

**Table S2.** *Spirometra* isolates included in the molecular analysis.

Country of origin	Host	Location	Sample codes	References
China				
Yiyang City, Hunan	<i>Zaocys dhumnades</i>	112°46' E, 28°59' N	HuN-YiY1	This study
	<i>Z. dhumnades</i>	112°46' E, 28°59' N	HuN-YiY2	This study
	<i>Z. dhumnades</i>	112°46' E, 28°59' N	HuN-YiY3	This study
	<i>Elaphe carinata</i>	112°46' E, 28°59' N	HuN-YiY4	This study
	<i>E. carinata</i>	112°46' E, 28°59' N	HuN-YiY5	This study
Changde City, Hunan	<i>Z. dhumnades</i>	111°96' E, 28°77' N	HuN-CD2	This study
	<i>Z. dhumnades</i>	111°96' E, 28°77' N	HuN-CD3	This study
	<i>E. carinata</i>	111°96' E, 28°77' N	HuN-CD4	This study
	<i>E. carinata</i>	111°96' E, 28°77' N	HuN-CD5	This study
Yongzhou City, Hunan	<i>Z. dhumnades</i>	112°13' E, 25°67' N	HuN-YZ1	This study
	<i>Z. dhumnades</i>	112°13' E, 25°67' N	HuN-YZ2	This study
	<i>Z. dhumnades</i>	112°13' E, 25°67' N	HuN-YZ3	This study
Hengyang City, Hunan	<i>Z. dhumnades</i>	112°85' E, 27°24' N	HuN-HY1	This study
	<i>Z. dhumnades</i>	112°85' E, 27°24' N	HuN-HY2	This study
	<i>Z. dhumnades</i>	112°85' E, 27°24' N	HuN-HY3	This study
	<i>E. carinata</i>	112°85' E, 27°24' N	HuN-HY4	This study
	<i>E. carinata</i>	112°85' E, 27°24' N	HuN-HY5	This study
Xiangtan City, Hunan	<i>Z. dhumnades</i>	112°75' E, 27°59' N	HuN-XT1	This study
	<i>Z. dhumnades</i>	112°75' E, 27°59' N	HuN-XT2	This study
	<i>Z. dhumnades</i>	112°75' E, 27°59' N	HuN-XT3	This study
	<i>E. carinata</i>	112°75' E, 27°59' N	HuN-XT4	This study
	<i>E. carinata</i>	112°75' E, 27°59' N	HuN-XT5	This study
Shaoyang City, Hunan	<i>Z. dhumnades</i>	110°73' E, 27°25' N	HuN-SY1	This study

	<i>Z. dhumnades</i>	110°73' E, 27°25' N	HuN-SY2	This study
	<i>Z. dhumnades</i>	110°73' E, 27°25' N	HuN-SY3	This study
	<i>E. carinata</i>	110°73' E, 27°25' N	HuN-SY4	This study
	<i>E. carinata</i>	110°73' E, 27°25' N	HuN-SY5	This study
Zhuzhou City, Hunan	<i>Z. dhumnades</i>	113°43' E, 26°61' N	HuN-ZZ1	This study
	<i>Z. dhumnades</i>	113°43' E, 26°61' N	HuN-ZZ2	This study
	<i>Z. dhumnades</i>	113°43' E, 26°61' N	HuN-ZZ3	This study
	<i>Elaphe. taeniura</i>	113°43' E, 26°61' N	HuN-ZZ4	This study
	<i>E. taeniura</i>	113°43' E, 26°61' N	HuN-ZZ5	This study
Changsha City, Hunan	<i>Z. dhumnades</i>	113°13' E, 28°19' N	HuN-CS1	This study
	<i>Z. dhumnades</i>	113°13' E, 28°19' N	HuN-CS2	This study
	<i>Z. dhumnades</i>	113°13' E, 28°19' N	HuN-CS3	This study
	<i>White Tiger</i>	113°01' E, 28°04' N	HuN-BT1	This study
	<i>White Tiger</i>	113°01' E, 28°04' N	HuN-BT2	This study
	<i>White Tiger</i>	113°01' E, 28°04' N	HuN-BT3	This study
	<i>Panthera tigris</i>	113°01' E, 28°04' N	HuN-DT1	This study
	<i>Panthera tigris</i>	113°01' E, 28°04' N	HuN-DT2	This study
	<i>Panthera tigris</i>	113°01' E, 28°04' N	HuN-DT3	This study
	<i>Prionailurus bengalensis</i>	113°01' E, 28°04' N	HuN-Li1	This study
	<i>P. bengalensis</i>	113°01' E, 28°04' N	HuN-Li2	This study
	<i>P. bengalensis</i>	113°01' E, 28°04' N	HuN-Li3	This study
	<i>Cat</i>	113°01' E, 28°04' N	HuN-C1	This study
	<i>Cat</i>	113°01' E, 28°04' N	HuN-C2	This study
	<i>Cat</i>	113°01' E, 28°04' N	HuN-C3	This study
Loudi City, Hunan	<i>E. carinata</i>	112°12' E, 27°32' N	HuN-LD1	This study
	<i>E. carinata</i>	112°12' E, 27°32' N	HuN-LD2	This study
	<i>E. carinata</i>	112°12' E, 27°32' N	HuN-LD3	This study
Chenzhou City, Hunan	<i>Z. dhumnades</i>	113°29' E, 26°48' N	HuN-CZ1	This study

	<i>Z. dhumnades</i>	13°29' E, 26°48' N	HuN-CZ2	This study
	<i>Z. dhumnades</i>	13°29' E, 26°48' N	HuN-CZ3	This study
Huaihua City, Hunan	<i>Z. dhumnades</i>	110°86' E, 28°88' N	HuN-HH1	This study
	<i>Z. dhumnades</i>	110°86' E, 28°88' N	HuN-HH2	This study
	<i>Z. dhumnades</i>	110°86' E, 28°88' N	HuN-HH3	This study
Zhangjiajie City, Hunan	<i>Z. dhumnades</i>	110°83' E, 29°14' N	HuN-ZZJ1	This study
	<i>Z. dhumnades</i>	110°83' E, 29°14' N	HuN-ZZJ2	This study
	<i>Z. dhumnades</i>	110°83' E, 29°14' N	HuN-ZZJ3	This study
Yueyang City, Hunan	<i>Z. dhumnades</i>	113°72' E, 28°75' N	HuN-YuY1	This study
	<i>Z. dhumnades</i>	113°72' E, 28°75' N	HuN-YuY2	This study
	<i>Z. dhumnades</i>	113°72' E, 28°75' N	HuN-YuY3	This study
	<i>E. taeniura</i>	113°72' E, 28°75' N	HuN-YuY4	This study
	<i>E. taeniura</i>	113°72' E, 28°75' N	HuN-YuY5	This study
Xiangxi City, Hunan	<i>Z. dhumnades</i>	109°54' E, 29°09' N	HuN-XX1	This study
	<i>Z. dhumnades</i>	109°54' E, 29°09' N	HuN-XX2	This study
	<i>Z. dhumnades</i>	109°54' E, 29°09' N	HuN-XX3	This study
Guilin City, Guangxi	<i>R. rugulosa</i>	110°2' E, 25°23' N	GX-GL-1	[13]
	<i>R. rugulosa</i>	110°2' E, 25°23' N	GX-GL-2	[13]
	<i>R. rugulosa</i>	110°2' E, 25°23' N	GX-GL-3	[13]
Nanning City, Guangxi	<i>E. chinensis</i>	108°48'E, 22°75'N	GX-NN-1	[13]
	<i>E. chinensis</i>	108°48'E, 22°75'N	GX-NN-2	[13]
	<i>R. rugulosa</i>	108°48'E, 22°75'N	GX-NN-3	[13]
	<i>R. rugulosa</i>	108°48'E, 22°75'N	GX-NN-4	[13]
	<i>R. nigromaculata</i>	108°48'E, 22°75'N	GX-NN-7	[13]
Yunlin city, Guangxi	<i>R. rugulosa</i>	110°27'E, 22°33'N	GX-YL-1	[13]
	<i>R. rugulosa</i>	110°27'E, 22°33'N	GX-YL-2	[13]
	<i>R. nigromaculata</i>	110°27'E, 22°33'N	GX-YL-5	[13]
	<i>R. nigromaculata</i>	110°27'E, 22°33'N	GX-YL-6	[13]
Haikou city, Hainan	<i>R. rugulosa</i>	110°32'E, 20°03'N	HN-HK-1	[13]
	<i>R. rugulosa</i>	110°32'E, 20°03'N	HN-HK-2	[13]
	<i>R. nigromaculata</i>	110°32'E, 20°03'N	HN-HK-4	[13]

Wuzhishan city, Hainan	<i>R. rugulosa</i>	110°4'E, 18°8'N	HN-WZS-1	[13]
	<i>R. rugulosa</i>	110°4'E, 18°8'N	HN-WZS-3	[13]
	<i>R. nigromaculata</i>	110°4'E, 18°8'N	HN-WZS-4	[13]
	<i>R. nigromaculata</i>	110°4'E, 18°8'N	HN-WZS-6	[13]
Guiyang city, Guizhou	<i>Enhydriis chinensis</i>	106°63'E, 26°65'N	GZ-GY-1	[13]
	<i>R. nigromaculata</i>	106°63'E, 26°65'N	GZ-GY-4	[13]
Anshun city, Guizhou	<i>R. nigromaculata</i>	105°95'E, 26°25'N	GZ-AS-1	[13]
Jishou city, Hunan	<i>R. nigromaculata</i>	109°73'E, 28°32'N	HuN-JS-4	[13]
	<i>R. nigromaculata</i>	109°73'E, 28°32'N	HuN-JS-5	[13]
	<i>R. nigromaculata</i>	109°73'E, 28°32'N	HuN-JS-6	[13]
Changsha city, Hunan	<i>R. nigromaculata</i>	112°93'E, 28°23'N	HuN-CS-2	[13]
Guangan city, Sichuan	<i>R. nigromaculata</i>	106°11'E, 30°15'N	SC-GA-1	[36]
	<i>R. nigromaculata</i>	106°11'E, 30°15'N	SC-GA-2	[36]
	<i>R. nigromaculata</i>	106°11'E, 30°15'N	SC-GA-3	[36]
	<i>R. nigromaculata</i>	106°11'E, 30°15'N	SC-GA-5	[36]
Luzhou city, Sichuan	<i>R. nigromaculata</i>	105°55'E, 28°55'N	SC-LZ-1	[36]
	<i>R. nigromaculata</i>	105°55'E, 28°55'N	SC-LZ-2	[36]
	<i>R. nigromaculata</i>	105°55'E, 28°55'N	SC-LZ-4	[36]
	<i>R. nigromaculata</i>	105°55'E, 28°55'N	SC-LZ-5	[36]
Mianyang city, Sichuan	<i>R. nigromaculata</i>	104°35'E, 31°55'N	SC-MY-1	[36]
Nanchong city, Sichuan	<i>R. nigromaculata</i>	105°50'E, 30°35'N	SC-NC-1	[36]
	<i>R. nigromaculata</i>	105°50'E, 30°35'N	SC-NC-3	[36]
	<i>R. nigromaculata</i>	105°50'E, 30°35'N	SC-NC-4	[36]
	<i>R. nigromaculata</i>	105°50'E, 30°35'N	SC-NC-5	[36]
Baoshan city, Yunnan	<i>R. nigromaculata</i>	95°25'E, 100°02'N	YN-BS-1	[36]
	<i>R. nigromaculata</i>	95°25'E, 100°02'N	YN-BS-3	[36]
	<i>R. nigromaculata</i>	95°25'E, 100°02'N	YN-BS-4	[36]
Dehongzhou city, Yunnan	<i>R. nigromaculata</i>	97°31'E, 98°43'N	YN-DHZ-1	[36]
	<i>R. nigromaculata</i>	97°31'E, 98°43'N	YN-DHZ-2	[36]
Kunming city, Yunnan	<i>R. nigromaculata</i>	102°10'E, 24°23'N	YN-KM-1	[36]
	<i>R. nigromaculata</i>	102°10'E, 24°23'N	YN-KM-3	[36]
Liangping district, Chongqing	<i>R. nigromaculata</i>	107°80'E, 30°44'N	CQ-LP-1	[36]
	<i>R. nigromaculata</i>	107°80'E, 30°44'N	CQ-LP-3	[36]
Poland				
Białowieża Forest (BF)	<i>Nyctereutes procyonoides</i>	23°67' E, 52° 89' N	H01	[15]

<i>N. procyonoides</i>	23°67' E, 52° 89' N	H02	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H03	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H04	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H05	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H06	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H07	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H10	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H11	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H12	[15]
<i>Meles meles</i>	23°67' E, 52° 89' N	H13	[15]
<i>M. meles</i>	23°67' E, 52° 89' N	H14	[15]
<i>M. meles</i>	23°67' E, 52° 89' N	H15	[15]
<i>M. meles</i>	23°67' E, 52° 89' N	H16	[15]
<i>M. meles</i>	23°67' E, 52° 89' N	H18	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H23	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H24	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H25	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H26	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H27	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H28	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H29	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H30	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H31	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H32	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H33	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H34	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H37	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H38	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H39	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H40	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H41	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H42	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H43	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H44	[15]
<i>N. procyonoides</i>	23°67' E, 52° 89' N	H45	[15]

	<i>M. meles</i>	23°67' E, 52° 89' N	H47	[15]
	<i>M. meles</i>	23°67' E, 52° 89' N	H49	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H50	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H58	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H59	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H61	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H62	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H63	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H64	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H65	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H66	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H67	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H68	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H69	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H70	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H71	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H72	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H73	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H74	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H75	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H76	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H77	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H78	[15]
	<i>N. procyonoides</i>	23°67' E, 52° 89' N	H79	[15]
Augustów Forest (AF)	<i>N. procyonoides</i>	22° 96' E, 53° 80' N	H08	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H09	[15]
	<i>N. procyonoides</i>	22° 96' E, 53° 80' N	H17	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H19	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H20	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H21	[15]
	<i>N. procyonoides</i>	22° 96' E, 53° 80' N	H22	[15]
	<i>N. procyonoides</i>	22° 96' E, 53° 80' N	H35	[15]
	<i>N. procyonoides</i>	22° 96' E, 53° 80' N	H36	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H46	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H48	[15]

	<i>M. meles</i>	22° 96' E, 53° 80' N	H51	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H52	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H53	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H54	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H55	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H56	[15]
	<i>M. meles</i>	22° 96' E, 53° 80' N	H57	[15]
	<i>N. procyonoides</i>	22° 96' E, 53° 80' N	H80	[15]
	<i>N. procyonoides</i>	22° 96' E, 53° 80' N	H81	[15]
	<i>N. procyonoides</i>	23° 65' E, 53° 26' N	H60	[15]
Knyszyn Forest (KF)	<i>Mustela putorius</i>	23° 65' E, 53° 26' N	H82	[15]
	<i>M. putorius</i>	23° 65' E, 53° 26' N	H83	[15]
	<i>N. procyonoides</i>	23° 65' E, 53° 26' N	H84	[15]
	<i>N. procyonoides</i>	23° 65' E, 53° 26' N	H85	[15]
Masurian Lake District (MLD)	<i>N. procyonoides</i>	23° 65' E, 53° 26' N	H85	[15]