

Table S9. Comparison of seed dispersal effectiveness (SDE) and SDE subcomponents (SDE_Q, SDE_D) between experiments (across species) using distinct or *T. migratorius* physiological parameters by movement method. The SDE variables are presented as the mean value, across species, with standard error of the mean in parentheses.

Movement	Variable	N₁	N₂	U	Distinct	<i>T. migratorius</i>
Permeability	SDE _Q	150	150	7530***	79.6 (4.22)	114.0 (6.37)
	SDE _D	150	150	10367	0.60 (0.03)	0.62 (0.03)
	SDE	150	150	7499.5***	49.6 (3.20)	72.6 (5.50)
Straight Path	SDE _Q	150	150	6288.5***	76.0 (4.10)	120.9 (6.44)
	SDE _D	150	150	10121.5	0.60 (0.04)	0.64 (0.02)
	SDE	150	150	6538***	48.9 (3.46)	78.6 (5.20)

Results of Wilcoxon–Mann–Whitney tests (U) comparing SDE variables between experiments using distinct and *T. migratorius* physiological parameters by movement method (*** P<0.001, ** P<0.01, * P<0.05).