>brachyrostrum</i>	Colloff 2015
<i>Crotonia</i>	<i>reticulata</i>	Luxton 1982
<i>Ctenacarus</i>	<i>araneola</i>	Weigmann 2006
<i>Cymbaeremaeus</i>	<i>cymba</i>	Weigmann 2006
<i>Cyrthermannia</i>	<i>florens</i>	Balogh & Mahunka 1980
<i>Damaeobelba</i>	<i>minutissima</i>	Weigmann 2006
<i>Damaeus</i>	<i>clavipes</i>	Weigmann 2006
<i>Damaeus</i>	<i>flagelloides</i>	Norton 1979 (see <i>Epidamaeus flagelloides</i>)
<i>Dissorhina</i>	<i>ornata</i>	Weigmann 2006
<i>Dolicheremaeus</i>	<i>dorni</i>	Schäffer et al. 2018

<i>Dometorina</i>	<i>plantivaga</i>	Weigmann 2006
<i>Edwardzetes</i>	<i>edwardsi</i>	Weigmann 2006
<i>Eniochthonius</i>	<i>minutissimus</i>	Weigmann 2006
<i>Eohypochthonius</i>	<i>gracilis</i>	Jacot, 1936 (see <i>Hypochthonius gracilis</i>)
<i>Epieremulus</i>	<i>granulatus</i>	Balogh & Mahunka, 1979 (see <i>Carabodoides</i> gr.)
<i>Epilohmannia</i>	<i>aff. pallida</i>	Wallwork 1962
<i>Eremaezetes</i>	sp.	Schatz 2000
<i>Eueremaeus</i>	<i>oblongus</i>	Weigmann 2006
<i>Eupelops</i>	<i>hirtus</i>	Weigmann 2006
<i>Eupelops</i>	<i>acromios</i>	Weigmann 2006
<i>Eupterotegeus</i>	<i>dentatus</i>	Sitnokova 1979
<i>Eutegaeus</i>	<i>curviseta</i>	Hammer 1966
<i>Euzetes</i>	<i>globulosus</i>	Weigmann 2006
<i>Fortuynia</i>	<i>rotunda</i>	Marshall & Pugh 20002
<i>Fortuynia</i>	<i>longiseta</i>	Pfingstl 2015
<i>Galumna</i>	<i>lanceata</i>	Weigmann 2006
<i>Gehypochthonius</i>	<i>urticinus</i>	Krisper unpubl., Präparate aus USA
<i>Gittella</i>	<i>variabilis</i>	Ermilov et al. 2013
<i>Globoppia</i>	<i>maior</i>	Hammer 1962
<i>Gozmanyina</i>	<i>majesta</i>	Marshall & Reeves 1970 (See <i>Trichthonius m.</i>)
<i>Gymnodamaeus</i>	<i>bicostatus</i>	Weigmann 2006
<i>Haplochthonius</i>	<i>simplex</i>	Weigmann 2006
<i>Hemileius</i>	<i>singularis</i>	Sellnick, 1930 (see <i>Tuberemaeus singularis</i>)
<i>Hemileius</i>	<i>microclava</i>	Hammer 1961 (see <i>Schelorbates microclava</i>)
<i>Heminothrus</i>	<i>paolianus</i>	Fujikawa 1972
<i>Hermannia</i>	<i>gibba</i>	Weigmann 2006
<i>Hermannobates</i>	<i>monstruosus</i>	Hammer 1961
<i>Humerobates</i>	<i>rostromellatus</i>	Weigmann 2006
<i>Hydrozetes</i>	<i>confervae</i>	Weigmann 2006
<i>Hydrozetes</i>	<i>lacustris</i>	Weigmann 2006
<i>Hydrozetes</i>	<i>lemnae</i>	Weigmann 2006
<i>Hypochthonius</i>	<i>rufulus</i>	Weigmann 2006
<i>Hypochthonius</i>	<i>luteus</i>	Weigmann 2006
<i>Lepidozetes</i>	<i>singularis</i>	Weigmann 2006
<i>Liacarus</i>	<i>coracinus</i>	Weigmann 2006
<i>Liebstadia</i>	<i>humerala</i>	Weigmann 2006
<i>Limnozetes</i>	<i>foveolatus</i>	Willmann 1939 (supsp. of <i>L. ciliatus</i>) and Seniczak & Seniczak 2009
<i>Limnozetes</i>	<i>onondaga</i>	Behan-Pelletier 1989
<i>Liochthonius</i>	sp.	Weigmann 2006
<i>Liodes</i> (<i>Neoliodes</i> ?)	sp.	Weigmann 2006
<i>Litoribates</i>	<i>bonairensis</i>	Pfingstl et al. 2017
<i>Litoribates</i>	<i>floridae</i>	Pfingstl et al. 2019
<i>Lohmannia</i>	<i>banksi</i>	Norton et al. 1978
<i>Maculobates</i>	<i>bruneiensis</i>	Ermilov et al. 2013
<i>Mainothrus</i>	<i>badius</i>	Weigmann 2006

<i>Malaconothrus</i>	<i>gracilis</i>	Ermilov et al. 2010
<i>Malaconothrus</i>	<i>monodactylus</i>	Luxton 1987
<i>Masthermannia</i>	sp.	Weigmann 2006
<i>Meristolohmannia</i>	<i>meristacaroides</i>	Balogh & Mahunka 1966
<i>Mesoplophora</i>	<i>abscondita</i>	Niedbala 1988
<i>Metabelba</i>	<i>papillipes</i>	Weigmann 2006
<i>Microtegeus</i>	<i>similis</i>	Balogh & Mahunka 1980
<i>Mixacarus</i>	<i>brevipes</i>	Norton et al. 1978
<i>Mucronothrus</i>	<i>nasalis</i>	Weigmann 2006
<i>Mycobates</i>	<i>parmeliae</i>	Weigmann 2006
<i>Nanhermannia</i>	<i>elegantissima</i>	Hammer 1958
<i>Nanhermannia</i>	<i>nana</i>	Weigmann 2006
<i>Nehypochthonius</i>	<i>porosus</i>	Norton & Metz 1980
<i>Nesiacarus</i>	<i>granulatus</i>	Hammer, 1972
<i>Nothrus</i>	<i>truncatus</i>	Banks 1915
<i>Nothrus</i>	<i>silvestris</i>	Weigmann 2006
<i>Nothrus</i>	<i>willmanni</i>	Retana-Salazar & Alvarado-Rodríguez 2015
<i>Nothrus</i>	<i>borussicus</i>	Weigmann 2006
<i>Novonothrus</i>	<i>flagellatus</i>	Colloff 2011
<i>Odontocepheus</i>	<i>elongatus</i>	Weigmann 2006
<i>Odontocepheus</i>	<i>oblongus</i>	Reeves 1995
<i>Oppiella</i>	<i>nova</i>	Weigmann 2006
<i>Oribatula</i>	<i>sakamorii</i>	Aoki 1970
<i>Oribatula</i>	<i>tibialis</i>	Weigmann 2006
<i>Oripoda</i>	sp.	Fernández 2000
<i>Oromurcia</i>	<i>sudetica</i>	Weigmann 2006
<i>Palaeacarus</i>	<i>hystricinus</i>	Weigmann 2006
<i>Parabelbella</i>	<i>meridiana</i>	Norton 1979 (als <i>Epidamaeus meridianus</i>)
<i>Paraleius</i>	sp.5	Schäffer & Koblmüller submitted
<i>Paraleius</i>	sp.1	Schäffer & Koblmüller submitted
<i>Paraleius</i>	sp.6	Schäffer & Koblmüller submitted
<i>Paraleius</i>	sp.4	Schäffer & Koblmüller submitted
<i>Parhypochthonius</i>	<i>aphidinus</i>	Weigmann 2006
<i>Peloribates</i>	<i>acutus</i>	Fujikawa 2008
<i>Perlohmanna</i>	sp.	Weigmann 2006
<i>Phauloppia</i>	<i>lucorum</i>	Weigmann 2006
<i>Pheroliodes</i>	sp.	Fernández 1987
<i>Platynothrus</i>	<i>peltifer</i>	Weigmann 2006
<i>Platynothrus</i>	<i>castaneus</i>	Hammer 1961
<i>Protoribates</i>	<i>hakonensis</i>	Aoki 1994
<i>Prototritia</i>	<i>major</i>	Niedbala 2004
<i>Pseudotocepheus</i>	<i>amonstruosus</i>	Grobler 1997
<i>Pterochthonius</i>	<i>angelus</i>	Krisper 1997
<i>Punctoribates</i>	<i>punctum</i>	Weigmann 2006
<i>Rhynchoribates</i>	<i>mirus</i>	Beck 1961
<i>Rhysotritia</i>	<i>duplicata</i>	Weigmann 2006

<i>Rostrozetes</i>	<i>ovulum</i>	Beck 1965 (see <i>R. foveolatus</i> synonym!)
<i>Rostrozetes</i>	<i>nebulosus</i>	Beck 1965
<i>Scapheremaeus</i>	<i>palustris</i>	Weigmann 2006, ++
<i>Scapheremaeus</i>	<i>nakanoshimensis</i>	Bayartogtokh et al. 2018
<i>Scheloribates</i>	<i>pallidulus</i>	Weigmann 2006
<i>Scheloribates</i>	<i>ascendens</i>	Weigmann 2006
<i>Schusteria</i>	<i>littorea</i>	Grandjean 1968
<i>Scutovertex</i>	<i>sculptus</i>	Weigmann 2006
<i>Sellnickochthonius</i>	<i>zelawaiensis</i>	Weigmann 2006
<i>Siculobata</i>	<i>sicula</i>	Grandjean 1953
<i>Solenozetes</i>	<i>carinatus</i>	Hammer 1961 (see <i>Plasmobates carinatus</i>)
<i>Sphaerochthonius</i>	sp.	Weigmann 2006
<i>Spinotocepheus</i>	sp.	Fujikawa 2016
<i>Steganacarus</i>	<i>magnus</i>	Weigmann 2006
<i>Steganacarus</i>	<i>applicatus</i>	Weigmann 2006
<i>Stomacarus</i>	<i>ligamentifer</i>	Hammer 1967 (see <i>Andacarus ligamentifer</i>)
<i>Tecteremaeus</i>	<i>incompletus</i>	Mahunka 1991
<i>Tectocepheus</i>	<i>sarekensis</i>	Weigmann 2006
<i>Tectocepheus</i>	<i>minor</i>	Weigmann 2006
<i>Tectocepheus</i>	<i>velatus</i>	Weigmann 2006
<i>Thalassozetes</i>	<i>balboa</i>	Pfingstl et al. 2019
<i>Thalassozetes</i>	<i>barbara</i>	Pfingstl 2013
<i>Thasecazetes</i>	<i>falcidactylus</i>	Pfingstl et al. 2017
<i>Trhypochthoniellus</i>	<i>crassus</i>	Kuriki 2010
<i>Trhypochthonius</i>	<i>silvestris</i>	Weigmann & Rasputnig 2009
<i>Trhypochthonius</i>	<i>japonicus</i>	Weigmann & Rasputnig 2009
<i>Trhypochthonius</i>	<i>tectorum</i>	Weigmann 2006
<i>Trichoribates</i>	<i>trimaculatus</i>	Weigmann 2006
<i>Trimalaconothrus</i>	<i>novus</i>	Sellnick 1921 (see <i>Malaconothrus novus</i>)
<i>Unguizetes</i>	<i>incertus</i>	Balogh & Mahunka 1969 (see <i>Uracrobates incertus</i>)
<i>Xenillus</i>	<i>tegeocranus</i>	Weigmann 2006

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Figure S1. Ancestral state reconstructions based on parsimony of (a) lifestyle and (b) sensillus type found in oribatid mites.

