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A taxonomical list of Tardigrada known from the assayed islands of the Svalbard Archipelago. Dubious records are denoted with parentheses. A reference list follows the table. The total number of tardigrades from Svalbard consists of 97 taxa with 85 valid species (Coulson et al. 2014 mistakenly listed 92 taxa).

Species	Spitsbergen	Prins Karls Forland	Hopen	Bjørnøya	Edgeøya	Barentsøya	Amsterdamsøya	Kong Ludvigøyanne	Nordaustlandet	Svenskøya	Ryke Yseøyanne	References and remarks
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Bryodelphax parvulus</i> Thulin, 1928	+											^a Łagisz 1999
<i>Bryodelphax parvuspolaris</i> Kaczmarek, Zawierucha et al. 2012	+											^a Kaczmarek, Zawierucha et al. 2012
<i>Bryodelphax sinensis</i> (Pilato, 1974)	(+)											^a Dastych 1985 (probably a misidentified <i>B. parvuspolaris</i>)
<i>Diploechiniscus oihonnae</i> (Richters, 1903)	+			+			+	+				^a Richters 1911a, b ^d Richters 1911b ^g Richters 1904
<i>Echiniscus arctomys</i> Ehrenberg, 1853	+			+								^a Scourfield 1897; Richters 1903; Richters 1904; Murray 1907; Marcus 1936 ^d Summerhayes & Elton 1923
<i>Echiniscus blumi blumi</i> Richters, 1903	+											^a Richters 1903; Richters 1904; Marcus 1936; Dastych 1985; Łagisz 1999; Bernardová & Košnar 2012 (mentioned as cf.; extracted from Holocene sediments)
<i>Echiniscus capillatus</i> Ramazzotti, 1956	+											^a Dastych 1985; Łagisz 1999
<i>Echiniscus columinis</i> Murray, 1911	+											^a Węglarska 1965
<i>Echiniscus granulatus</i> (Doyère, 1840)	+			+								^a Dastych 1985; Maucci 1996; Łagisz 1999 ^d Richters 1911b

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	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Echiniscus merokensis merokensis</i> Richters, 1904	+	+			+		+					^a Marcus 1936; Dastych 1985; Maucci 1996; Kaczmarek, Zawierucha et al. 2012 ^b present study ^e Maucci 1996 ^g Richters 1904
<i>Echiniscus quadrispinosus quadrispinosus</i> Richters, 1902	+											^a Marcus 1936; Kaczmarek, Zawierucha et al. 2012
<i>Echiniscus spiculifer</i> Schaudinn, 1901	+											^a Marcus 1936
<i>Echiniscus spinulosus</i> (Doyère, 1840)	+											^a Marcus 1936
<i>Echiniscus testudo</i> (Doyère, 1840)	+			+								^a Richters 1904; Marcus 1936; Dastych 1985; Maucci 1996; Kaczmarek, Zawierucha et al. 2012 ^d Richters 1904; Summerhayes & Elton 1923, Marcus 1936
<i>Echiniscus trisetosus</i> Cuénot, 1932				(+)								^d Marcus 1936 (author indicated that the Bjørnøya record was uncertain)
<i>Echiniscus wendti</i> Richters, 1903	+						+	+				^a Richters 1911a; Marcus 1936; Węglarska 1965; Dastych 1985; Łagisz 1999; Kaczmarek, Zawierucha et al. 2012 ^g Richters 1903, 1904 ^h Richters 1911b
<i>Pseudechiniscus islandicus</i> (Richters, 1904)			+									^c Van Rompu & De Smet 1996
<i>Pseudechiniscus suillus</i> (Ehrenberg, 1853)	+	+	+		+	+			+			^a Richters 1911a; Marcus 1936; Węglarska 1965; Dastych 1985; Kaczmarek, Zawierucha et al. 2012 ^b Murray 1907 ^c Van Rompu & De Smet 1996 ^e Maucci 1996 ^f Van Rompu & De Smet 1991 ⁱ present study
<i>Pseudechiniscus victor</i> (Ehrenberg, 1853)	+							+		+	+	^a Marcus 1936; Węglarska 1965; Dastych 1985; Łagisz 1999 ^{h, j, k} Richters 1911b

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	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Testechiniscus spitsbergensis</i> (Scourfield, 1897)	+		+	+	+	+			+			^a Scourfield 1897; Richters 1903; Richters 1904; Richters 1911a; Marcus 1936; Węglarska 1965; Dastych 1985; Łagisz 1999; Kaczmarek, Zawierucha et al. 2012 ^c Richters 1911a; Van Rompu & De Smet 1996 ^d Richters 1911b; Marcus 1936 ^e present study ^f Van Rompu & De Smet 1991 ⁱ present study
<i>Milnesium asiaticum</i> Tumanov, 2006	+											^a Kaczmarek, Zawierucha et al. 2012
<i>Milnesium eurystomum</i> Maucci, 1991	+											^a Kaczmarek, Zawierucha et al. 2012
<i>Milnesium tardigradum</i>	(+)				(+)							^a Richters 1903; Richters 1904; Marcus 1936; Węglarska 1965; Dastych 1985; Maucci 1996; Łagisz 1999 ^e Maucci 1996 General remark: given all reports of <i>M. tardigradum</i> Doyère, 1840 in Svalbard are prior to the redescription of the species (Michalczyk et al. 2012a, b), they should be considered as dubious (i.e., listed as <i>Milnesium</i> sp.) until verified against the neotype series.
<i>Bertolanius nebulosus</i> (Dastych, 1983)	+											^a Dastych 1983, 1985
<i>Bertolanius smreczynskii</i> (Węglarska, 1970)	+				+							^a Klekowski & Opaliński 1989; Janiec 1996 ^e De Smet et al. 1988
<i>Bertolanius weglarskae</i> (Dastych, 1972)			+	+		+						^c Van Rompu & De Smet 1996 ^d Van Rompu & De Smet 1988 ^f Van Rompu & De Smet 1991
<i>Calohypsibius ornatus</i> (Richters, 1900)	+			+			+					^a Murray 1907; Richters 1911a; Marcus 1936; Dastych 1985; Kaczmarek, Zawierucha et al. 2012 ^d Richters 1904; Murray 1907; Summerhayes & Elton 1923; Marcus 1936 ^g Richters 1903, 1904

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	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Diphascon</i> (<i>Diphascon</i>) <i>alpinum</i> Murray, 1906	+	+		+	+							^a Marcus 1936; Węglarska 1965; Łagisz 1999 (according to Dastyh [1985], Marcus [1936] and Węglarska [1965] mistakenly determined this species as <i>Diphascon</i> [<i>D.</i>] <i>pingue pingue</i>) ^b Murray 1907 ^d Van Rompu & De Smet 1988 ^e De Smet et al. 1988
<i>Diphascon</i> (<i>Diphascon</i>) <i>chilenense</i> Plate, 1888	+	+										^a Marcus 1936 ^b Murray 1907
<i>Diphascon</i> (<i>Diphascon</i>) <i>oculatum oculatum</i> Murray, 1906	+											^a Dastyh 1985
<i>Diphascon</i> (<i>Diphascon</i>) <i>pingue</i> <i>pingue</i> (Marcus, 1936)	+		+			+						^a Dastyh 1985 (Maucci [1996] suggested that Dastyh [1985] mistakenly determined this species and that the specimens belong to <i>D. [D.] chilense</i>); Kaczmarek, Zawierucha et al. 2012 ^c Van Rompu & De Smet 1996 ^f Van Rompu & De Smet 1991
<i>Diphascon</i> (<i>Diphascon</i>) <i>recamieri</i> Richters, 1911	+	+	+		+							^a Richters 1911a; Marcus 1936; Węglarska 1965; Dastyh 1985; De Smet & Van Rompu 1994; Janiec 1996; Maucci 1996; Łagisz 1999; Kaczmarek, Zawierucha et al. 2012; Zawierucha 2013 ^{b,e} present study ^c Richters 1911a; Van Rompu & De Smet 1996
<i>Diphascon</i> (<i>Diphascon</i>) <i>stappersi</i> Richters, 1911	+		+	+		+						^{a,d} Richters 1911a; Marcus 1936 ^c Richters 1911a ^f Van Rompu & De Smet 1991
<i>Diphascon</i> (<i>Diphascon</i>) <i>tenue</i> Thulin, 1928	+											^a Węglarska 1965; Dastyh 1985; Maucci 1996
<i>Diphascon</i> (<i>Adropion</i>) <i>arduifrons</i> Thulin, 1928	+											^a Dastyh 1985

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	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Diphascon (Adropion) behanae</i> Dastych, 1987	+											^a Dastych 1985 (reported as <i>Diphascon</i> sp. nov. ? and later described based on material from Spitsbergen and additional specimens from Canada [Dastych 1987])
<i>Diphascon (Adropion) belgicae</i> Richters, 1911	+		+	+								^a Richters 1911a; Marcus 1936; Dastych 1985, Maucci 1996 ^c Richters 1911a ^d Richters 1911b; Marcus 1936
<i>Diphascon (Adropion) prorsirostre</i> Thulin, 1928	+								+			^a Kaczmarek, Zawierucha et al. 2012 ⁱ present study
<i>Diphascon (Adropion) scoticum scoticum</i> Murray, 1905	+	+	+		+	+						^a Murray 1907; Węglarska 1965; Dastych 1985; Łagisz 1999; Kaczmarek, Zawierucha et al. 2012 ^b Murray 1907 ^c Van Rompu & De Smet 1996 ^e De Smet et al. 1988 ^f Van Rompu & De Smet 1991
<i>Acutuncus antarcticus</i> (Richters, 1904)						(+)						^f Van Rompu & De Smet 1991 General remark: according to Dastych (1991) all reports of <i>A. antarcticus</i> from the Northern Hemisphere are misidentifications.
<i>Borealibius zetlandicus</i> (Murray, 1907)	+	+										^a Marcus 1936; Łagisz 1999 ^b Murray 1907
<i>Hypsibius arcticus</i> (Murray, 1907)	+	+	+									^a Richters 1911a; Marcus 1936; Węglarska 1965; Dastych 1985 (author did not find eggs which made it impossible to determine his specimens to the species level) ^b Murray 1907 ^c Richters 1911a General remarks: Dastych (1991) suggested that status of <i>H. arcticus</i> should be verified due to insufficient morphological information. According to R. M. Kristensen (pers. comm.) most of the records of <i>H. arcticus</i> from Arctic are valid.
<i>Hypsibius biscuitiformis</i> Bartoš, 1960	(+)											^a Łagisz 1999 (author signalled that this identification was uncertain)

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	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Hypsibius convergens</i> (Urbanowicz, 1925)	+				+	+						^a Marcus 1936 (author signalled that the Spitsbergen record is uncertain); Węglarska 1965; Dastyh 1985; Janiec 1996; Łagisz 1999 ^e present study ^f Van Rompu & De Smet 1991
<i>Hypsibius dujardini</i> (Doyère, 1840)	+	+	+	+	+	+	+	+				^a Richters 1903; Richters 1904; Richters 1911a; Marcus 1936; Węglarska 1965; Dastyh 1985; Janiec 1996; Maucci 1996; Łagisz 1999; Kaczmarek, Zawierucha et al. 2012; Zawierucha 2013 ^b Murray 1907 ^c Van Rompu & De Smet 1996 ^d Van Rompu & De Smet 1988 ^e De Smet et al. 1988 ^f Van Rompu & De Smet 1991 ^g Richters 1904; De Smet et al. 1987 ^h Richters 1911b
<i>Hypsibius microps</i> Thulin, 1928	+											^a Maucci 1996; Kaczmarek, Zawierucha et al. 2012
<i>Hypsibius pallidus</i> Thulin, 1911	+											^a Węglarska 1965; Dastyh 1985; Janiec 1996; Łagisz 1999; Kaczmarek, Zawierucha et al. 2012
<i>Hypsibius sp.</i>				(+)								^d Marcus 1936 (author indicated that the Bjørnøya record was uncertain)
<i>Mesocrista spitzbergensis</i> (Richters, 1903)	+	+	+	+	+		+					^a Marcus 1936; Węglarska 1965; Dastyh 1985; Klekowski & Opaliński 1989; Zawierucha 2013 ^b Murray 1907 ^c Van Rompu & De Smet 1996 ^d Van Rompu & De Smet 1988 ^e De Smet et al. 1988 ^g Richters 1903, 1904
<i>Platicrista angustata</i> (Murray, 1905)	+	+										^a Murray 1907; Marcus 1936; Dastyh 1985; Maucci 1996; Kaczmarek, Zawierucha et al. 2012 ^b Murray 1907
<i>Hebesuncus conjungens</i> (Thulin, 1911)	+					+						^a Dastyh 1985; Kaczmarek, Zawierucha et al. 2012 ^f Van Rompu & De Smet 1991
<i>Ramazottius cataphractus</i> (Maucci, 1974)	+											^a Dastyh 1985

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	a	b	c	d	e	f	g	h	i	j	k	
<i>Ramazottius montivagus</i> (Dastych, 1983)	+											^a Dastych 1983, Dastych 1985
<i>Ramazottius oberhaeuseri</i> (Doyère, 1840)	+	+		+								^a Richters 1903; Richters 1904; Richters 1911b; Marcus 1936; Węglarska 1965; Dastych 1985 ^b Murray 1907 ^d Richters 1911b, Marcus 1936
<i>Doryphoribius macrodon</i> Binda et al. 1980	+											^a Binda et al. 1980; Dastych 1985
<i>Halobiotus arcturulus</i> Crisp & Kristensen, 1983	+											^a Mokievsky 1992
<i>Halobiotus crispae</i> Kristensen, 1982	+											^a Smykla et al. 2011
<i>Isohypsibius annulatus annulatus</i> (Murray, 1905)				+								^d Murray 1907; Marcus 1936
<i>Isohypsibius ceciliae</i> Pilato & Binda, 1987	+											Pilato & Binda 1987
<i>Isohypsibius coulsoni</i> Kaczmarek, Zawierucha et al. 2012	+	+										^a Kaczmarek, Zawierucha et al. 2012 ^b present study
<i>Isohypsibius dastychi</i> Pilato et al. 1982	+											^a Pilato et al. 1982; Dastych 1985
<i>Isohypsibius elegans</i> Binda & Pilato, 1971	+		+									^a Dastych 1985 ^c Van Rompu & De Smet 1996
<i>Isohypsibius granulifer granulifer</i> Thulin, 1928	+		+	+	+	+						^a Dastych 1985; De Smet & Van Rompu 1994; Janiec 1996), ^c Van Rompu & De Smet 1996 ^d Van Rompu & De Smet 1988 ^e De Smet et al. 1988 ^f Van Rompu & De Smet 1991
<i>Isohypsibius karenae</i> Zawierucha, 2013	+											^a Zawierucha 2013
<i>Isohypsibius marcellinoi</i> Binda and Pilato, 1971	(+)				(+)							^a Łagisz 1999 (author indicated that her identification was uncertain) ^e present study
<i>Isohypsibius papillifer bulbosus</i> (Marcus, 1928)				+		+						^d Van Rompu & De Smet 1988 ^f Van Rompu & De Smet 1991

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	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Isohypsibius papillifer papillifer</i> (Murray, 1905)	+		+	+		+						^a Richters 1911a; Marcus 1936 ^d Van Rompu & De Smet 1988 ^c Van Rompu & De Smet 1996 ^f Van Rompu & De Smet 1991
<i>Isohypsibius prosostomus prosostomus</i> Thulin, 1928	+											^a Węglarska 1965; Dastych 1985; Maucci 1996
<i>Isohypsibius sattleri</i> (Richters, 1902)	+											^a Dastych 1985
<i>Isohypsibius schaudinni</i> (Richters, 1909)	(+)											^a Richters 1909; Marcus 1936; Węglarska 1965. General remark: according to Dastych (1988) species requires redescription.
<i>Isohypsibius tetradactyloides</i> (Richters, 1907)	+											^a Węglarska 1965; Łagisz 1999 (author indicated that her identification was uncertain).
<i>Isohypsibius tuberculatus</i> (Plate, 1888)	+	+										^a Scourfield 1897; Marcus 1936 ^b Murray 1907 General remark: according to Dastych (1988) species ought to be considered as species <i>dubia et inquirenda</i> .
<i>Thulinius augusti</i> (Murray, 1907)	(+)											^a Mihelčič 1971 General remark: according to Bertolani et al. (1999) it is not possible to determine which record actually refers to true <i>T. augusti</i> .
<i>Macrobotus ariekammensis</i> Węglarska, 1965	+											^a Węglarska 1965; Dastych 1985; Łagisz 1999
<i>Macrobotus crenulatus</i> Richters, 1904	+	+	+		+		+					^a Maucci 1996; Kaczmarek, Zawierucha k et al. 2012; Zawierucha 2013 ^b Murray 1907 ^c Van Rompu & De Smet 1996 ^e Maucci 1996 ^g Richters 1904

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	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Macrobotus echinogenitus</i> Richters, 1904	+	+	+	+	+	+	+					^a Richters 1904; Richters 1911a, b; Marcus 1936; Węglarska 1965; Dastych 1985; Klekowski & Opaliński 1989; Łagisz 1999 ^b Murray 1907 ^c Richters 1911a; Van Rompu & De Smet 1996 ^d Richters 1911b; Marcus 1936 ^e De Smet et al. 1988 ^f Van Rompu & De Smet 1991 ^g Richters 1903, 1904
<i>Macrobotus grandis</i> Richters, 1911	+											^a Richters 1911a
<i>Macrobotus harmsworthi harmsworthi</i> Murray, 1907	+	+	+		+			+				^a Richters 1911a; Marcus 1936; Węglarska 1965; Dastych 1985; Klekowski & Opaliński 1989; Maucci 1996; Łagisz 1999; Kaczmarek, Zawierucha et al. 2012; Bernardová & Košnar 2012 (mentioned as cf.; extracted from Holocene sediments) ^b Murray 1907 ^c Van Rompu & De Smet 1996 ^e Maucci 1996 ^h Richters 1911b
<i>Macrobotus harmsworthi obscurus</i> Dastych, 1985	+											^a Dastych 1985, Kaczmarek, Zawierucha et al. 2012
<i>Macrobotus hufelandi hufelandi</i> C.A.S. Schultze, 1833	+	+	+	+	+							^a Scourfield 1897; Richters 1904; Murray 1907; Richters 1911a; Marcus 1936; Węglarska 1965; Dastych 1985; Łagisz 1999; Kaczmarek, Zawierucha et al. 2012; Bernardová & Košnar 2012 (mentioned only in figure 5 but omitted in the text; extracted from Holocene sediments) ^b Murray 1907 ^c Richters 1911a ^d Van Rompu & De Smet 1996; Summerhayes & Elton 1923 ^e present study

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	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Macrobotus islandicus islandicus</i> Richters, 1904	+	+			+				+			^a Murray 1907; Marcus 1936; Węglarska 1965; Dastyh 1985; Klekowski & Opaliński 1989; Maucci 1996; Łagisz 1999; Kaczmarek, Zawierucha et al. 2012 ^b Murray 1907 ^e present study
<i>Macrobotus occidentalis occidentalis</i> Murray, 1910	+											^a Węglarska 1965
<i>Macrobotus spectabilis</i> Thulin, 1928	+											^a Klekowski & Opaliński 1989; Łagisz 1999
<i>Minibiotus crassidens</i> (Murray, 1907)	+											^a Węglarska 1965
<i>Minibiotus intermedius</i> (Plate, 1888)	(+)	(+)										^a Richters 1904; Richters 1911a; Marcus 1936; Dastyh 1985; Łagisz 1999 ^b Murray 1907 General remark: many older reports of this species need to be confirmed because of a number of new species similar to <i>M. intermedius</i> that have been described using taxonomic traits that were not considered important at the time when <i>M. intermedius</i> was being reported from all over the world (e.g., Claxton 1998, Li et al. 2008, Fontoura et al. 2009).
<i>Paramacrobotus areolatus</i> (Murray, 1907)	+		+									^a Murray 1907; Richters 1911a; Marcus 1936; Węglarska 1965; Dastyh 1985; Maucci 1996; Łagisz 1999 ^c Richters 1911a
<i>Paramacrobotus richtersi</i> (Murray, 1911)	+											^a Węglarska 1965; Mihelcic 1971; Dastyh 1985; Łagisz 1999
<i>Richtersius coronifer</i> (Richters, 1903)	+											^a Richters 1903; Richters 1904; Marcus 1936; Węglarska 1965; Dastyh 1985; Maucci 1996; Łagisz 1999; Bernardová & Košnar 2012 (mentioned as cf.; extracted from Holocene sediments)
<i>Tenuibiotus voronkovi</i> (Tumanov, 2007)	+				+				+			^a Tumanov 2007 ^e present study ⁱ present study
<i>Tenuibiotus willardi</i> (Pilato, 1977)	+											^a Dastyh 1985; Maucci 1996

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	<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	
<i>Dactylobiotus ambiguus</i> (Murray, 1907)	+	+		+	+							^a Janiec 1996 ^b Murray 1907 ^d Van Rompu & De Smet 1988 ^e De Smet et al. 1988
<i>Dactylobiotus dispar</i> (Murray, 1907)	+	+	+			+						^a Marcus 1936; Klekowski & Opaliński 1989 ^b Murray 1907 ^c Van Rompu & De Smet 1996 ^f Van Rompu & De Smet 1991
<i>Dactylobiotus macronyx</i> (Dujardin, 1851)	(+)		(+)	(+)								^a Marcus 1936 (author indicated that the Spitsbergen record is uncertain) ^d Summerhayes & Elton 1923 ^c Richard 1898 General remark: despite the fact that the species is nominal for the genus, it is considered <i>nomen dubium</i> because of its poor original description and the lack of the type series (Binda & Pilato 1999; Kaczmarek, Schabetsberger et al. 2012).
<i>Murrayon dianae</i> (Kristensen, 1982)			+			+						^c Van Rompu & De Smet 1996 ^f Van Rompu & De Smet 1991
<i>Murrayon hastatus</i> (Murray, 1907)	(+)											^a Bernardová & Košnar 2012 (mentioned as cf.; extracted from Holocene sediments)
<i>Murrayon hibernicus</i> (Murray, 1911)	+				+							^a Dastyč 1985; Łagisz 1999 ^e present study
<i>Murrayon pullari</i> (Murray, 1907)	+	+			+		+					^a Marcus 1936; De Smet et al. 1987 ^b Murray 1907 ^e De Smet et al. 1988 ^g De Smet et al. 1987
Total number of taxa	89	23	23	23	22	16	9	5	5	1	1	
Number of valid species	80	22	22	20	20	15	9	5	5	1	1	

References

Bernardová A. & Košnar J. 2012. What do Holocene sediments in Petuniabukta, Spitsbergen reveal? *Polish Polar Research* 33, 329-345.

Bertolani R., Marley N. & Nelson D.R. 1999. Redescription of the genus *Thulinia* (Eutardigrada, Hypsibiidae) and of *Thulinia augusti* (Murray, 1907) comb. n. *Zoologischer Anzeiger* 238, 139-145.

Binda M.G. & Pilato G. 1999. *Dactylobiotus lombardoi* sp. n. (Eutardigrada: Macrobiotidae) from Tierra del Fuego, with a key to the *Dactylobiotus*-species. *Zoologischer Anzeiger* 238, 147-155.

- Binda M., Pilato G. & Dastych H. 1980. Descrizione di una nuova specie di Eutardigrado, *Doryphoribius macrodon*. (Description of the new species of Eutardigrada, *Doryphoribius macrodon*.) *Animalia* 7, 23-27.
- Claxton S.K. 1998. A revision of the genus *Minibiotus* (Tardigrada: Macrobiotidae) with descriptions of eleven new species from Australia. *Records of the Australian Museum* 50, 125-160.
- Coulson S.J., Convey P., Aakra K., Aarvik L., Ávila-Jiménez M.L., Babenko A., Biersma E.M., Boström S., Brittain J.E., Carlsson A.M., Christoffersen K., De Smet W.H., Ekremj T., Fjellberg A., Füreder L., Gustafsson D., Gwiazdowicz D.J., Hansen L.O., Holmstrup M., Hullé M., Kaczmarek Ł., Kolicka M., Kuklin V., Lakka H.K., Lebedeva N., Makarova O., Maraldo K., Melekhina E., Ødegaard F., Pilskog H.E., Simon J.C., Sohlenius B., Solhøy T., Sjøli G., Stur E., Tanasevitch A., Taskaeva A., Velle G., Zawierucha K., Zmudczyńska-Skarbek K. 2014. The terrestrial and freshwater invertebrate biodiversity of the archipelagoes of the Barents Sea; Svalbard, Franz Josef Land and Novaya Zemlya. *Soil Biology & Biochemistry* 68, 440-470.
- Dastych H. 1983. Two new Eutardigrada species from West Spitsbergen and the Tatra Mts. *Bulletin de la Société des Amis des Sciences et des Lettres* 23, 195-200.
- Dastych H. 1985. West Spitsbergen Tardigrada. *Acta Zoologica Cracoviensia* 28, 169-214.
- Dastych H. 1987. Two new species of Tardigrada from the Canadian Subarctic with some notes on sexual dimorphism in the family Echiniscidae. *Mitteilungen Hamburgisches Zoologisches Museum* 8(129), 319-334.
- Dastych H. 1988. *The Tardigrada of Poland. Monografie Fauny Polski* 16. Warsaw: PWN.
- Dastych H. 1991. Redescription of *Hypsibius antarcticus* (Richters, 1904), with some notes on *Hypsibius arcticus* (Murray, 1907) (Tardigrada). *Mitteilungen Hamburgisches Zoologisches Museum* 88, 141-159.
- De Smet W.H. & Van Rompu E.A. 1994. Rotifera and Tardigrada from some cryoconite holes on a Spitsbergen (Svalbard) glacier. *Belgian Journal of Zoology* 124, 27-37.
- De Smet W.H., Van Rompu E.A. & Beyens L. 1987. Rotifera, Gastrotricha en Tardigrada uit Shetland, Faroër en Spitsbergen. (Rotifera, Gastrotricha and Tardigrada from Shetland, Faroe and Spitsbergen islands.) *Natuurwetten Tijdschrift* 69, 81-102.
- De Smet W.H., Van Rompu E.A. & Beyens L. 1988. Contribution to the rotifers and aquatic Tardigrada of Edgeøya (Svalbard). *Fauna Norvegica Series A* 9, 19-30.
- Fontoura P., Pilato G., Morais P. & Lisi O. 2009. *Minibiotus xavieri*, a new species of tardigrade from the Parque Biológico de Gaia, Portugal (Eutardigrada: Macrobiotidae). *Zootaxa* 2267, 55-64.
- Janiec K. 1996. The comparison of freshwater invertebrates of Spitsbergen (Arctic) and King George Island (Antarctic). *Polish Polar Research* 17, 173-202.

- Kaczmarek Ł., Schabetsberger R., Litwin M. & Michalczyk Ł. 2012. A new freshwater eutardigrade from Fiji and Vanuatu (Oceania), with remarks on the genus *Dactylobiotus*. *New Zealand Journal of Zoology* 39, 311-318.
- Kaczmarek Ł., Zawierucha K., Smykla J. & Michalczyk Ł. 2012. Tardigrada of the Revdalen (Spitsbergen) with the descriptions of two new species: *Bryodelphax parvuspolaris* (Heterotardigrada) and *Isohypsibius coulsoni* (Eutardigrada). *Polar Biology* 35, 1013-1026.
- Klekowski R.Z. & Opaliński K.W. 1989. Oxygen consumption in Tardigrada from Spitsbergen. *Polar Biology* 9, 299-303.
- Łagisz M. 1999. *Fauna niesporczaków (Tardigrada) na nunatakach Spitsbergenu jako przykład fauny wyspowej. (The water bears [Tardigrada] from Spitsbergen nunataks as an example of insular fauna.)* MSc thesis, Jagiellonian University, Krakow.
- Maucci W. 1996. Tardigrada of the Arctic tundra with description of two new species. *Zoological Journal of the Linnean Society* 116, 185-204.
- Michalczyk Ł., Wełnicz W., Frohme M. & Kaczmarek Ł. 2012a. Redescriptions of three *Milnesium* Doyère, 1840 taxa (Tardigrada: Eutardigrada: Milnesiidae), including the nominal species for the genus. *Zootaxa* 3154, 1-20.
- Michalczyk Ł., Wełnicz W., Frohme M. & Kaczmarek Ł. 2012b. Corrigenda of *Zootaxa* 3154, 1-20. Redescriptions of three *Milnesium* Doyère, 1840 taxa (Tardigrada: Eutardigrada: Milnesiidae), including the nominal species for the genus. *Zootaxa* 3393, 66-68.
- Mihelčič F. 1971. Süßwasser tardigraden aus Nordeuropa. (Freshwater Tardigrada from northern Europe.) *Entomologica Scandinavia* 2, 205-214.
- Moskiewsky V.O. 1992. Composition and distribution of intertidal meiofauna of Isfjorden, west Spitsbergen. *Polish Polar Research* 13, 31-40.
- Murray J. 1907. Arctic Tardigrada, collected by Wm. S. Bruce. *Transactions of the Royal Society of Edinburgh* 45, 669-681.
- Pilato G. & Binda M. G. 1987. *Isohypsibius ceciliae*, nuova specie di Eutardigrado (Hypsibiidae) dello Spitsbergen. *Animalia* 14, 125-129.
- Richard J. 1898. Sur la faune des eaux douces explorées en 1898 pendant la campagne du yacht *Prince-Alice* (Lofoten, Spitsberg, Iles Beeren, Hope, de Barents, et Færoer). (On the freshwater fauna explored in 1898 during the campaign yacht *Prince Alice* [Lofoten, Spitsbergen, islands of Beeren, Hope, Barents and the Faroe Islands].) *Memoires Société Zoologique de France* 11, 326-338.
- Richters F. 1903. Nordische Tardigraden. (Nordic Tardigrada.) *Zoologischer Anzeiger* 27, 168-172.
- Richters F. 1904. Arktische Tardigraden. (Arctic Tardigrada.) *Fauna Arctica* 3, 494-508.
- Richters F. 1909. Tardigraden-Studien. (Tardigrade studies.) *Berichte der Senckenbergischen Naturforschenden Gesellschaft in Frankfurt am Main* 40, 28 -45.

- Richters F. 1911a. Duc d'Orléans, campagne arctique de 1907. Faune des mousses. Tardigrades. (The Duke of Orléans, Arctic campaign of 1907. Fauna of the mosses. Tardigrada.) Bruxelles: Charles Bulens.
- Richters F. 1911b. Moosfauna, Tardigrada. (Moss fauna.) In A. Koenig (ed.): *Avifauna Spitzbergensis. (Avifauna of Spitsbergen.)* Pp. 283-286. Druck von W. Büxenstein: Bonn.
- Scourfield D.J. 1897. Contributions to the non-marine fauna of Spitsbergen. Part I. Preliminary notes, and reports on the Rhizopoda, Tardigrada, Entomostraca, & c. *Proceedings of the Zoological Society of London* 65, 784-792.
- Smykla J., Kaczmarek Ł., Huzarska K. & Michalczyk Ł. 2011. The first record of a rare marine tardigrade, *Halobiotus crispae* Kristensen, 1982 (Eutardigrada: Hypsibiidae), from the Svalbard Archipelago. *Polar Biology* 34, 1243-1247.
- Summerhayes V.S. & Elton C.S. 1923. Contribution to the ecology of Spitsbergen and Bear Island. *Journal of Ecology* 11, 214-286.
- Tumanov D.V. 2007. Three new species of *Macrobiotus* (Eutardigrada, Macrobiotidae, *tenuis*-group) from Tien Shan (Kirghizia) and Spitsbergen. *Journal of Limnology* 66, 40-48.
- Węglarska B. 1965. Die Tardigraden (Tardigrada) Spitzbergens. (The tardigrades [Tardigrada] on Spitsbergen.) *Acta zoologica Cracoviensia* 11, 43-51.
- Van Rompu E.A. & De Smet W.H. 1988. Some aquatic Tardigrada from Bjørnøya (Svalbard). *Fauna Norvegica Series A* 9, 31-36.
- Van Rompu E.A. & De Smet W.H. 1991. Contribution to the freshwater Tardigrada from Barentsøya, Svalbard (78° 30'N). *Fauna Norvegica Series A* 12, 29-39.
- Van Rompu E.A. & De Smet W.H. 1994. Freshwater tardigrades from Hopen, Svalbard (76°31'N). *Fauna Norvegica Series A* 17, 1-9.
- Zawierucha K. 2013. Tardigrada from Arctic tundra (Spitsbergen) with a description of *Isohypsibius karenæ* sp. n. (Isohypsibiidae). *Polish Polar Research* 34, 351-364.