

RESEARCH

Physcraper: A Python package for continually updated phylogenetic trees using the Open Tree of Life

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Abstract

First part title: Text for this section.

Second part title: Text for this section.

Keywords: sample; article; author

Content

Text and results for this section, as per the individual journal's instructions for authors.

Section title

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In this section we examine the growth rate of the mean of Z_0 , Z_1 and Z_2 . In addition, we examine a common modeling assumption and note the importance of considering the tails of the extinction time T_x in studies of escape dynamics. We will first consider the expected resistant population at vT_x for some $v > 0$, (and temporarily assume $\alpha = 0$)

$$E[Z_1(vT_x)] = \int_0^{v\wedge 1} Z_0(uT_x) \exp(\lambda_1) du.$$

If we assume that sensitive cells follow a deterministic decay $Z_0(t) = xe^{\lambda_0 t}$ and approximate their extinction time as $T_x \approx -\frac{1}{\lambda_0} \log x$, then we can heuristically estimate the expected value as

$$\begin{aligned} E[Z_1(vT_x)] &= \frac{\mu}{r} \log x \int_0^{v\wedge 1} x^{1-u} x^{(\lambda_1/r)(v-u)} du. \end{aligned} \quad (1)$$

Thus we observe that this expected value is finite for all $v > 0$ (also see [1, 2, 3, 4, 5, 6]).

Appendix

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Acknowledgements

Text for this section...

Funding

Text for this section...

Abbreviations

Text for this section...

Availability of data and materials

Text for this section...

Ethics approval and consent to participate

Text for this section...

Competing interests

The authors declare that they have no competing interests.

Consent for publication

Text for this section...

Authors' contributions

Text for this section...

Authors' information

Text for this section...

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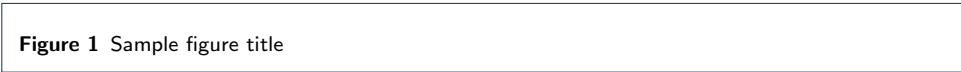
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Figures



Tables

Table 1 Sample table title. This is where the description of the table should go

	B1	B2	B3
A1	0.1	0.2	0.3
A2
A3

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Additional file 1 — Sample additional file title

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