

## Additional Table S7

Biology/habitat of each of the 98 sampled tenebrionid genera.

Genus	Systematics	Biology/Habitat	Coded as
<i>Borboresthes</i>	Alleculinae, Alleculini	Open grasslands, temperate forests	0 (other)
<i>Gonodera</i>	Alleculinae, Alleculini	Open grasslands, temperate forests	0 (other)
<i>Hymenalia</i>	Alleculinae, Alleculini	Open grasslands, temperate forests	0 (other)
<i>Isomira</i>	Alleculinae, Alleculini	Open grasslands, temperate forests	0 (other)
<i>Cteniopus</i>	Alleculinae, Cteniopodini	Open grasslands, temperate forests	0 (other)
<i>Omophlus</i>	Alleculinae, Cteniopodini	Open grasslands, temperate forests	0 (other)
<i>Crypticus</i>	Diaperinae, Crypticini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Diaperis</i>	Diaperinae, Diaperini	Temperate forests	0 (other)
<i>Gnatocerus</i>	Diaperinae, Diaperini	Temperate forests	0 (other)
<i>Pentaphyllus</i>	Diaperinae, Diaperini	Temperate forests	0 (other)
<i>Platydema</i>	Diaperinae, Diaperini	Temperate/tropical rainforests, temperate forests	0 (other)
<i>Menimus</i>	Diaperinae, Gnathidiini	Temperate/tropical rainforests	0 (other)
<i>Parahyocis</i>	Diaperinae, Hyociini	Costal sand areas	1 (arid/semi-arid)
<i>Halammobia</i>	Diaperinae, Phaleriini	Costal sand areas	1 (arid/semi-arid)
<i>Phaleria</i>	Diaperinae, Phaleriini	Costal sand areas	1 (arid/semi-arid)
<i>Spiloscapha</i>	Diaperinae, Scaphidemini	Temperate/tropical rainforests	0 (other)
<i>Trachyscelis</i>	Diaperinae, Trachyscelini	Costal sand areas	1 (arid/semi-arid)
<i>Adelium</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Arcothymus</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Cardiothorax</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Coripera</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Cymbeba</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Isopteron</i>	Lagriinae, Adeliini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Neoadelium</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Nolicima</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Periatrum</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Pheloneis</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Pseudocilibe</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Zeadelium</i>	Lagriinae, Adeliini	Temperate/tropical rainforests	0 (other)
<i>Chaerodes</i>	Lagriinae, Chaerodini	Costal sand areas	1 (arid/semi-arid)
<i>Adynata</i>	Lagriinae, Lagriini	Temperate forests	0 (other)
<i>Anisostira</i>	Lagriinae, Lagriini	Temperate forests	0 (other)
<i>Arthromacra</i>	Lagriinae, Lagriini	Temperate forests	0 (other)
<i>Cerogria</i>	Lagriinae, Lagriini	Temperate forests	0 (other)
<i>Lagria</i>	Lagriinae, Lagriini	Temperate forests	0 (other)
<i>Macrolagria</i>	Lagriinae, Lagriini	Temperate forests	0 (other)
<i>Lorelus</i>	Lagriinae, Lupropini	Temperate/tropical rainforests	0 (other)
<i>Tagalinus</i>	Phrenapatinae, Penetini	Temperate/tropical rainforests	0 (other)
<i>Adesmia</i>	Pimeliinae, Adesmiini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Akis</i>	Pimeliinae, Akidini	Arid/semi-arid zones	1 (arid/semi-arid)

<i>Cyphogenia</i>	Pimeliinae, Akidini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Morica</i>	Pimeliinae, Akidini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Asida</i>	Pimeliinae, Asidini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Leptoderis</i>	Pimeliinae, Elenophorini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Psammetichus</i>	Pimeliinae, Elenophorini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Erodius</i>	Pimeliinae, Erodiini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Mantchorula</i>	Pimeliinae, Pimeliini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Pimelia</i>	Pimeliinae, Pimeliini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Thriptera</i>	Pimeliinae, Pimeliini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Anatolica</i>	Pimeliinae, Tentyriini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Dailognatha</i>	Pimeliinae, Tentyriini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Mesostena</i>	Pimeliinae, Tentyriini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Pachychila</i>	Pimeliinae, Tentyriini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Tentyria</i>	Pimeliinae, Tentyriini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Tentyrina</i>	Pimeliinae, Tentyriini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Bradymerus</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Charioteca</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Chlorocamma</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Chrysopeplus</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Episopus</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Isopus</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Promethis</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Pseudandrosus</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Scotoderus</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Tetragonomenes</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Thesilea</i>	Stenochiinae, Cnadaloniini	Temperate/tropical rainforests	0 (other)
<i>Strongylium</i>	Stenochiinae, Stenochiini	Temperate/tropical rainforests, temperate forests	0 (other)
<i>Amarygmus</i>	Tenebrioninae, Amarygmini	Temperate/tropical rainforests	0 (other)
<i>Blaps</i>	Tenebrioninae, Blaptini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Bolitophagus</i>	Tenebrioninae, Bolitophagini	Temperate forests	0 (other)
<i>Eledonoprius</i>	Tenebrioninae, Bolitophagini	Temperate forests	0 (other)
<i>Bassianus</i>	Tenebrioninae, Heleini	Temperate/tropical rainforests	0 (other)
<i>Lepispilus</i>	Tenebrioninae, Heleini	Temperate/tropical rainforests	0 (other)
<i>Meneristes</i>	Tenebrioninae, Heleini	Sclerophyll forests	0 (other)
<i>Mimopeus</i>	Tenebrioninae, Heleini	Temperate/tropical rainforests	0 (other)
<i>Accanthopus</i>	Tenebrioninae, Helopini	Temperate forests	0 (other)
<i>Nalassus</i>	Tenebrioninae, Helopini	Temperate forests	0 (other)
<i>Cheirodes</i>	Tenebrioninae, Melanimonini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Ammobius</i>	Tenebrioninae, Opatrini	Costal sand areas	1 (arid/semi-arid)
<i>Diphyrhynchus</i>	Tenebrioninae, Opatrini	Costal sand areas	1 (arid/semi-arid)
<i>Gonocephalum</i>	Tenebrioninae, Opatrini	Arid/semi-arid zones	1 (arid/semi-arid)
<i>Opatroides</i>	Tenebrioninae, Opatrini	Costal sand areas, arid/semi-	1 (arid/semi-arid)

		arid zones	
<i>Opatrum</i>	Tenebrioninae, Opatrini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Allophylax</i>	Tenebrioninae, Pedinini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Dendarus</i>	Tenebrioninae, Pedinini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Heliopates</i>	Tenebrioninae, Pedinini	Costal sand areas	1 (arid/semi-arid)
<i>Micrositus</i>	Tenebrioninae, Pedinini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Phylan</i>	Tenebrioninae, Pedinini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Scaurus</i>	Tenebrionini, Scaurini	Costal sand areas, arid/semi-arid zones	1 (arid/semi-arid)
<i>Tenebrio</i>	Tenebrioninae, Tenebrionini	Sclerophyll/temperate forests	0 (other)
<i>Artystona</i>	Tenebrioninae, Titaeini	Temperate/tropical rainforests	0 (other)
<i>Callismilax</i>	Tenebrioninae, Titaeini	Temperate/tropical rainforests	0 (other)
<i>Cerodolus</i>	Tenebrioninae, Titaeini	Temperate/tropical rainforests	0 (other)
<i>Tribolium</i>	Tenebrioninae, Triboliini	Temperate forests	0 (other)
<i>Calymmus</i>	Tenebrioninae, Toxicini	Temperate/tropical rainforests	0 (other)
<i>Achthosus</i>	Tenebrioninae, Ulomini	Temperate/tropical rainforests	0 (other)
<i>Uloma</i>	Tenebrioninae, Ulomini	Temperate/tropical rainforests, temperate forests	0 (other)
<i>Aphthora</i>	<i>Incertae sedis</i>	Temperate/tropical rainforests	0 (other)