

Key to the asellote isopod superfamily Janiroidea

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This key is designed to be used without dissection of the specimen, although some inspection at higher magnifications may be necessary. See glossary for descriptions of anatomical terms. The key is currently best used for most of the Janiroidean families, and does not include other superfamilies (Stenetrioidea, Aselloidea or Gnathostenetroidoidea). Interstitial families, such as Vermectiadiidae and Microparasellidae, are currently not included, and character state coverage for the polyphyletic family Janiridae (see Wilson and Wägele, 1994; Wilson, 1994) is limited.

1. Antenna podomere axis with only moderate bend at articles 3-5 so that distal podomeres cannot fold against proximal podomeres..... 2
Antenna podomere axis with large geniculation at articles 3-5 so that distal podomeres can fold against proximal podomeres..... 24
- 2(1). Uropod protopod present..... 3
Uropod protopod vestigial or absent..... 23
- 3(2). Uropod insertion on pleotelson on posterolateral margin, or on posteroventral surface..... 4
Uropod insertion on pleotelson above posterior margin on dorsal surface..... 22
Uropod insertion on pleotelson mediodorsal surface..... **Pleurocopidae Fresi & Schiecke, 1972**
- 4(3). Posterior pereonites 5-7 serially homologous and not especially integrated with pleon, pereonal musculature not distinctly enlarged..... 5
Posterior pereonites 5-7 and pleon integrated into natasome, dorsal surface vaulted, with enlarged pereonal musculature..... **Munnopsidae Lilljeborg, 1864**
- 5(4). Pereopod IV coxae inserting on mediolateral margin..... 6
Pereopod IV coxae inserting on anterolateral margin..... 16
- 6(5). Anterior pereonites 1-3 not especially integrated into fossome; Antennula basal article directed anteriorly..... 7
Anterior pereonites 1-3 integrated into fossome; Antennula basal article directed posterodorsally..... **Macrostylidae Hansen, 1916**
Anterior pereonites 1-3 not especially integrated into fossome; Antennula basal article directed anterodorsally..... 15
- 7(6). Antennula first article subcircular or oval in crosssection..... 8
Antennula first article flattened in crosssection..... **Janiridae Neojaera Nordenstam, 1933 & Microjanira Schiecke & Fresi, 1970**
- 8(7). Head frontal margin not projecting anteriorly..... 9
Head frontal margin projecting anteriorly..... 11
- 9(8). Pereonite 5 length and pereonite 3 length subsimilar; Antennula first article width distinctly enlarged compared to second article; Pereopods dactyli posterior claw as long as dorsal claw..... **Janiridae Sars, 1897 sensu stricto**
Pereonite 5 length shorter than pereonite 3 length; Antennula first article width subsimilar or somewhat wider than second article; Pereopods dactyli posterior claw shorter than dorsal claw..... 10

Key to the superfamily Janiroidea (Asellota)

- 10(9). Tergal projections laterally on anterior pereonites 2-4 absent; Antennula length similar head width or longer; Pereopod I carpus ventral margin opposing propodus ventral margin; Head lateral processes absent **Janiridae *Ectias* Richardson, 1906**
Tergal projections laterally on anterior pereonites 2-4 present; Antennula length much shorter than head width; Pereopod I carpus ventral margin opposing propodus ventral margin; Head lateral processes present **Acanthaspidiidae Menzies, 1962**
- 11(8). Tergal projections laterally on anterior pereonites 2-4 absent 12
Tergal projections laterally on anterior pereonites 2-4 present 13
- 12(11). Antennula length similar to head width or longer; Antennal article 3 (basis) scale as tiny articulated lobe, length subequal to width; Pleopodal cavity posteriorly closed; Uropod ramus with exopod lateral to endopod **Janiridae *Caecianiopsis* Menzies & Pettit, 1956**
Antennula length much shorter than head width; Antennal article 3 (basis) scale as unarticulated spine or projection; Pleopodal cavity posteriorly open; Uropod rami with exopod dorsal to endopod **Santiidae Wilson, 1987**
- 13(11). Pereonite 5 length similar to pereonite 3 length; Antennal basis scale present; Antennula and antenna with recessed insertions; Antennula article multiarticulate (7 or more) 14
Pereonite 5 length shorter than pereonite 3 length; Antennal basis scale absent; Antennula and antenna inserting at head surface, but outline not projecting; Antennula with few articles (less than 7) **Incertae sedis *Dactylostylis* Richardson, 1911**
- 14(13). Antennula length similar to head width or longer; Antennal article 3 (basis) length subsimilar to or shorter than articles 2 and 4; Pleopodal cavity posterior form closed; Antennula first article width subsimilar or somewhat wider than second article **Mictosomatidae Wolff, 1965**
Antennula length much shorter than head width; Antennal article 3 (basis) length longer than articles 2 and 4; Pleopodal cavity posterior form open; Antennula first article width distinctly enlarged compared to second article **Janirellidae Menzies, 1956**
- 15(6). Pereonite 5 length subsimilar to pereonite 3 length; Pereonites 2-4 tergites with lateral projections; Antennula length much shorter than head width; Body dorsal surfaces without major spines **Katianiridae Svavarsson, 1987**
Pereonite 5 length shorter than pereonite 3 length; Pereonites 2-4 tergites without lateral projections; Antennula length similar to head width or longer; Body dorsal surfaces with major spines **Haplomunnidae Wilson, 1976**
- 16(5). Head frontal margin not projecting anteriorly; Antennula length similar to or longer than antenna length; Antennula projecting anterodorsally and laterally **Echinothambematidae Menzies, 1956**
Head frontal margin projecting anteriorly; Antennula length much shorter than antenna length; Antennula projecting anteriorly 17
- 17(16). Pereonites 2-4 tergites without lateral projections; Pereopods V-VII coxae orientation ventrolateral 18
Pereonites 2-4 tergites with lateral projections; Pereopods V-VII coxae orientation ventral 20
- 18(17). Anterior pereopods coxae anterolateral robust setae absent; Pereonite tagmosis hardly developed, mainly expressed by orientation and position of legs on pereon, pereonites similar in shape; Head depth subsimilar to anterior pereon depth 19
Anterior pereopods coxae anterolateral robust setae present; Pereonite tagmosis strongly developed, resulting in pereonites with clearly distinct appearance; Head depth deeper than anterior pereon, ventrally projecting **Desmosomatidae G. O. Sars, 1897**

Key to the superfamily Janiroidea (Asellota)

- 19(18). Pleopods III-V not exposed, covered by anterior pleopods; Pereopod I carpus shape trapezoidal, widening distally **Urstylidae Riehl et al, in press**
Pleopods III-V not exposed, covered by anterior pleopods; Pereopod I carpus shape elongate, dorsal and lateral margins linear, subparallel.....
..... ***Incertae sedis Xostylus Menzies, 1962 & Trichopleon Beddard, 1886***
Pleopods III-V exposed, not covered by anterior pleopods; Pereopod I carpus shape elongate, dorsal margin convex, ventral margin concave or linear **Thambematidae Stebbing, 1913**
- 20(17). Mouthparts projecting not projecting strongly anteriorly, mandibles not exposed in dorsal view; Anterior pereopods coxae without anterolateral robust setae; posterior pereonites coxae setation absent; Pereopod I carpus ventral margin opposing propodus ventral margin; Pereonite tagmosis strongly developed, resulting in pereonites with clearly distinct appearance..... 21
Mouthparts projecting strongly anteriorly, mandibles exposed in dorsal view and lanceolate; Anterior pereopods coxae with anterolateral robust setae; posterior pereonites coxae setation present; Pereopod I carpus ventral margin not opposing propodus ventral margin; Pereonite tagmosis hardly developed, mainly expressed by orientation and position of legs on pereon, pereonites similar in shape
..... ***Incertae sedis Sugoniscus Menzies & George, 1972***
- 21(20). Pereonite 5 not distinctly elongate compared to pereonites 6-7; Antennula basal article projecting anteriorly; Pereonite 1 lateral length in male subsimilar female and less than pereonite 2 length ..
..... **Nannoniscidae Hansen, 1916**
Pereonite 5 distinctly elongate compared to pereonites 6-7; Antennula basal article projecting anterodorsally; Pereonite 1 lateral length in male distinctly longer than in female and greater than pereonite 2 length..... **Ischnomesidae Hansen, 1916**
- 22(3). Pereonite 5 length length subsimilar to pereonite 3 length; Pleopodal cavity posteriorly open; Antennula basal article projecting anteriorly; Antennula length similar to antennal length or longer.....
..... **Xenosellidae Just, 2005**
Pereonite 5 length length less than pereonite 3 length; Pleopodal cavity posteriorly closed; Antennula basal article projecting posterodorsally; Antennula length much shorter than antennal length.....
..... **Dendrotionidae Vanhöffen, 1914**
- 23(2). Pereonites 2-4 tergites without lateral projections; Head with lateral processes clearly projecting anterolaterally from head outline; Antennula length much less than head width; Antennal article 3 longer than articles 2 and 4 length..... **Munnidae Sars, 1897**
Pereonites 2-4 tergites with lateral often spinose or denticulate projections; Head lateral processes consisting only of small spines, barely projecting from head outline; Antennula length similar to head width or longer; Antennal article 3 length subsimilar to or less than articles 2 and 4 length
..... **Mesosignidae Schultz, 1969**
- 24(1). Head without pseudorostrum on frons above clypeus; Pleopodal cavity posteriorly closed; Antenna article 3 (basis) without distal groove for ischium; Anterior pereonites sternal keels absent..... 25
Head with pseudorostrum on frons above clypeus; Pleopodal cavity posteriorly open; Antenna article 3 (basis) with distal groove for ischium; Anterior pereonites sternal keels present
..... **Joeropsididae Nordenstam, 1933**
- 25(24). Head frontal margin not projecting anteriorly; Uropod inserting on pleotelson posterolateral margin, or on posteroventral surface; Antennula basal article projecting anteriorly; Antennal article 3 (basis) scale as unarticulated spine or projection..... **Haploniscidae Hansen, 1916**
Head frontal margin projecting anteriorly; Uropod inserting on pleotelson above posterior margin on dorsal surface (in most species); Antennula basal article projecting anterolaterally or laterally; Antennal article 3 (basis) scale as small proximal lobe without articulation but with single seta.....
..... **Paramunnidae Vanhöffen, 1914**