

CHECKLIST OF SWEDISH TARDIGRADES

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Introduction

This checklist of Swedish tardigrades is based on the publication **Guidetti, R., Jönsson, K.I. & Kristensen, R.M. 2015. Tardigrades of Sweden, an updated check-list. Zootaxa, 3981(4): 491–507**, which included 101 species reported from published studies and museum and university collections. The current online checklist is free for all users, but reference to it requires citation also of the original paper.

Citation to this checklist should be **Guidetti, R., Jönsson, K.I. & Kristensen, R.M. Checklist of Swedish tardigrades. <http://www.hkr.se/swedishtardigrades>, Accessed date).**

The checklist will be updated continuously based on new records of tardigrades from Sweden (date of latest update is given in the title). All changes, additions and corrections in comparison to the original paper are written in red font, and changes from the last version of the checklist are marked with yellow background.

Please contact us (ingemar.jonsson@hkr.se) if you find any mistake or missing data in this checklist. Your help in its improvement is greatly appreciated!

We hope that this checklist will inspire students, researchers and others to further explore the tardigrade fauna of Sweden!

Acknowledgements

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Genus	Species	Authority	Province	Reference
HETEROTARDIGRADA				
ARTHROTARDIGRADA				
Batillipedidae				
<i>Batillipes</i>	<i>cf. bullacaudatus</i>		Bo	Willems et al. 2009
<i>Batillipes</i>	<i>mirus</i>	(Richters, 1909)	Bo, Go, Ha, Sk	Karling 1954; Willems et al. 2009 (ZMUC)
Halechiniscidae				
Styraconyxinae				
<i>Raiarctus</i>	<i>aureolatus</i>	(Renaud- Mornant, 1981)	Bo	Willems et al. 2009
Tanarctinae				
<i>Actinarctus</i>	<i>doryphorus</i> <i>doryphorus</i>	(Schulz, 1935)	Bo	Willems et al. 2009
<i>Tanarctus</i>	<i>gracilis</i>	(Renaud- Mornant, 1980)	Bo	Willems et al. 2009
ECHINISCOIDEA				
Echiniscoididae				
<i>Echiniscoides</i>	<i>sigismundi</i> <i>sigismundi</i>	(Schultze, 1865)	Bo, Ha	Carlzon 1909; Willems et al. 2009 (ZMUC)
Echiniscidae				
<i>Brychoerus</i>	<i>intermedius</i>	(Murray, 1910)	Go, La	Thulin 1911 (ZMUC)
<i>Bryodelphax</i>	<i>parvulus</i>	(Thulin, 1928)	Go, Öl	Jørgensen et al. 2011 (ZMUC)
<i>Diploechiniscus</i>	<i>oihonnae</i>	(Richters, 1903)	Vg, Sö, Sk	Richters 1904b; Carlzon 1909 (ZMUC)
<i>Echiniscus</i>	<i>arctomys</i>	(Ehrenberg, 1853)	Bo, Up	Richters 1904b; Carlzon 1909
<i>Echiniscus</i>	<i>blumi</i>	(Richters, 1903)	Sk, Öl, Up, La	Thulin 1911 (SMNH)
<i>Echiniscus</i>	<i>filamentosus</i>	(Plate, 1888)	Vg	Richters 1904b
<i>Echiniscus</i>	<i>granulatus</i>	(Doyère, 1840)	Up	Thulin 1911 (SMNH)
<i>Echiniscus</i>	<i>lapponicus</i>	(Thulin, 1911)	La*	Thulin 1911 (SMNH)
<i>Echiniscus</i>	<i>merokensis</i>	(Richters, 1904a)	Go, La	(ZMUC)
<i>Echiniscus</i>	<i>merokensis</i> <i>merokensis**</i>	(Richters, 1904a)	La, Up	Thulin 1911; Durante Pasa & Maucci 1979 (SMNH; MC)
<i>Echiniscus</i>	<i>merokensis</i> <i>suecicus**</i>	(Thulin, 1911)	La*, Sk*, Go*	Thulin 1911 (ZMUC; MC)

<i>Echiniscus</i>	<i>pusae</i>	(Marcus, 1928)	Go	(ZMUC)
<i>Echiniscus</i>	<i>quadrispinosus</i>	(Richters, 1902)	Vg, Up, Sm, Sk	Richters 1904b; Carlzon 1909 (ZMUC)
<i>Echiniscus</i>	<i>spiniger</i>	(Richters, 1904b)	Go*, Öl	Richters 1904b; Jönsson 2007; Guil et al. 2013 (ZMUC)
<i>Echiniscus</i>	<i>testudo</i>	(Doyère, 1840)	Go	Richters 1904b
<i>Echiniscus</i>	<i>trisetosus</i>	(Cuénot, 1932)	Up	(SMNH)
<i>Echiniscus</i>	<i>wendti</i>	(Richters, 1903)	La	Thulin 1911 (ZMUC; SMNH)
<i>Parechiniscus</i>	<i>chitonides</i>	(Cuénot, 1926)	Öl, Go	Jørgensen et al. 2011 (ZMUC)
<i>Pseudechiniscus</i>	<i>suillus</i>	(Ehrenberg, 1853)	Sk, La, Up, Öl, Sm, Go	Thulin 1911, Durante Pasa & Maucci 1979 (ZMUC; MC)
<i>Pseudechiniscus</i>	<i>suillus/facettalis</i> **		Gä	Durante Pasa & Maucci 1979 (MC)
<i>Testechiniscus</i>	<i>spitsbergensis</i>	(Scourfield, 1897)	Öl, La	(ZMUC)

EUTARDIGRADA

APOCHELA

Milnesiidae

<i>Milnesium</i>	cf. <i>asiaticum</i>		Öl	Nilsson et al. 2013
<i>Milnesium</i>	<i>tardigradum</i>	(Doyère, 1840)	Bo, Go, Vä, Vg, Vl, Up, Sk, Da, Sm, Ha, Me, Ån, Gä, Bl, La	Richters 1904b; Carlzon 1909; Thulin 1911; Durante Pasa & Maucci 1979; Jönsson 2003; Nilsson et al. 2013 (ZMUC; SMNH; MC)

PARACHELA

Eohypsibioidea

Eohypsibiidae

<i>Bertolanius</i>	<i>birnae</i>	(Hansen, Kristensen, Bertolani & Guidetti, 2016)	La	Hansen et al. 2016 (ZMUC)
<i>Bertolanius</i>	<i>smreczynskii</i>	(Węglarska, 1970)	La	(ZMUC)

Hypsibioidea

Calohypsibiidae

<i>Calohypsibius</i>	<i>ornatus</i>	(Richters, 1900)	Up, Vl, La, Sk, Sm	Carlzon 1909; Thulin 1911; Durante Pasa & Maucci 1979 (ZMUC; MC)
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<i>Calohypsibius</i>	<i>verrucosus</i>	(Richters, 1900)	La, Öl, Bo, Sm	Thulin 1911 (ZMUC)
Hypsibiidae				
Diphasconinae				
<i>Diphascon</i>	<i>alpinum</i>	(Murray, 1906)	Ha, Me, Up, Gä, Sö, Ös, Sm, Vä	Durante Pasa & Maucci 1979 (MC)
<i>Diphascon</i>	<i>chilenense</i>	(Plate, 1888)	Sk, Bl, Vl, Up, La, Gä, Go	Thulin 1911 (ZMUC; SMNH)
<i>Diphascon</i>	<i>pingue</i>	(Marcus, 1936)	Bl, Up, Sm, Sk	Jönsson 2003 (ZMUC; SMNH)
<i>Diphascon</i>	<i>tenue</i>	(Thulin, 1928)	Vä	Durante Pasa & Maucci 1979 (MC)
Hypsibiinae				
<i>Hypsibius</i>	<i>arcticus</i>	(Murray, 1907a)	Go	(ZMUC)
<i>Hypsibius</i>	<i>convergens</i>	(Urbanowicz, 1925)	Sk, Bl, La, Gä, Sö, Up, Go, Sm	Mihelčič 1971; Durante Pasa & Maucci 1979 (ZMUC; SMNH; MC)
<i>Hypsibius</i>	<i>dujardini</i>	(Doyère, 1840)	Sö, Bo, Sk, La, Nä, Da, Go, Up	Carlzon 1909; Thulin 1911; Mihelčič 1971 (ZMUC; SMNH)
<i>Hypsibius</i>	<i>microps</i>	(Thulin, 1928)	Sk*, Sm*, Bo*, No, Ån, Me, Hä, Up	Thulin 1928; Durante Pasa & Maucci 1979 (ZMUC; SMNH; MC)
<i>Hypsibius</i>	<i>pallidus</i>	(Thulin, 1911)	Sk*Vl*, Vä, Sö*, La*, No, Me, Gä, Up, Ös, Sm	Thulin 1911; Durante Pasa & Maucci 1979; Maucci 1980 (ZMUC; SMNH; MC)
Itaquasconinae				
<i>Adropion</i>	<i>arduifrons</i>	(Thulin, 1928)	La*	Thulin 1928
<i>Adropion</i>	<i>belgicae</i>	(Richters, 1911)	Bl, La	Jönsson 2003 (SMNH)
<i>Adropion</i>	<i>prorsirostre</i>	(Thulin, 1928)	Sm*, Ån; Ös, Sö, Bl	Thulin 1928; Durante Pasa & Maucci 1979; Jönsson 2003 (SMNH; MC)
<i>Adropion</i>	<i>scoticum</i>	(Murray, 1905)	Bo, Sk, Da, Vl, La, Me, Ös, Up, Gä, Sm, Bl	Carlzon 1909; Thulin 1911; Durante Pasa & Maucci 1979; Sohlenius et al. 1997; Jönsson 2003 (SMNH; MC)
<i>Adropion</i>	<i>scoticum ommatophorum</i>	(Thulin, 1911)	Vl*, Vg*	Thulin 1911 (ZMUC; SMNH)
<i>Astatumen</i>	sp.**		Bl	Jönsson 2003

<i>Itaquascon</i>	<i>enckelli</i>	(Mihelčič, 1971-72)	Up*	Mihelčič 1971-72
<i>Itaquascon</i>	<i>pawlowskii</i>	(Węglarska, 1973)	Vä	Durante Pasa & Maucci 1979 (MC)
<i>Itaquascon</i>	<i>placophorum</i>	(Maucci, 1973)	Ån, Sö, Up	Durante Pasa & Maucci 1979 (MC)
<i>Mesocrista</i>	<i>spitzbergensis</i>	(Richters, 1903)	Sm, Da, La, Ån, Gä, Sk, Up, Bl	Thulin 1911; Durante Pasa & Maucci 1979; Sohlenius et al. 1997; Jönsson 2003 (ZMUC; SMNH; MC)
<i>Platicrista</i>	<i>angustata</i>	(Murray, 1905)	Bl, Up, Sm	Jönsson 2003 (SMNH)
<i>Platicrista</i>	<i>itaquasconoide</i>	(Durante Pasa & Maucci, 1975)	Ös*, Up*	Durante Pasa & Maucci 1975 (MC)
Pilatobiinae				
<i>Pilatobius</i>	<i>bullatus</i>	(Murray, 1905)	La	(ZMUC)
<i>Pilatobius</i>	<i>oculatus</i>	(Murray, 1906)	Vi, La, Bl, Up, Sm	Thulin 1911; Jönsson 2003 (ZMUC; SMNH)
<i>Pilatobius</i>	<i>recamieri</i>	(Richters, 1911)	Ha, La	Durante Pasa & Maucci 1979 (ZMUC; MC)
<i>Pilatobius</i>	<i>rugosus</i>	(Bartoš, 1935)	Sö, Go, Up, Sm	(SMNH)
Microhypsbidae				
<i>Fractonotus</i>	<i>caelatus</i>	(Marcus, 1928)	Up	Maucci 1980
Ramazzottiidae				
<i>Hebesuncus</i>	<i>conjungens</i>	(Thulin, 1911)	Vi*, La*, Gä	Thulin 1911 (ZMUC; SMNH)
<i>Ramazzottius</i>	<i>oberhaeuseri</i>	(Doyère, 1840)	Vi, Vg, Up, Bo, Sk, La, Gä, Ös, Sm, Öl	Richters 1904b; Carlzon 1909; Thulin 1911; Durante Pasa & Maucci 1979 (ZMUC; SMNH; MC)
Isohypsibioidea				
Isohypsibiidae				
<i>Halobiotus</i>	<i>crispae</i>	(Kristensen, 1982)	Bo	Willem et al. 2009
<i>Halobiotus</i>	<i>stenostomus</i>	(Richters, 1908)	Bo	Willem et al. 2009
<i>Isohypsibius</i>	cf. <i>annulatus</i>		Up, Sk	Carlzon 1909 (ZMUC)
<i>Isohypsibius</i>	<i>basalovoi</i>	(Durante & Maucci, 1973)	Me	Durante Pasa & Maucci 1979 (MC)
<i>Isohypsibius</i>	<i>fuscus</i>	(Mihelčič, 1971-72)	Sk*	Mihelčič 1971, 1971- 72

<i>Isohypsbius</i>	<i>glaber</i>	(Durante Pasa & Maucci, 1979)	No*	Durante Pasa & Maucci 1979 (MC)
<i>Isohypsbius</i>	<i>granulifer</i>	(Thulin, 1928)	Sk*, Sö	Thulin 1928 (ZMUC; SMNH)
<i>Isohypsbius</i>	<i>helenae</i>	(Iharos, 1964)	Vm, Sm	Durante Pasa & Maucci 1979 (MC)
<i>Isohypsbius</i>	<i>indicus</i>	(Murray, 1907b)	Sk	(ZMUC)
<i>Isohypsbius</i>	<i>lunulatus</i>	(Iharos, 1966)	Ån, Gä	Durante Pasa & Maucci 1979 (MC)
<i>Isohypsbius</i>	<i>neoundulatus</i>	(Durante Pasa & Maucci, 1975)	Up*	Durante Pasa & Maucci 1975, 1979 (MC)
<i>Isohypsbius</i>	<i>prosostomus</i>	(Thulin, 1928)	Go, Sk, Bl, Ös, Nä, Da, Up, La,	Mihelčič 1971; Jönsson 2003 (ZMUC; SMNH)
<i>Isohypsbius</i>	<i>pulcher</i>	(Mihelčič, 1971-1972)	La*, Sk	Mihelčič 1971, 1971-72
<i>Isohypsbius</i>	<i>sattleri</i>	(Richters, 1902)	Sk, La, Bl, Sö, Up, Go, Sm	Thulin 1911; Jönsson 2003 (ZMUC; SMNH)
<i>Isohypsbius</i>	<i>schaudinni</i>	(Richters, 1909)	Sk	(ZMUC)
<i>Isohypsbius</i>	<i>septentrionalis</i>	(Thulin, 1928)	La*	(ZMUC)
<i>Isohypsbius</i>	<i>tetradactyloides</i>	(Richters, 1907)	Sö, Sk	(ZMUC; SMNH)
<i>Isohypsbius</i>	<i>tuberculatus</i>	(Plate, 1888)	Sk, Sö, La, Up, Go, Sm	Thulin 1911 (SMNH)
<i>Isohypsbius</i>	<i>undulatus</i>	(Thulin, 1928)	Sk*, Sm*, Up	Thulin 1928; Durante Pasa & Maucci 1975, 1979; Maucci 1980 (ZMUC; MC)
<i>Thulinius</i>	<i>augusti</i>	(Murray, 1907c)	Vä, Vl, Vg, Sm, Sk, Bl, Nä, Up, Da, Hä, Jä, La, Ån, No, Go, Öl	Mihelčič 1971
<i>Thulinius</i>	<i>ruffoi</i>	(Bertolani, 1982)	Ån	(ZMUC)
Macrobiotoidea				
Macrobiotidae				
<i>Macrobiotus</i>	<i>brevipes</i>	(Mihelčič, 1971-72)	La*	Mihelčič 1971-72
<i>Macrobiotus</i>	<i>echinogenitus</i>	(Richters, 1903)	Sö, Bo	Carlzon 1909

<i>Macrobiotus</i>	<i>harmsworthi</i>	(Murray, 1907a)	Sk, Vä, Bl, Up, Sö, Sm, La, Go,	Thulin 1911; Durante Pasa & Maucci 1979; Jönsson 2003 (ZMUC; SMNH; MC)
<i>Macrobiotus</i>	<i>hufelandi</i>	(Schultze, 1834)	Bo, Bl, Da, Gä, Go, Hä, Jä, La, Me, No, Sm, Sk, Up, Vä, Vg, Öl, Ös, Ån	Richters 1904b; Carlzon 1909; Thulin 1911; Durante Pasa & Maucci 1979; Maucci 1980; Sohlenius et al. 1997; Jönsson 2003 (ZMUC; SMNH; MC)
<i>Macrobiotus</i>	<i>islandicus</i>	(Richters, 1904c)	Up, La	Carlzon 1909 (ZMUC)
<i>Macrobiotus</i>	<i>longipes</i>	(Mihelčič, 1971-72)	Bl*, Da*	Mihelčič 1971, 1971- 72
<i>Macrobiotus</i>	<i>macrocalix</i>	(Bertolani & Rebecchi, 1993)	Öl	Jönsson 2007
<i>Macrobiotus</i>	<i>montanus</i>	(Murray, 1910)	Up, Ös	Durante Pasa & Maucci 1979 (MC)
<i>Macrobiotus</i>	<i>occidentalis</i>	(Murray, 1910)	Sk	Thulin 1911 (ZMUC; ZMS)
<i>Macrobiotus</i>	<i>orcadensis</i>	(Murray, 1907c)	Ha, No	Durante Pasa & Maucci 1979 (MC)
<i>Macrobiotus</i>	<i>spectabilis</i>	(Thulin, 1928)	Ös	Durante Pasa & Maucci 1979 (MC)
<i>Macrobiotus</i>	cf. <i>terminalis</i>	(Bertolani & Rebecchi, 1993)	Öl	Jönsson 2007
<i>Minibiotus</i>	<i>intermedius</i>	(Plate, 1888)	Bl, Bo, Da, Gä, Ha, Me, No, Sm, Sk, Sö, Vä, Vg, Vm, Up, Ös	Richters 1904b; Carlzon 1909; Durante Pasa & Maucci 1979; Jönsson 2003 (ZMUC; SMNH; MC)
<i>Paramacrobiotus</i>	<i>richtersi</i>	(Murray, 1911)	Go, La, No, Sm, Sk, Up, Ös	Mihelčič 1971; Durante Pasa & Maucci 1979 (ZMUC; SMNH; MC)
<i>Paramacrobiotus</i>	<i>areolatus</i>	(Murray, 1907c)	Up, Go,	(SMNH)
<i>Richtersius</i>	<i>coronifer</i>	(Richters, 1903)	Jä, La, Öl	Carlzon 1909; Westh & Ramløv 1991; (ZMUC)
Murrayidae				
<i>Dactylobiotus</i>	<i>ambiguus</i>	(Murray, 1907c)	La, Vä	Thulin 1911; Mihelčič 1971 (ZMUC; SMNH)
<i>Dactylobiotus</i>	<i>ampullaceus</i>	(Thulin, 1911)	La*	Thulin 1911 (ZMUC; SMNH)

<i>Dactylobiotus</i>	<i>dispar</i>	(Murray, 1907d)	Jä, La, Nä, Sm, Sk, Up, Vl, Vg,	Mihelčíč 1971 (ZMUC)
<i>Dactylobiotus</i>	<i>macronyx</i>	(Dujardin, 1851)	Bo, Up, Vg	Richters 1904b; Carlzon 1909
<i>Dactylobiotus</i>	<i>octavi</i>	(Guidetti, Altiero & Hansen, 2006)	La	(ZMUC)
<i>Murrayon</i>	<i>dianeae</i>	(Kristensen, 1982)	Bl, Öl	Westh et al. 1991; Jönsson 2003
<i>Murrayon</i>	<i>hastatus</i>	(Murray, 1907c)	Vä	(ZMUC)
<i>Murrayon</i>	<i>pullari</i>	(Murray, 1907c)	La, Sk	(ZMUC)

Explanatory information to some parts of the list:

In the **Species** column one asterisk refers to the type localities of species described in Sweden. Two asterisks refer to taxa that were not included in the calculation of total number (101) of tardigrade species recorded in Sweden.

Authority gives the name and year of the person who originally described the species.

Province gives the province in Sweden where the species has been recorded. Province abbreviations: Bl = Blekinge; Bo = Bohuslän; Da = Dalarna; Go = Gotland; Gä = Gästrikland; Ha = Halland; Hä = Hälsingland; Jä = Jämtland; La = Lappland; Me = Medelpad; No = Norrbotten; Nä = Närke; Sk = Skåne; Sm = Småland; Sö = Södermanland; Up = Uppland; Vä = Västerbotten; Vl = Värmland; Vg = Västergötland; Vm = Västmanland; Ån = Ångermanland; Öl = Öland; Ös = Östergötland.

Reference gives the references to the publications of records of a species. Within parentheses the tardigrade collections in which some specimens can be found are given (ZMUC = Tardigrade collection of the Zoological Museum, Natural Museum of Denmark; SMNH = Tardigrade collection of the Swedish Museum of Natural History in Stockholm; MC = Maucci collection of the Natural History Museum of Verona).

Note: the notation of references in the species list above and in the reference list below are not necessarily identical to the original publication in Zootaxa.

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