

附录 1 不同样地间各个蜘蛛多样性指标的 Moran I 空间自相关分析

Appendix 1 Moran I spatial autocorrelation analysis on spider diversity indices among different forest types

蜘蛛群落结构	Moran I 指数	预期指数	方差	Z 值	P 值
Spider community structure	Moran I index	Expectation index	Variance	Z value	P value
Shannon 多样性指数 Shannon diversity index	-0.014843	0.008403	0.00007	-0.771979	0.440127
Simpson 多样性指数 Simpson diversity index	-0.01466	-0.008403	0.00007	-0.749955	0.453282
Pielou 均匀度指数 Pielou evenness index	-0.010497	0.008403	0.000069	-0.251517	0.8401414
蜘蛛科数 Number of spider families	-0.009193	-0.008403	0.000069	-0.094892	0.924401
蜘蛛属数 Number of spider genera	-0.013235	-0.008403	0.00007	-0.579338	0.562361
蜘蛛种数 Number of spider species	-0.013437	-0.008403	0.00007	-0.603615	0.546099
蜘蛛个体数 Number of spider individuals	-0.00791	-0.008403	0.000066	0.060595	0.951682
片状网型蜘蛛个体数 Number of sheet web spider individuals	-0.007601	-0.008333	0.000061	0.093903	0.925186
空间网型蜘蛛个体数 Number of space web spider individuals	-0.007649	-0.008403	0.000054	0.102252	0.918557
圆网型蜘蛛个体数 Number of orb web spider individuals	-0.008194	-0.008403	0.000063	0.026448	0.9789
专性捕食型蜘蛛个体数 Number of specialists spider individuals	-0.007285	-0.008403	0.000062	0.142275	0.886863
地表游猎型蜘蛛个体数 Number of ground hunters spider individuals	-0.008076	-0.008403	0.000066	0.040299	0.967855
空间游猎型蜘蛛 Number of other hunters spider individuals	-0.004345	-0.008333	0.000057	0.526233	0.598726
伏击捕食型蜘蛛个体数 Number of ambush hunters spider individuals	-0.012903	-0.008333	0.000066	-0.563435	0.573193

Moran I 系数的取值范围为[-1, 1]。当其取值大于 0 时, 表明所研究区域存在空间正相关, 且取值越接近 1, 表明空间正自相关性越强, 研究对象的价值呈聚集分布; 当其取值小于 0 时, 表明所研究区域存在空间负相关, 取值越接近-1, 表明空间负自相关性越强, 研究对象的价值呈离散互斥(高值周围排斥高值、低值周围排斥低)分布; 当其取值接近于 0, 研究对象的价值呈随机分布, 不存在自相关性。 $P > 0.05$ 说明研究对象的价值不存在显著的空间自相关, 属于空间随机分布。

The value range of Moran I is [-1, 1]. When its value is greater than 0, it indicates that there is a positive spatial correlation in the study area, and the closer the value is to 1, the stronger the positive spatial autocorrelation is, and the value of the research object is in a clustered distribution. When its value is less than 0, it indicates that there is a negative spatial correlation in the studied area. The closer the value is to -1, the stronger the negative spatial autocorrelation is, and the value of the research object is discrete and mutually exclusive distribution. When the value is close to 0, the value of the research object is randomly distributed, and there is no autocorrelation. $P > 0.05$ indicates that there is no significant spatial autocorrelation in the value of the research object, which belongs to the spatial random distribution.