

1 Revisiting the Biological Value Index (Sanders, 1960); Contribution
2 to its calculation and visualization

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11 Abstract: No more than approx. 500 words (or 3,000 characters).

12 Introduction

- 13 • Indices in ecology

14 Usually people describe a site by the species that inhabit it, but do not pay much attention
15 to how some species are incharged of the simmlarities.

- 16 • History of the index

- 17 – When it was proposed

- 18 – How it worked

- 19 – Modifications by Loya Salinas

- 20 – How it works now

- 21 • Usage of the index

- 22 – Works that have used it

- 23 • Stating the problem

- 24 – Lack of comparison

- 25 – computability

26 Materials and Methods

- 27 • How the index works, step by step (possibly citing Loya-Salinas)

- 28 • Flow diagram depfun(ivb)

- 29 • Adding the %BVI

$$\%BVI_i = \frac{(100 \times BVI_i)}{\sum_{i=1}^n BVI_i} \quad (1)$$

30 • Compare N and Ni vs rBVI to test its usefulness

31 • Propose ways to visualize rBVI

32 • Recreating Loya-Salinas

<i>Spp</i>	S1	S2	S3	S4	S5	S6
<i>Synchelidium spp.</i>	2398	1626	811	1275	1343	7079
<i>Tridentella spp.</i>	2048	1125	528	1990	1098	1274
<i>Nerine cirratulus</i>	37	165	1141	1540	118	53
<i>Nephtys californiensis</i>	544	875	404	170	58	90
<i>Glycera tenuis</i>	265	566	106	646	133	118
<i>Donax gouldii</i>	914	75	42	5	5	15
<i>Orchestoidea benedicti</i>	11	251	133	79	162	245
<i>Archaeomysis spp.</i>	958	90	160	37	522	111
33 <i>Armadillium spp.</i>	59	155	91	16	208	283
<i>Megalopus spp.</i>	149	266	48	30	0	0
<i>Emerita analoga</i>	101	16	96	27	0	10
<i>Pontharpinia spp.</i>	69	96	11	16	0	0
<i>Euzonus mucronata</i>	0	0	37	341	0	0
<i>Lepidopa californica</i>	5	69	16	0	16	0
<i>Magelona californica</i>	0	5	5	0	42	10
<i>Hanstorina spp.</i>	0	16	5	0	0	0
<i>Glycera dibranchiata</i>	0	0	0	0	5	0
<i>Archaeomysis maculata</i>	0	0	0	5	0	0

34 • Mention using SIMPER as a comparative

35 • Propose a graph to visualize data

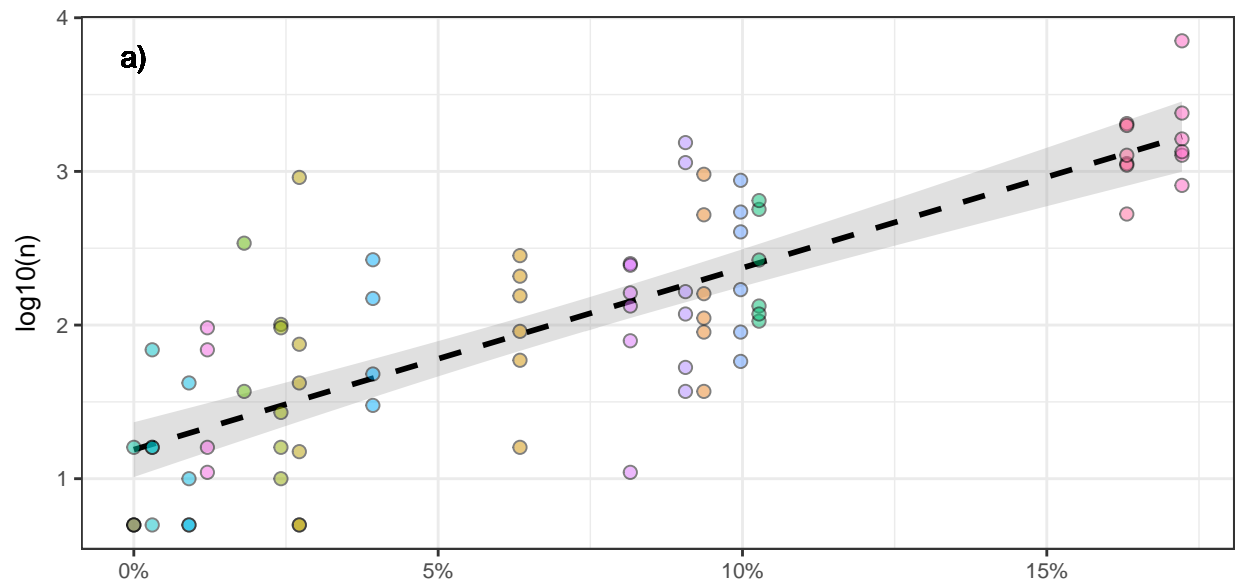
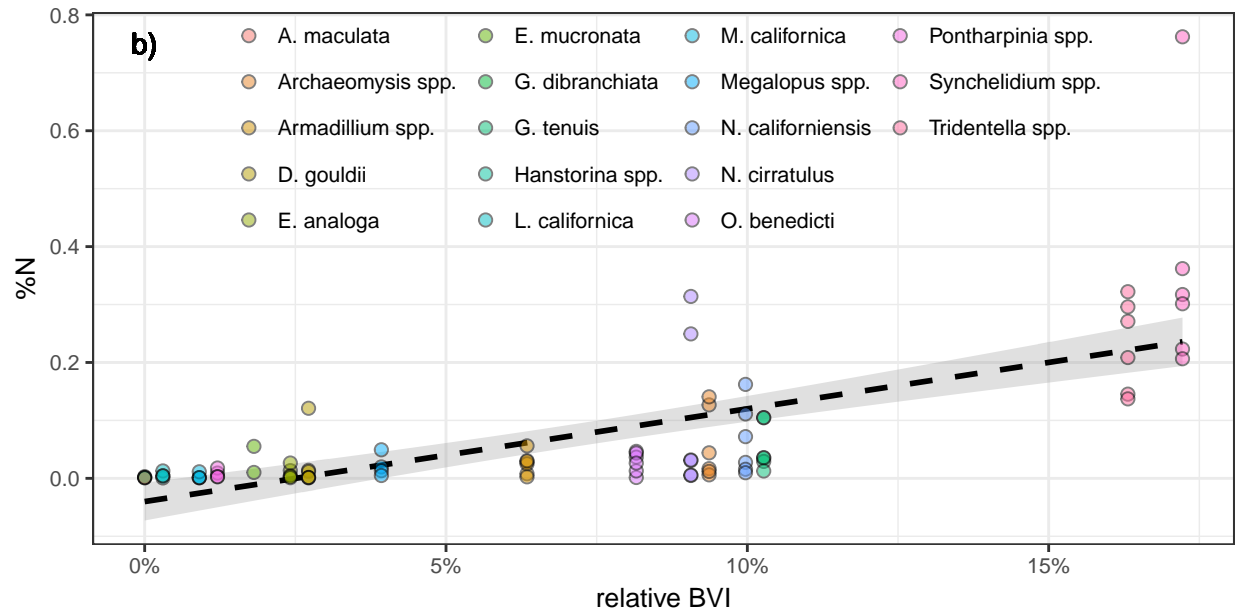
Results

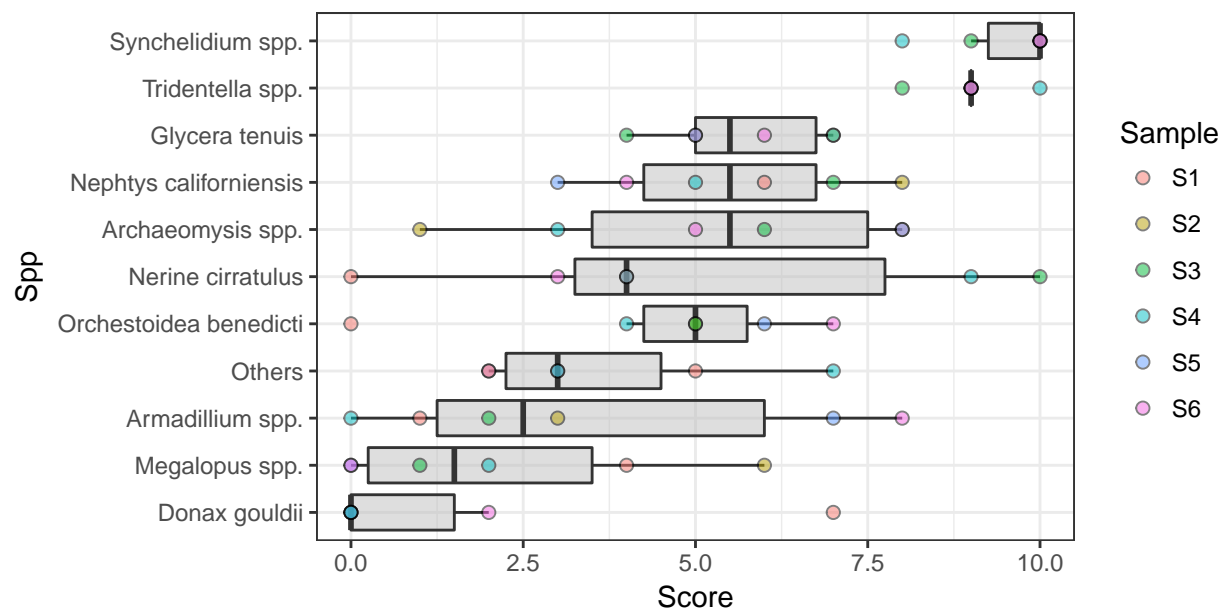
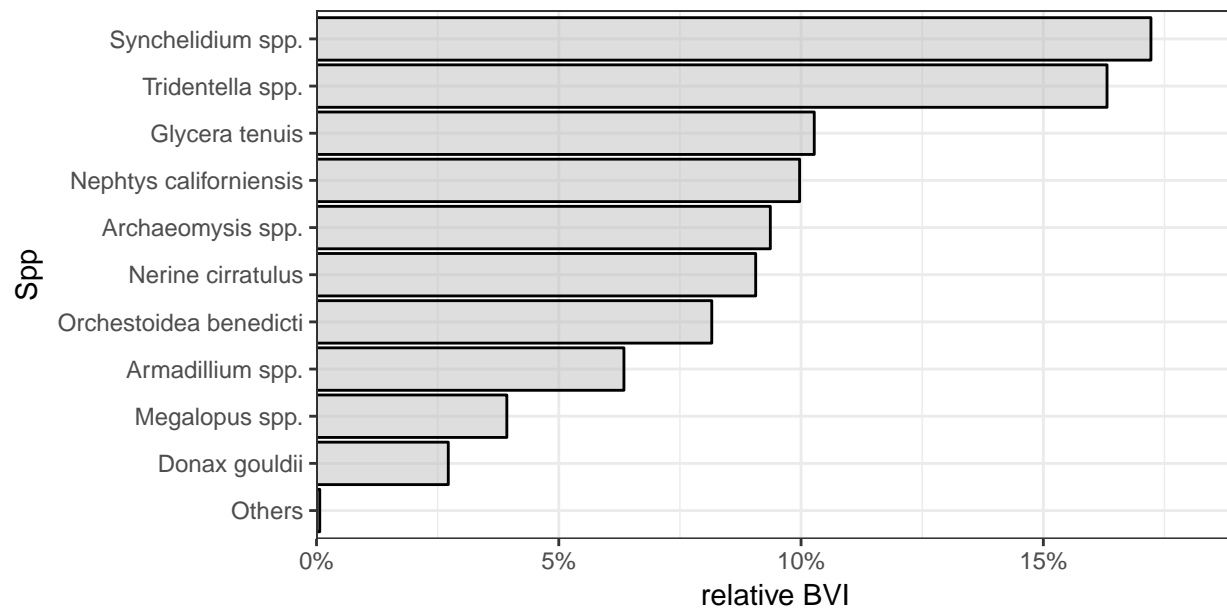
- Results from Loya-Salinas
- Graph
- Comparing %BVI with SIMPER
- Table with abundances, BVI, %BVI and SIMPER

<i>Species</i>	S1	S2	S3	S4	S5	S6	BVI	%BVI
<i>Synchelidium spp.</i>	10	10	9	8	10	10	57	17.22
<i>Tridentella spp.</i>	9	9	8	10	9	9	54	16.31
<i>Glycera tenuis</i>	5	7	4	7	5	6	34	10.27
<i>Nephtys californiensis</i>	6	8	7	5	3	4	33	9.97
<i>Archaeomysis spp.</i>	8	1	6	3	8	5	31	9.37
<i>Nerine cirratulus</i>	0	4	10	9	4	3	30	9.06
<i>Orchestoidea benedicti</i>	0	5	5	4	6	7	27	8.16
<i>Armadillium spp.</i>	1	3	2	0	7	8	21	6.34
<i>Megalopus spp.</i>	4	6	1	2	0	0	13	3.93
<i>Donax gouldii</i>	7	0	0	0	0	2	9	2.72
<i>Others</i>	5	2	3	7	3	2	22	0.07
<i>Total</i>								100.00

Table 1:

	<i>Dependent variable:</i>	
	(1)	(2)
rBVI	0.016*** (0.002)	0.118*** (0.010)
Constant	-0.040** (0.016)	1.189*** (0.090)
Observations	81	81
R ²	0.489	0.636
Residual Std. Error (df = 79)	0.088	0.482
F Statistic (df = 1; 79)	75.486***	138.264***
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	





⁴⁴ **Discussion and Conclusions**

⁴⁵ **References**

⁴⁶ **Figures and Tables**