

Supplementary Material

Enigmatic and extravagant genitalia in the spider genus *Mastigusa* (Araneae, Cybaeidae) – a taxonomic revision

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Table S1. List of *Mastigusa* specimens included in the molecular species delimitation analysis, with provenance and habitat.

Code	Species	Country	Locality	Habitat	Collecting date	Latitude	Longitude	Elevation (m ASL)	Legit	Source	Accession Number
MABE01	<i>Mastigusa arietina</i>	BE	Snellegem, Brugge	In <i>Lasius fuliginosus</i> nest, deciduous forest patch on sandy soil	2020	51°10.49 50'	003°08.29167'	16	Parmentier T.	Castellucci <i>et al.</i> 2023	OP956111
MABE02	<i>Mastigusa arietina</i>	BE	Snellegem, Brugge	In <i>Lasius fuliginosus</i> nest, deciduous forest patch on sandy soil	2020	51°10.49 50'	003°08.29167'	16	Parmentier T.	Castellucci <i>et al.</i> 2023	OP956091
MABE03	<i>Mastigusa arietina</i>	BE	Snellegem, Brugge	In <i>Lasius fuliginosus</i> nest, deciduous forest patch on sandy soil	2020	51°10.49 50'	003°08.29167'	16	Parmentier T.	This study	OR509878
MABE04	<i>Mastigusa arietina</i>	BE	Snellegem, Brugge	In <i>Lasius fuliginosus</i> nest, deciduous forest patch on sandy soil	2020	51°10.49 50'	003°08.29167'	16	Parmentier T.	This study	OR509877
MMHR4	<i>Mastigusa macrophthalma</i>	HR	6 km west of Sljeme, Funzine	Under stones, <i>Fagus sylvatica</i> forest with some <i>Picea abies</i>	29/06/21	45°20.79 50'	014°41.59333'	915	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956100
MMHR5	<i>Mastigusa macrophthalma</i>	HR	6 km west of Sljeme, Funzine	Under stones, <i>Fagus sylvatica</i> forest with some <i>Picea abies</i>	29/06/21	45°20.79 50'	014°41.59333'	915	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956101
MAS_DK_01	<i>Mastigusa arietina</i>	DK	Gribskov, Hillerød	In <i>Formica</i> sp. nest, broad leaf forest with some conifers	20/05/18	55°58.98 300'	012°17.69300'	60	Scharff N.	Castellucci <i>et al.</i> 2023	OP956093
MAS_DK_02	<i>Mastigusa arietina</i>	DK	Gribskov, Hillerød	In <i>Formica</i> sp. nest, broad leaf forest with some conifers	20/05/18	55°58.98 300'	012°17.69300'	60	Scharff N.	This study	OR509884
MAS_DK_03	<i>Mastigusa arietina</i>	DK	Gribskov, Hillerød	In <i>Formica</i> sp. nest, broad leaf forest with some conifers	20/05/18	55°58.98 300'	012°17.69300'	60	Scharff N.	Castellucci <i>et al.</i> 2023	OP956106
MAS_DK_04	<i>Mastigusa arietina</i>	DK	Gribskov, Hillerød	In <i>Formica</i> sp. nest, broad leaf forest with some conifers	20/05/18	55°58.98 300'	012°17.69300'	60	Scharff N.	This study	OR509882
MAS_DK_05	<i>Mastigusa arietina</i>	DK	Ørnsoø, Silkeborg	In <i>Formica</i> sp. nest	10/11/18	56°09.01 800'	9°31.39200'	53	Pedersen J.	This study	OR509879
MAS_DK_06	<i>Mastigusa arietina</i>	DK	Ørnsoø, Silkeborg	In <i>Formica</i> sp. nest	11/11/18	56°09.01 800'	9°31.39200'	54	Pedersen J.	This study	OR509880
MAS_DK_07	<i>Mastigusa arietina</i>	DK	Ørnsoø, Silkeborg	In <i>Formica</i> sp. nest	12/11/18	56°09.01 800'	9°31.39200'	55	Pedersen J.	This study	OR509881
MAS_DK_08	<i>Mastigusa arietina</i>	DK	Ørnsoø, Silkeborg	In <i>Formica</i> sp. nest	13/11/18	56°09.01 800'	9°31.39200'	56	Pedersen J.	This study	OR509883
MAS_DK_09	<i>Mastigusa arietina</i>	DK	Tokkekøb Hegn, Lillerød	In <i>Formica</i> sp. nest, broad leaf forest with some conifers	12/04/18	55°53.24 886'	012°23.16618'	60	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956112
MAGE04	<i>Mastigusa arietina</i>	GE	Didgori, Tibilisi	Under rocks, montane, dry creek in oak forest	10/10/20	41°46.86 240'	044°40.47540'	850	Seropian A. & Otto S.	Castellucci <i>et al.</i> 2023	OP956108
MAGE05	<i>Mastigusa arietina</i>	GE	Didgori, Tibilisi	Under rocks, montane, dry creek in oak forest	10/10/20	41°46.86 240'	044°40.47540'	850	Seropian A. & Otto S.	Castellucci <i>et al.</i> 2023	OP956109
MAGE06	<i>Mastigusa arietina</i>	GE	Didgori, Tibilisi	Under rocks, montane, dry creek in oak forest	10/10/20	41°46.86 240'	044°40.47540'	850	Seropian A. & Otto S.	Castellucci <i>et al.</i> 2023	OP956110
MAVSC1	<i>Mastigusa arietina</i>	IT	Chabod trail, Valsavarenche	In <i>Formica</i> sp. nest, <i>Larix decidua</i> forest with scarce <i>Pinus cembra</i> and <i>Picea abies</i>	08/07/20	45°32.59 620'	07°13.33200'	2024	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956097
MAVSC2	<i>Mastigusa arietina</i>	IT	Chabod trail, Valsavarenche	In <i>Formica</i> sp. nest, <i>Larix decidua</i> forest with scarce <i>Pinus cembra</i> and <i>Picea abies</i>	08/07/20	45°32.59 620'	07°13.33200'	2024	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956098
EDBA1	<i>Mastigusa arietina</i>	IT	Val Pramper, Forni di Zoldo	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest with some <i>Larix decidua</i>	06/08/20	46°18.79 932'	012°09.47328'	1433	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956102
EDBA2	<i>Mastigusa arietina</i>	IT	Val Pramper, Forni di Zoldo	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest with some <i>Larix decidua</i>	06/08/20	46°18.79 932'	012°09.47328'	1433	Castellucci F.	This study	OR509868
MADBA1	<i>Mastigusa arietina</i>	IT	Val Pramper, Forni di Zoldo	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest with some <i>Larix decidua</i>	06/08/20	46°18.79 932'	012°09.47328'	1433	Castellucci F.	This study	OR509861
MADBA2	<i>Mastigusa arietina</i>	IT	Val Pramper, Forni di Zoldo	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest with some <i>Larix decidua</i>	06/08/20	46°18.79 932'	012°09.47328'	1433	Castellucci F.	This study	OR509862
MADBC2	<i>Mastigusa arietina</i>	IT	Val Pramper, Forni di Zoldo	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest with some <i>Larix decidua</i>	06/08/20	46°18.46 940'	012°09.25550'	1477	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956092
ESDBA1	<i>Mastigusa arietina</i>	IT	Val Pramper, Forni di Zoldo	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest with some <i>Larix decidua</i>	06/08/20	46°18.79 932'	012°09.47328'	1433	Castellucci F.	This study	OR509867
ESDBA2	<i>Mastigusa arietina</i>	IT	Val Pramper, Forni di Zoldo	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest with some <i>Larix decidua</i>	06/08/20	46°18.79 932'	012°09.47328'	1433	Castellucci F.	This study	OR509871
ESDBA3	<i>Mastigusa arietina</i>	IT	Val Pramper, Forni di Zoldo	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest with some <i>Larix decidua</i>	06/08/20	46°18.79 932'	012°09.47328'	1433	Castellucci F.	This study	OR509865
HLDBA1	<i>Mastigusa arietina</i>	IT	Val Pramper, Forni di Zoldo	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest with some <i>Larix decidua</i>	06/08/20	46°18.79 932'	012°09.47328'	1433	Castellucci F.	This study	OR509872
MAVPA1	<i>Mastigusa arietina</i>	IT	Around Roner Alm, Luson	In <i>Formica aquilonia</i> nest, in <i>Picea abies</i> forest with <i>Pinus sylvestris</i>	26/06/20	46°46.83 600'	11°44.48400'	1841	Castellucci F.	This study	OR509873
MAVPA2	<i>Mastigusa arietina</i>	IT	Around Roner Alm, Luson	In <i>Formica aquilonia</i> nest, in <i>Picea abies</i> forest with <i>Pinus sylvestris</i>	26/06/20	46°46.83 600'	11°44.48400'	1841	Castellucci F.	This study	OR509869
MAPOA1	<i>Mastigusa arietina</i>	IT	Val Chedul, Selva di Val Gardena	In <i>Formica aquilonia</i> nest in <i>Pinus cembra</i> forest with <i>Picea abies</i> and <i>Larix decidua</i>	24/06/20	46°33.76 200'	11°46.84200'	1781	Castellucci F.	This study	OR509874
MAPOB1	<i>Mastigusa arietina</i>	IT	Val Chedul, Selva di Val Gardena	In <i>Formica aquilonia</i> nest in <i>Pinus cembra</i> forest with <i>Picea abies</i> and <i>Larix decidua</i>	25/06/20	46°33.78 000'	11°46.81800'	1760	Castellucci F.	This study	OR509875
MAPOC1	<i>Mastigusa arietina</i>	IT	Col Raiser, Santa Cristina	In <i>Formica aquilonia</i> nest in <i>Pinus cembra</i> forest with <i>Picea abies</i> and <i>Larix decidua</i>	25/06/20	46°35.19 600'	11°44.96400'	2058	Castellucci F.	This study	OR509866
MAPOC2	<i>Mastigusa arietina</i>	IT	Col Raiser, Santa Cristina	In <i>Formica aquilonia</i> nest in <i>Pinus cembra</i> forest with <i>Picea abies</i> and <i>Larix decidua</i>	26/06/20	46°35.19 600'	11°44.96400'	2059	Castellucci F.	This study	OR509870
MAS_IT_01	<i>Mastigusa arietina</i>	IT	Casera Casavento, Claut	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest	08/09/18	46°16.08 600'	012°35.74800'	934	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956094

MAS_IT_03	<i>Mastigusa arietina</i>	IT	Casera Casavento, Claut	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest	08/09/18	46°16.08 60'	012°35.74800'	934	Castellucci F.	This study	OR509859
MAS_IT_10	<i>Mastigusa arietina</i>	IT	Corona, Cortaccia	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest	23/09/18	46°19.76 40'	11°12.51000'	1195	Castellucci F.	This study	OR509885
MAS_IT_11	<i>Mastigusa arietina</i>	IT	Corona, Cortaccia	In <i>Formica</i> sp. nest, <i>Picea abies</i> forest	23/09/18	46°19.76 40'	11°12.51000'	1195	Castellucci F.	This study	OR509860
MAAMA1	<i>Mastigusa arietina</i>	IT	Gias delle Mosche, Valdieri	In <i>Formica lugubris</i> nest in <i>Picea abies</i> forest with scarce <i>Larix decidua</i> and <i>Fagus sylvatica</i>	12/07/20	44°10.96 200'	7°16.31400'	1703	Castellucci F.	This study	OR509858
MAAMA2	<i>Mastigusa arietina</i>	IT	Gias delle Mosche, Valdieri	In <i>Formica lugubris</i> nest in <i>Picea abies</i> forest with scarce <i>Larix decidua</i> and <i>Fagus sylvatica</i>	12/07/20	44°10.96 200'	7°16.31400'	1703	Castellucci F.	This study	OR509876
MACMPA	<i>Mastigusa arietina</i>	IT	Campigna, Santa Sofia	In <i>Formica paralugubris</i> nest in <i>Abies alba</i> forest	17/06/21	43°52.20 084'	11°44.25150'	1220	Castellucci F.	This study	OR509856
MACMPA3	<i>Mastigusa arietina</i>	IT	Campigna, Santa Sofia	In <i>Formica paralugubris</i> nest in <i>Abies alba</i> forest	17/06/21	43°52.20 084'	11°44.25150'	1220	Castellucci F.	This study	OR509857
MD2844	<i>Mastigusa</i> sp.	ES	Sola de Boi, Lleida	In pitfall trap, white oak forest	15-29/6/13	42°32.97 480'	000°52.35240'	1760	Crespo L. <i>et al.</i>	Crespo <i>et al.</i> 2018	OP956095
MD372	<i>Mastigusa diversa</i>	ES	Soportujar, Granada	In pitfall trap, white oak forest	31/5/13– 14/6/13	36°57.69 060'	−003°25.12860'	1787	Crespo L. <i>et al.</i>	Crespo <i>et al.</i> 2018	OP956096
MASN01	<i>Mastigusa diversa</i>	ES	Puente Palo, Cañar	Under logs, pine forest with white oak	19/07/21	36°58.13 400'	−003°24.69420'	1811	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956105
MASN02	<i>Mastigusa diversa</i>	ES	Puente Palo, Cañar	Under logs, pine forest with white oak	19/07/21	36°58.13 400'	−003°24.69420'	1811	Castellucci F.	Castellucci <i>et al.</i> 2023	OP956107
MASN03	<i>Mastigusa diversa</i>	ES	Puente Palo, Cañar	Under logs, pine forest with white oak	19/07/21	36°58.13 400'	−003°24.69420'	1811	Castellucci F.	This study	OR509889
MASNES01	<i>Mastigusa diversa</i>	ES	Puente Palo, Cañar	Under logs, pine forest with white oak	19/07/21	36°58.13 400'	−003°24.69420'	1811	Castellucci F.	This study	OR509892
MASNES02	<i>Mastigusa diversa</i>	ES	Puente Palo, Cañar	Under logs, pine forest with white oak	19/07/21	36°58.13 400'	−003°24.69420'	1811	Castellucci F.	This study	OR509888
MASNES05	<i>Mastigusa diversa</i>	ES	Puente Palo, Cañar	Under logs, pine forest with white oak	19/07/21	36°58.13 400'	−003°24.69420'	1811	Castellucci F.	This study	OR509891
MASNES06	<i>Mastigusa diversa</i>	ES	Puente Palo, Cañar	Under logs, pine forest with white oak	19/07/21	36°58.13 400'	−003°24.69420'	1811	Castellucci F.	This study	OR509887
MASNES08	<i>Mastigusa diversa</i>	ES	Puente Palo, Cañar	Under logs, pine forest with white oak	19/07/21	36°58.13 400'	−003°24.69420'	1811	Castellucci F.	This study	OR509886
MASNES09	<i>Mastigusa diversa</i>	ES	Puente Palo, Cañar	Under logs, pine forest with white oak	19/07/21	36°58.13 400'	−003°24.69420'	1811	Castellucci F.	This study	OR509890
FIN3	<i>Mastigusa arietina</i>	FI	Kuopio, Lippumäki	In <i>Formica aquilonia</i> nest	07/11/21	62°50.52 233'	27°38.69917'	102	Sorvari J.	This study	OR509854
FIN4	<i>Mastigusa arietina</i>	FI	Kuopio, Lippumäki	In <i>Formica lugubris</i> nest	29/11/21	62°50.52 350'	27°38.55317'	100	Sorvari J.	This study	OR509855
MMNOR	<i>Mastigusa arietina</i>	NO	Skjaak, Oppland, Norway	NA	21/06/14	61°48.36 000'	7°42.24000'	750	Fjellberg A.	Bold Systems	BOLD:ACR991 8
MAUK01	<i>Mastigusa diversa</i>	UK	Dunsford Wood, SX79268899	Under half embedded rotten oak log, in woodland	28/12/21	50°41.28 333'	−003°42.63333'	130	Gallon R.	Castellucci <i>et al.</i> 2023	OP956099
MAUK05	<i>Mastigusa diversa</i>	UK	Dunsford Wood, SX79268899	Under half embedded rotten oak log, in woodland	28/12/21	50°41.28 333'	−003°42.63333'	130	Gallon R.	Castellucci <i>et al.</i> 2023	OP956103
MAUK06	<i>Mastigusa diversa</i>	UK	Dunsford Wood, SX79268899	Under half embedded rotten oak log, in woodland	28/12/21	50°41.28 333'	−003°42.63333'	130	Gallon R.	Castellucci <i>et al.</i> 2023	OP956104