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>N.vectensis catalase
TCCTTCTCTGATCGTTCGTCGCAAGGAGAAAAGTCGGCCGAATCCATTTTTTGTGTGGAAAACATCTGAGTTT
GCTTTGAACATGGCGTCCAAATGCAAGGCCCTCGGAGCAGCTGTCTGACTATGCTAAAATCTCAATCGAATG
TGGCAGGCCTGACCACCAGTGTCTGGTATCCCTGTTGACACGAATGCAAGCAGCATGACGGCTGGCCCCCG
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GAGCGAGTCGTCCATGCCAAGGGCGGCGGTGCGTTTTGGGTACTTTGAGGTTACCAATGATATCACTAAGT
ACTGCAAGGCCAGGATCTTTGAAACTGTTGGGAAGAAGACTCCATGTCTGGTCAGGTTCTCCACTGTGGG
TGGTGAGGCTGGAAGTGTGATACAGCCAGAGATCCCCGTGGTTTCGCCATGAAGTTCTACACAGATGAG
GGCAACTGGGACCTTGTCGGAAACAACACCCCTATCTTCTTCATCCGGGACCCAATTCTGTTCCCCAGTT
TTATTTCATACGCAGAAGAGAAAATCCTGTTACACATTTGAAAGGATGCCACATGTTTTGGGACTTTATCAC
TCTTCGTCTGAGACCACCCACCAGACGTCTTTCCTGTTTCAGTGACCGAGGCATCCCTGATGGGTTCGCG
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TCCATGTGAAGACGGACCAGGGAATCAAGAATTGCCAGTCGAGAGAGCTACAGAGCTTGCAGGCACCGA
CCCAGACTACAGCACTAGGGATCTTTATAATGCTATTGCTGAGGGGAACATCCATCTTGGACCATGTAC
ATCCAAGTGATGACATTTGCTGAAGCAGAGAGCCACAGGTTTAACCCATTTGACCTTACCAAGATCTGGC
CCCATGCAGAGTTCCCTCTCATCCCTGTTGGAAAGATGGTGTGAATAGAAAACCCCAAGAACTACTTTGC
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CAGTCAACTGTCCATTTCAGGACCCGTGTTGCCAACTACCAGCGGGATGGACCCAGACATTTGACAATCA
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CAACCTTTTGGACTAAAAGTGTAAATGATGAAGAGCGCATGCGGCTAGTAAAAGAACATCGCTGGCCACGT
GAAGGACGCCAAGGACTTTATCCAAAAACGATGCGTACAACAATTCACTAAGGTTACCCAGACTTCGGA
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GAGTTATTACGTGCACTTACGTGACGTGTTCTTAAACAATAGCAAACGGTAGACGTAAATGGTTATGG
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TGACAAGAGGTTAGACAGGATGAAAACGTGATTTGAAAACAGGTTAGACAGGAAATCACTGACGCTGTAGT
GATGCTGTGTATCAGTGAACATATGATGAACACAAGAGTATAAACACAGCAAGTGTATCGTAGCGT

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Fig. S1. (A) Catalase nucleotide sequence from *N. vectensis*, assembled in silico from multiple overlapping expressed sequence tags. (B) Predicted protein sequence for *N. vectensis* catalase aligned to catalase from the anemone *A. viridis* (accession number AAZ50618).

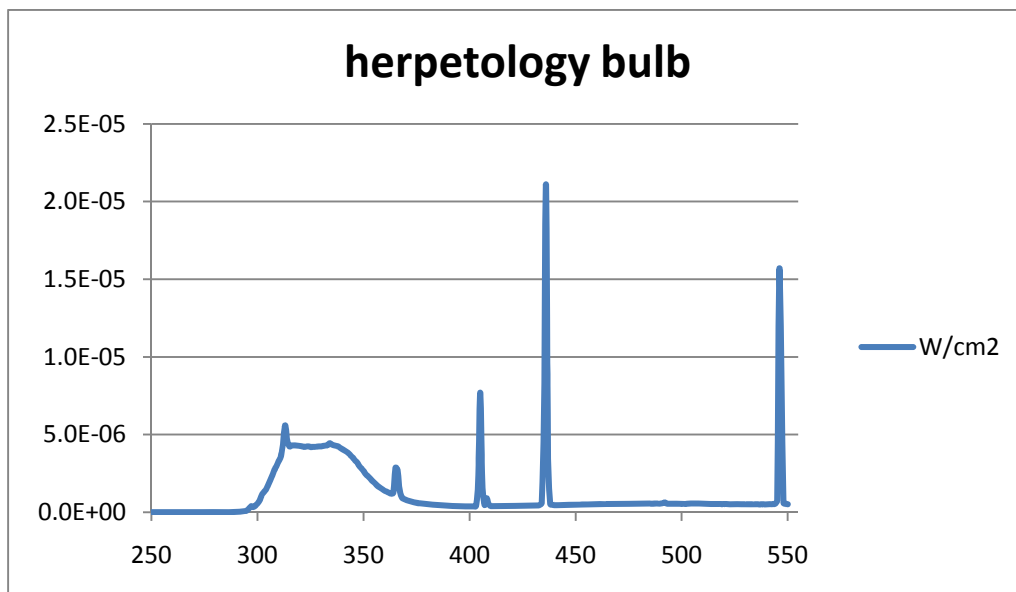


Fig. S2. Emission spectrum for the Zilla Desert Series fluorescent T5 bulb. Wavelength (nm) is shown on the x-axis, and irradiance ($W\ cm^{-2}$) on the y-axis.

Supplementary Table 1: Primers used for quantitative PCR. F and R designate forward and reverse primers respectively.

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|--------------------------------|---|
| NvCuZnSOD1 (JGI 234825) | F: 5'-GGGTGTTTGTTCCTGGTAG-3' R: 5'-TCTGAGAGTACAAGGGCCATC-3' |
| NvCuZnSOD2 (JGI 165732) | F: 5'-TCACACTTGTGGGAGAGCAC-3' R: 5'-TCCTCGTCAGCATGAACAAC-3' |
| NvCuZnSOD3 (JGI 3582) | F: 5'-ATTACCAAGGGGTGCCAAAG-3' R: 5'-GACCACACATTCCCAAGGTC-3' |
| NvMnSOD1 (JGI 236349) | F: 5'-GAAGCTCAGGCCAAAGGTG-3' R: 5'-ACCACCTCCATTGAATTTGAC-3' |
| NvMnSOD2 (JGI 94316) | F: 5'-AGTGGAGAGAATCGGGAAAAG-3' R: 5'-CTCCACCATTGTTGATCACG-3' |
| NvCCS (JGI 227361) | F: 5'-CGTTTGTCCGTGTTTCAATG-3' R: 5'-TTCCACAGCGAATTCCATC-3' |
| NvCatalase ¹ | F: 5'-AAGGTGGGTGTCATGGTAGG-3' R: 5'-TGCGGAGATTGAACAGAGTG-3' |
| NvHSP70 (JGI 234533) | F: 5'-TCATCCAGCACTGAAGCAAG-3' R: 5'-CTCGGCTGATTTTCGTGTAG-3' |
| NvHSC71 (JGI 195315) | F: 5'-TCGATGATCCTGGGGTAAAG-3' R: 5'-CCTGCCTCGTTCACTACCTC-3' |
| Nv18S (JGI 158236) | F: 5'-GACTCAACACGGGGAAACTC-3' R: 5'-GCACCACCACCATAGAATC-3' |
| NvEF1 α (JGI 247215) | F: 5'-GAGAAGGAATCCAGCGAGATC-3' R: 5'-TAAGGTCTCGAACTTCCACAGG-3' |

¹ NvCatalase is composed of JGI predicted proteins 103289 and 103340. See text and Fig. S1.