

Supplementary Table S1Geographical origin of *D. sanguinalis* populations (2014).

Population	Location			Coordinate
	Province	County	Village	
14HN2	Hunan	Anxiang	Chejiapu	N29°29'33", E112°11'25"
14HN3	Hunan	Taoyuan	Chenbei	N28°55'14", E111°29'37"
14HN4	Hunan	Furong	Dongan	N28°11'06", E113°04'36"
14HN5	Hunan	Hanshou	Longdaji	N29°00'43", E111°59'32"
14HN6	Hunan	Xiangying	Hehu	N28°43'56", E112°45'31"
14HN7	Hunan	Dingcheng	Haozhou	N29°02'02", E111°50'57"
14HN8	Hunan	Linli	Bamao	N29°37'41", E111°33'46"
14HN9	Hunan	Wangcheng	Xinkang	N28°24'38", E112°47'48"
14HN10	Hunan	Yuanjiang	Siming	N29°02'34", E112°24'11"
14HN11	Hunan	Nan	Niuchang	N29°20'57", E112°26'17"
14HN12	Hunan	Datonghu	Hewan	N29°10'11", E112°37'35"
14HN13	Hunan	Li	Hongxing	N29°38'04", E111°56'13"
14JX1	Jiangxi	Jiujiang	Maoqiao	N29°33'18", E115°52'02"
14HEN1	Henan	Liangyuan	Wanglou	N34°41'33", E115°53'42"
14HEN2	Henan	Luyi	Zhangqiao	N34°02'03", E115°32'52"
14HB1	Hubei	Tianmen	Yuxin	N30°38'44", E112°57'14"
14HB2	Hubei	Tianmen	Huangtan	N30°40'02", E113°03'50"
14SX1	Shanxi	Yangling	Youfeng	N34°28'53", E108°06'37"
14XJ1	Xinjiang	Kashi	Shufu	N39°20'49", E75°52'29"
14HEB1	Hebei	Cangzhou	Nanpi	N37°59'10", E116°49'14"
14HEB2	Hebei	Handan	Quzhou	N36°47'02", E115°00'06"
14AH1	Anhui	Hanshan	Dama	N31°47'49", E118°08'06"
14HN1(S)	Hunan	Li	Xinglong	N29°37'24", E111°45'36"

Supplementary Table S2Geographical origin of *D. sanguinalis* populations (2015).

Population	Location			Coordinate
	Province	County	Village	
15HN1	Hunan	Li	Xiaodukou	N29°36'54", E111°51'12"
15HN2	Hunan	Li	Xinmiao	N29°38'07", E111°56'21"
15HN3	Hunan	Li	Zhanggong	N29°35'12", E111°54'33"
15HN5	Hunan	Anxiang	Huaxinnan	N29°40'59", E112°20'38"
15HN6	Hunan	Anxiang	Fuchangqiao	N29°24'17", E112°11'56"
15HN8	Hunan	Taoyuan	Gonglu	N29°02'42", E111°49'24"
15HN9	Hunan	Nan	Niuchang	N29°35'59", E112°43'33"
15HN10	Hunan	Nan	Sanguang	N29°19'54", E112°53'46"
15HN12	Hunan	Yuanjiang	Fuming	N29°40'51", E112°36'46"
15HEN1	Henan	Tuocheng	Laowangji	N34°01'11", E115°18'03"
15HEN2	Henan	Liangyuan	Yangzhuang	N34°23'16", E115°46'18"
15JX1	Jiangxi	Pengze	Furong	N29°52'04", E116°29'13"
15JX2	Jiangxi	Pengze	Jianshanliu	N29°51'44", E116°37'21"

15JX3	Jiangxi	Pengze	Wulian	N29°50'37", E116°29'19"
15JX4	Jiangxi	Hukou	Junqiao	N29°40'25", E116°17'40"
15JX7	Jiangxi	Xingan	Zaoshi	N27°47'55", E115°43'06"
15HB1	Hubei	Tianmen	Xiaoban	N30°35'48", E113°10'54"
15HEB2	Hebei	Quzhou	Huaiqiao	N36°46'30", E115°01'16"
14HN1(S)	Hunan	Li	Xinglong	N29°37'24", E111°45'36"

Supplementary Table S3

Geographical origin of *D. sanguinalis* populations (2016).

Population	Location			Coordinate
	Province	County	Village	
16HN2	Hunan	Henshan	Beiwangqiao	N27°14'46", E112°51'31"
16HN3	Hunan	Taoyuan	Fengshu	N29°00'52", E111°29'51"
16HN4	Hunan	Anxiang	Huananxin	N29°23'30", E112°12'13"
16HN5	Hunan	Huarong	Guanyan	N29°32'10", E112°42'37"
16JX1	Jiangxi	Pengze	Jinxing	N30°00'04", E116°38'14"
16JX4	Jiangxi	Jiujiang	Sunjiaao	N29°33'28", E115°46'05"
16HEN1	Henan	Xinxiang	Muye	N35°19'15", E113°59'07"
16HEB1	Hebei	Wei	Xishayin	N37°05'51", E115°08'30"
16HEB4	Hebei	Quzhou	Huaiqiao	N36°46'58", E115°02'48"
16HEB5	Hebei	Qiu	Hengzhuang	N36°47'44", E115°09'32"
16HEB6	Hebei	Hengshui	Xiaoxiyein	N37°44'54", E115°43'43"
16HEB7	Hebei	Hengshui	Hujiachi	N37°53'43", E115°42'14"
14HN1(S)	Hunan	Li	Xinglong	N29°37'24", E111°45'36"

Supplementary Table S4

Geographical origin of *D. sanguinalis* populations (2017).

Population	Location			Coordinate
	Province	County	Village	
17HEB1	Hebei	Handan	Changzhuang	N36°31'40", E114°47'02"
17HEB2	Hebei	Xingtai	Zhu	N36°52'43", E114°29'32"
17HEB3	Hebei	Xingtai	Han	N37°04'59", E114°38'33"
17HEB4	Hebei	Xingtai	Xisuncai	N37°07'59", E114°36'15"
17HEB5	Hebei	Xingtai	Nanyang	N37°29'06", E114°43'58"
17HEB6	Hebei	Xingtai	Beizhang	N37°31'40", E114°44'21"
17HEB7	Hebei	Xingtai	Xing	N37°33'26", E114°44'26"
17HEB8	Hebei	Xingtai	Xima	N37°33'57", E114°44'39"
17HEB9	Hebei	Xingtai	Nansu	N37°35'41", E114°46'34"
17JX1	Jiangxi	Pengze	Dingshan	N29°49'45", E116°25'07"
17JX2	Jiangxi	Hukou	Liusi	N29°47'07", E116°23'44"
17JX3	Jiangxi	Hukou	Baishu	N29°43'51", E116°26'58"
14HN1(S)	Hunan	Li	Xinglong	N29°37'24", E111°45'36"