

Dataset	Variable	Model	$r$	$p - value$
HMP	$N_0$	BS	-0.386	$1.15 \times 10^{-159}$
		METE	-0.191	$2.01 \times 10^{-38}$
		Zipf	0.228	$2.01 \times 10^{-38}$
	$S_0$	BS	0.276	$2.82 \times 10^{-79}$
		METE	0.314	$1.82 \times 10^{-12}$
		Zipf	0.144	$2.01 \times 10^{-38}$
	$N_0/S_0$	BS	-0.626	0.0
		METE	-0.453	$1.87 \times 10^{-226}$
		Zipf	0.125	$1.03 \times 10^{-09}$
EMP Closed	$N_0$	BS	-0.354	0.0
		METE	-0.0824	$2.02 \times 10^{-23}$
		Zipf	0.262	$2.57 \times 10^{-40}$
	$S_0$	BS	0.264	$4.89 \times 10^{-231}$
		METE	0.287	$1.32 \times 10^{-274}$
		Zipf	0.0181	0.367
	$N_0/S_0$	BS	-0.695	0.0
		METE	-0.377	0.0
		Zipf	0.334	$1.18 \times 10^{-65}$
MG – RAST 97%	$N_0$	BS	-0.803	$4.17 \times 10^{-87}$
		METE	-0.361	$3.49 \times 10^{-13}$
		Zipf	0.356	$1.34 \times 10^{-05}$
	$S_0$	BS	-0.447	$4.216 \times 10^{-20}$
		METE	-0.259	$2.87 \times 10^{-07}$
		Zipf	0.512	$7.10 \times 10^{-11}$
	$N_0/S_0$	BS	-0.639	$4.33 \times 10^{-45}$
		METE	-0.242	$1.79 \times 10^{-06}$
		Zipf	-0.135	0.109