

Supplementary material**Appendix 1**

Data on mammalian and flea species richness in 59 surveys used in the analyses

Realm/region	Survey	Number of species		Source
		Hosts	Fleas	
Afrotropical	Kenya	4	6	Oguge et al. 2009
	Madagascar	6	6	Laakkonen et al. 2003
	Namibia	9	19	Shihepo et al. 2008
	South Africa (eastern Cape)	7	7	Shepherd et al. 1983
	Tanzania	15	23	Laudisoit et al. 2009
	Uganda	15	8	Amatre et al. 2009
Neotropical	Argentina eastern (Buenos Aires)	7	10	Lareschi 1996, 2006, Lareschi et al. 2003, 2007 and unpublished data
	Argentina (Monte Desert)	3	5	Lareschi et al. 2004
	Argentina (Patagonia)	6	7	Sanchez et al. 2009
	Brazil southeastern (Sao Paulo and Rio de Janeiro)	16	10	de Moraes et al. 2003
	Brazil southern (Parana)	5	5	Barros-Battesti et al. 1998
	Chile (Osorno and Aisen)	13	23	Beaucournu and Kelt 1990
	Peru (Ancash)	7	13	Hastriter et al. 2002 and unpublished data
	Uruguay southern (Montevideo, Maldonado, Canelones, Rivera and San Jose)	7	4	Lareschi et al. 2006
Nearctic	California central (Monterey)	16	20	Linsdale and Davis 1956
	California southwestern (Ventura)	8	17	Davis et al. 2002
	Colorado (Larimer)	3	24	Campos et al. 1985
	Connecticut (Middlesex)	10	13	Main 1983
	Idaho (Bonneville)	15	29	Allred 1968
	Indiana	26	20	Whitaker 1982
	Montana (Phillips)	6	16	Holmes 2003
	New Mexico (Santa Fe)	26	34	Morlan 1955
	Wisconsin (Kenosha)	8	11	Amin 1976
	Wyoming (Park)	4	13	Anderson and Williams 1997
Palaearctic (Caucasus)	Adzharia	13	20	Alania et al. 1964
	Armenia (Sevan)	10	22	Avetisyan et al. 1960
	Armenia (semi-desert)	8	12	Avetisyan et al. 1960
	Armenia southeastern	7	14	Avetisyan et al. 1960
	Azerbaijan	13	23	Kunitsky and Kunitskaya 1962
	Kabarda	10	21	Syrvacheva 1964

	Nakhichevan	6	17	Kadatshay and Shirova 1963
Palaearctic (Central Asia)	Akmolinsk region, northern Kazakhstan	12	24	Mikulin 1959a
	Dzhungarskyi Alatau ridge, Kazakhstan	15	22	Burdelova 1996
	East Balkhash desert, Kazakhstan	14	36	Mikulin 1959b
	Kustanai region, northwestern Kazakhstan	11	17	Reshetnikova 1959
	Kyrgyz ridge, northern Kyrgyzstan	14	35	Shwartz et al. 1958
	Mongolia, northwestern Khangay region,	17	40	Labunets 1967
	Moyynkum desert, southern Kazakhstan	15	30	Popova 1968
	Shimkent region, southern Kazakhstan	9	27	Nuriev et al. 2004
	Tarbagatai ridge, eastern Kazakhstan	13	30	Mikulin 1958
	Trans-Ili Alatau ridge, Kazakhstan	8	18	Busalaeva and Fedosenko 1964
	Tyva	13	28	Letov et al. 1966
Palaearctic (Europe)	Hungary	7	9	Haitlinger 1973
	Kostroma region, Russia	16	21	Krylov 1986
	Kursk region, Russia	9	16	Izosov et al. 1966
	Moscow region, Russia	15	17	Darskaya et al. 1970
	Poland (Pieniny)	14	18	Haitlinger 1974
	Scotland	5	7	Varma and Page 1966
	Slovakia central (Hran)	7	7	Stanko et al. 2002 and unpublished data
	Sweden	9	12	Brinck 1966
Palaearctic (Siberia)	Altai Mountains	20	9	Sapegina et al. 1981a
	Amur region	9	23	Koshkin 1966
	Krasnojarsk region	8	18	Ravkin and Sapegina 1990
	Novosibirsk region	20	30	Violovich 1969
	Pre-Polar Ural Mountains	10	10	Novozhilova 1977
	Taimyr peninsula	12	11	Sapegina et al. 1980, 1981b
	Ural River Valley	13	14	Tanitovskiy et al. 2004
	Western Sayan ridge	12	28	Emelyanova and Shtilmark 1967
	Yakutia	7	18	Elshanskaya and Popov 1972

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