

Taxon	Ovariterus	Trichobothrial pattern	Lateral lymphoid organs	Hemispermataphore truncal flexure
Buthidae	8-celled or 2-celled	Type A	Absent	Absent
Pseudochactidae	6-celled	Type D	Absent	Absent
Chaeriliidae	6-celled	Type B	Absent	Absent
Iuridae	6-celled	Type C	Present	Present
Bothriuridae	6-celled	Type C	Present	Present
Superstitioniidae	6-celled	Type C	Present	Present
Vaejovidae (Smeringurinae)	6-celled	Type C	Present	Present
Chactidae ( <i>Anuroctonus</i> )	6-celled	Type C	Present	Present
Chactidae ( <i>Brotheini</i> )	6-celled	Type C	Present	Present
Euscorpiidae	6-celled	Type C	Present	Present
Scorpiopidae	6-celled	Type C	Present	Present
Troglotayosicidae	6-celled	Type C	Present	Present
Caraboctonidae	6-celled	Type C	Present	Present
Vaejovidae (Syntropinae)	6-celled	Type C	Present	Present
Urodacidae	6-celled	Type C	Present	Present
Hormuridae ( <i>Liocheles</i> )	6-celled	Type C	Present	Present
Diplocentridae	6-celled	Type C	Present	Present
Hormuridae ( <i>Opisthacanthus</i> )	6-celled	Type C	Present	Present
Hormuridae ( <i>Hadogenes</i> )	6-celled	Type C	Present	Present
Scorpionidae	6-celled	Type C	Present	Present

Taxon	Sternum	Venom glands	Pedal spurs	Internobasal reflection of sperm duct
Buthidae	Horizontal compression and two internal processes	Folded	Both prolateral and retrolateral	Absent
Pseudochactidae	No horizontal compression and two internal processes	Simple	Both prolateral and retrolateral	Absent
Chaeriliidae	Minor compression and two internal processes	Folded	Both prolateral and retrolateral	Absent
Iuridae	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Bothriuridae	Posterior depression and single internal process	Folded	Single prolateral or both prolateral and retrolateral	Present
Superstitioniidae	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Vaejovidae (Smeringurinae)	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Chactidae ( <i>Anuroctonus</i> )	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Chactidae ( <i>Brotheini</i> )	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Euscorpiidae	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Scorpiopidae	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Troglotayosicidae	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Caraboctonidae	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Vaejovidae (Syntropinae)	Posterior depression and single internal process	Folded	Both prolateral and retrolateral	Absent
Urodacidae	Posterior depression and single internal process	Folded	Single prolateral pedal spur	Present
Hormuridae ( <i>Liocheles</i> )	Posterior depression and single internal process	Simple	Single prolateral pedal spur	Present
Diplocentridae	Posterior depression and single internal process	Folded	Single prolateral pedal spur	Present
Hormuridae ( <i>Opisthacanthus</i> )	Posterior depression and single internal process	Simple	Single prolateral pedal spur	Present
Hormuridae ( <i>Hadogenes</i> )	Posterior depression and single internal process	Simple	Single prolateral pedal spur	Present
Scorpionidae	Posterior depression and single internal process	Folded	Single prolateral pedal spur	Present

Taxon	Lateral eyes	Posterior edges of spiracles	Distal edges of book lung lamellae	Development
Buthidae	Five pairs	flattened subconical structures or subconical structures	smooth or wrinkled	Apoikogenic
Pseudochactidae	One pair	flattened subconical structures	spiniform	Apoikogenic
Chaeriliidae	Two pairs	subconical structures	pillow-like pads	Apoikogenic
Iuridae	Two pairs or three pairs	chisel-like structures	meandering bulges	Apoikogenic
Bothriuridae	Three pairs	subconical structures	spiniform	Apoikogenic
Superstitioniidae	Two pairs	hillock-like structures	arcuate structures	Apoikogenic
Vaejovidae (Smeringurinae)	Three pairs	flattened lobe-like structures	spiniform	Apoikogenic
Chactidae ( <i>Anuroctonus</i> )	Two pairs	hillock-like structures	bristles	Apoikogenic
Chactidae ( <i>Brotheini</i> )	Two pairs	hillock-like or subconical structures	bristles	Apoikogenic
Euscorpiidae	Two pairs	hillock-like structures	arcuate structures	Apoikogenic
Scorpiopidae	Two pairs	hillock-like structures	bristles	Apoikogenic
Troglotayosicidae	Absent/vestigial	hillock-like structures	bristles	Apoikogenic
Caraboctonidae	Two pairs	subconical structures	spiniform	Apoikogenic
Vaejovidae (Syntropinae)	Three pairs	hillock-like structures	spiniform	Apoikogenic
Urodacidae	Two pairs	chisel-like structures	bristles	Katoikogenic
Hormuridae ( <i>Liocheles</i> )	Two pairs or three pairs	hillock-like structures	arcuate structures	Katoikogenic
Diplocentridae	Three pairs	hexagonal tiles	arcuate structures	Katoikogenic
Hormuridae ( <i>Opisthacanthus</i> )	Three pairs	hexagonal tiles	bristles	Katoikogenic
Hormuridae ( <i>Hadogenes</i> )	Three pairs	hexagonal tiles	bristles	Katoikogenic
Scorpionidae	Three pairs	hexagonal tiles	bristles	Katoikogenic

Taxon	Digestive glands	Dentition of third cheliceral segment	Book lung lamellar surfaces	Hemispermataphore lamella
Buthidae	Compact	Internal margin with two teeth	reticulate venation	Flagelliform
Pseudochactidae	Compact	Internal margin with row of serrations/denticles	simple, conical trabeculae	Flagelliform
Chaeriliidae	Compact	Internal margin with row of serrations/denticles	reticulate venation	Lamelliform
Iuridae	Compact	Single large darkened tooth on internal margin	simple trabeculae	Lamelliform
Bothriuridae	Compact	Internal margin smooth	simple trabeculae	Lamelliform
Superstitioniidae	Compact	Internal margin smooth	simple trabeculae	Lamelliform
Vaejovidae (Smeringurinae)	Compact	Internal margin smooth	simple trabeculae	Lamelliform
Chactidae ( <i>Anuroctonus</i> )	Compact	Internal margin smooth	simple trabeculae	Lamelliform
Chactidae ( <i>Brotheini</i> )	Compact	Internal margin smooth	simple trabeculae	Lamelliform
Euscorpiidae	Compact	Internal margin smooth	simple trabeculae	Lamelliform
Scorpiopidae	Compact	Internal margin smooth	simple trabeculae	Lamelliform
Troglotayosicidae	Compact	Internal margin smooth	bristle like trabeculae	Lamelliform
Caraboctonidae	Compact	Single large darkened tooth on internal margin	simple trabeculae	Lamelliform
Vaejovidae (Syntropinae)	Compact	Internal margin smooth	simple trabeculae	Lamelliform
Urodacidae	Digitiform	Internal margin smooth	simple trabeculae	Lamelliform
Hormuridae ( <i>Liocheles</i> )	Digitiform	Internal margin smooth	simple trabeculae	Lamelliform
Diplocentridae	Digitiform	Internal margin smooth	simple trabeculae	Lamelliform
Hormuridae ( <i>Opisthacanthus</i> )	Digitiform	Internal margin smooth	simple trabeculae	Lamelliform
Hormuridae ( <i>Hadogenes</i> )	Digitiform	Internal margin smooth	branched trabeculae	Lamelliform
Scorpionidae	Digitiform	Internal margin smooth	branched trabeculae	Lamelliform