

**Table S2**

**Statistical difference (P. values) between every pair in random paralogous group and no, low and high morphological diversification groups in the wilcoxon test.**

In Figure S1-A

	No	Low	High	Random
No		$3.1 \times 10^{-4} *$	$2.2 \times 10^{-16} *$	$2.7 \times 10^{-4} *$
Low			$7.2 \times 10^{-9} *$	0.20
High				$2.2 \times 10^{-16} *$
Random				

\* Significant difference at P=0.01.

In Figure S1-B

	No	Low	High	Random
No		$3.0 \times 10^{-16} *$	$3.5 \times 10^{-25} *$	0.49
Low			$1.1 \times 10^{-5} *$	$1.7 \times 10^{-37} *$
High				$7.0 \times 10^{-49} *$
Random				

\* Significant difference at P=0.01.

In Figure S1-C

	No	Low	High	Random
No		$3.0 \times 10^{-18} *$	$3.9 \times 10^{-33} *$	$5.6 \times 10^{-3} *$
Low			$2.8 \times 10^{-13} *$	$3.8 \times 10^{-34} *$
High				$3.3 \times 10^{-63} *$
Random				

\* Significant difference at P=0.01.

In Figure 2-A

	No	Low	High	Random
No		$4.7 \times 10^{-7} *$	$1.5 \times 10^{-16} *$	$7.0 \times 10^{-4} *$
Low			$9.7 \times 10^{-9} *$	$4.8 \times 10^{-4} *$
High				$2.4 \times 10^{-22} *$
Random				

\* Significant difference at P=0.01.

In Figure 2-B

	No	Low	High	Random
No		$1.2 \times 10^{-9} *$	$2.7 \times 10^{-19} *$	$5.4 \times 10^{-7} *$
Low			$3.9 \times 10^{-5} *$	$3.0 \times 10^{-3} *$
High				$1.1 \times 10^{-13} *$
Random				

\* Significant difference at P=0.01.

In Figure 2-C

	No	Low	High	Random
No		0.06	0.09	0.11
Low			0.87	0.61
High				0.83
Random				

\* Significant difference at P=0.01.

In Figure S2-A

	No	Low	High
No		$3.3 \times 10^{-6} *$	$3.3 \times 10^{-9} *$
Low			0.02 *

\* Significant difference at P=0.05.

In Figure S2-B

	No	Low	High
No		0.34	0.20
Low			0.62

\* Significant difference at P=0.05.