

RESEARCH

# Evaluating trait-based analyses for microbiome relative abundance data

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**Abstract**  
**First part title:** Text for this section.  
**Second part title:** Text for this section.  
**Keywords:** sample; article; author

## Methods

Constructing the trait database

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

Name	Description	Source
ProTraits		<a href="http://protraits.irb.hr/data.html">http://protraits.irb.hr/data.html</a>
MediaDB		<a href="https://mediadb.systemsbiology.net/">https://mediadb.systemsbiology.net/</a>
Microbe Directory		<a href="https://github.com/microbe-directory/microbe-directory">https://github.com/microbe-directory/microbe-directory</a>
JGI GOLD		<a href="https://gold.jgi.doe.gov/index">https://gold.jgi.doe.gov/index</a>
FAPROTAX		<a href="https://pages.uoregon.edu/slouca/LoucaLab/archive/FAPROTAX/lib/php/index.php">https://pages.uoregon.edu/slouca/LoucaLab/archive/FAPROTAX/lib/php/index.php</a>
BacDive		<a href="https://bacdive.dsmz.de/">https://bacdive.dsmz.de/</a>

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

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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**Abbreviations**  
Text for this section...

**Availability of data and materials**

Text for this section. . .

**Ethics approval and consent to participate**

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**Competing interests**

The authors declare that they have no competing interests.

**Consent for publication**

Text for this section. . .

**Authors' contributions**

Text for this section . . .

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**Figures**



**Tables**

**Table 2** 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	..	.	.

**Additional Files**

Additional file 1 — Sample additional file title  
 Additional file descriptions text (including details of how to view the file, if it is in a non-standard format or the file extension). This might refer to a multi-page table or a figure.  
  
 Additional file 2 — Sample additional file title  
 Additional file descriptions text.