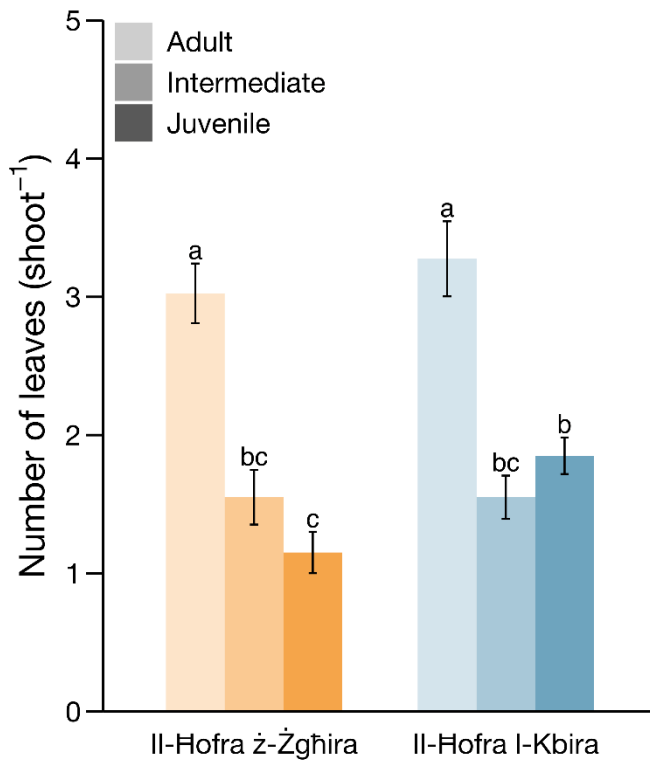


**Table S1.** Species driving the dissimilarity between the macrofaunal communities associated with *Posidonia oceanica* at Il-Hofra I-Kbira (HK) and Il-Hofra ž-Žghira (HZ). Species are ordered by their contribution to community dissimilarity.

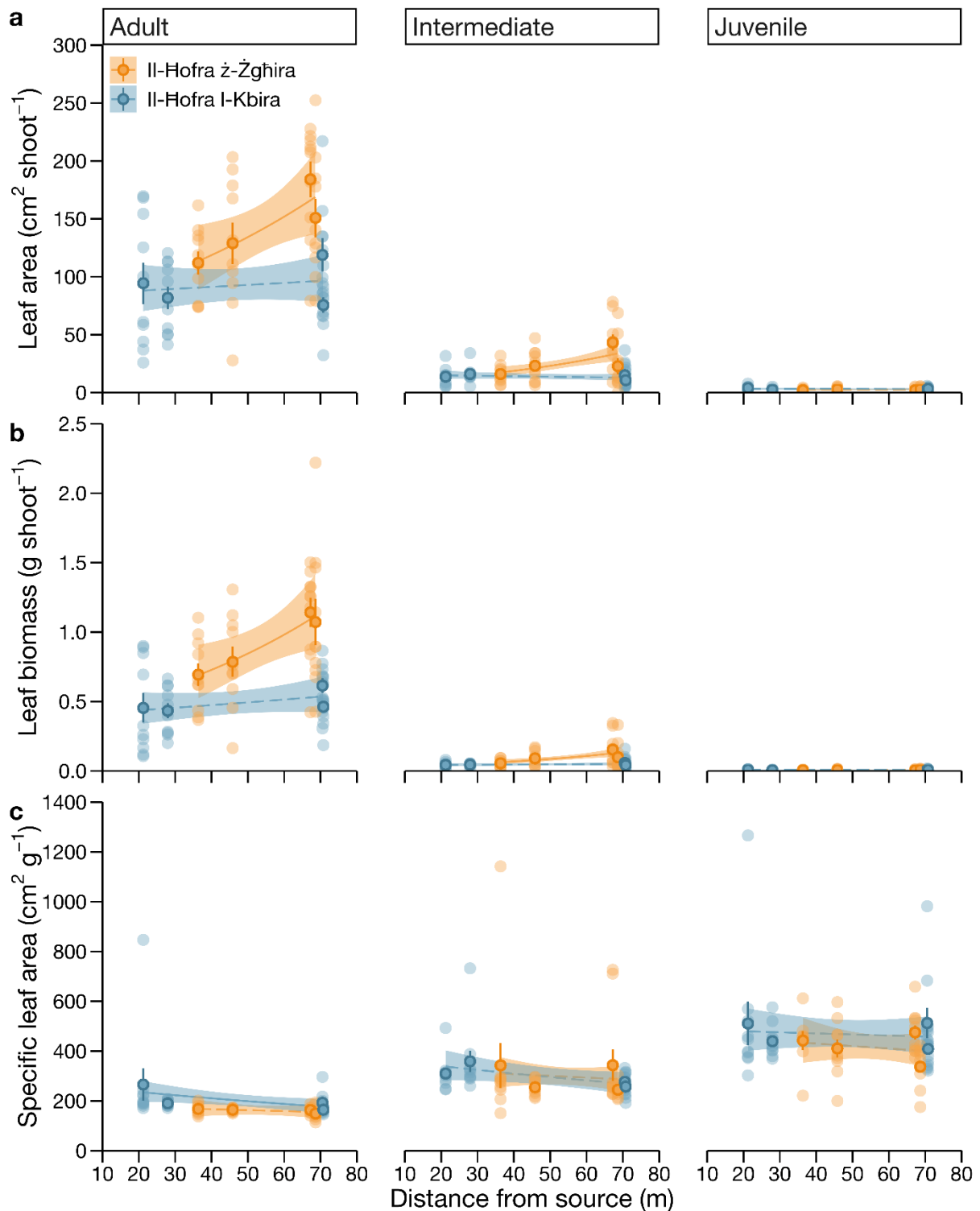
Species	Contribution (%)	Preferred	$\Delta$ abundance (net <sup>-1</sup> )
<i>Hippolyte inermis</i>	18.6	HZ	15.375
<i>Jujubinus exasperatus</i>	14.69	HZ	12.375
<i>Rissoa variabilis</i>	10.28	HZ	7.625
<i>Mysida</i> sp.	8.16	HZ	7.5
<i>Alvania discors</i>	4.91	HZ	3.875
<i>Leptochelia</i> sp.	4.23	HZ	4.875
<i>Rissoa auriscalpium</i>	2.74	HZ	2
<i>Leucothoe spinicarpa</i>	2.27	HZ	2.25
<i>Asterina gibbosa</i>	1.82	HZ	1.625
<i>Rissoa</i> sp. 1	1.71	HZ	1.375
<i>Tricolia pullus</i>	1.04	HZ	0.75
<i>Rissoa auriscalpium</i>	0.81	HZ	0.625
<i>Jujubinus striatus</i>	0.54	HZ	0.5
<i>Cheirocratus sundevalli</i>	0.48	HZ	0.375
<i>Lysianassa</i> sp.	0.38	HZ	0.375
<i>Bittium latreillii</i>	0.33	HZ	0.25
<i>Amphipholis squamata</i>	0.26	HZ	0.25
<i>Calcinus tubularis</i>	0.24	HZ	0.25
<i>Anapagurus</i> sp.	0.21	HZ	0.25
<i>Isopoda</i> sp.	0.18	HZ	0.125
<i>Iphimedia</i> sp.	0.17	HZ	0.125
<i>Philineopsis</i> sp.	0.16	HZ	0.125
<i>Nemertea</i> sp.	0.15	HZ	0.125
<i>Nudibranchia</i> sp.	0.15	HZ	0.125
<i>Cumacea</i> sp.	0.14	HZ	0.125
<i>Mitromorpha olivoidea</i>	0.14	HZ	0.125
<i>Syllidae</i> sp.	0.13	HZ	0.125
<i>Polyopthalmus</i> sp.	0.13	HZ	0.125
<i>Rissoa</i> sp. 2	0.13	HZ	0.125
<i>Gibbula ardens</i>	0.13	HZ	0.125
<i>Trivia mediterranea</i>	0.11	HZ	0.125
<i>Eurydice</i> sp.	0.1	HZ	0.125
<i>Heterobranchia</i> sp.	0.1	HZ	0.125
<i>Monoporus</i> sp.	0.1	HZ	0.125
<i>Aspidosiphon muelleri</i>	0.1	HZ	0.125

**Table S2.** Species driving the dissimilarity between the macrofaunal communities associated with *Posidonia oceanica* at plots A (furthest from effluent source) and D (closest to effluent source) within Il-Hofra ż-Żgħira. Species are ordered by their contribution to community dissimilarity.

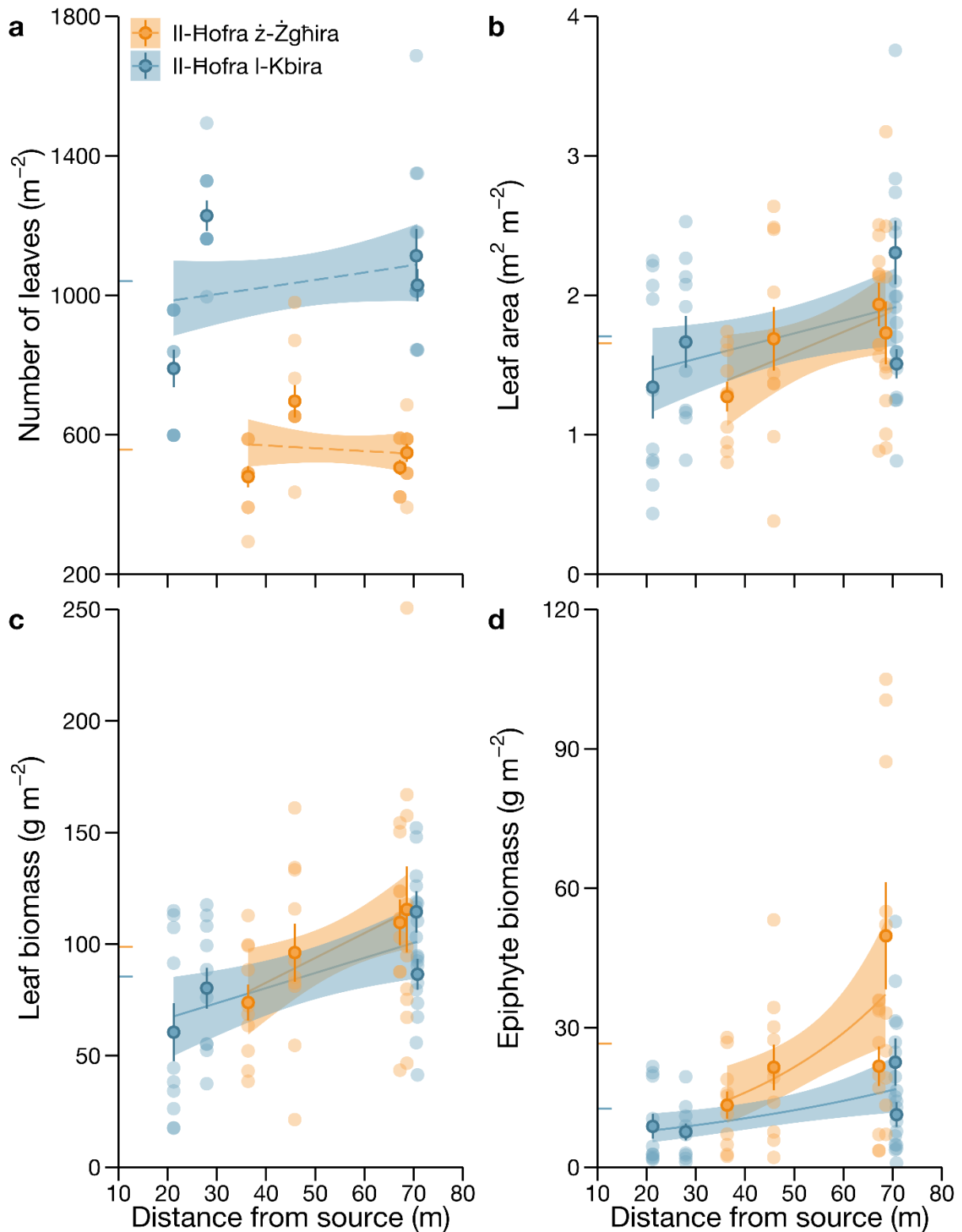
<b>Species</b>	<b>Contribution (%)</b>	<b>Preferred</b>	<b>Δ abundance (net<sup>-1</sup>)</b>
<i>Hippolyte inermis</i>	23.07	D	25.5
<i>Leptochelia</i> sp.	15.78	D	20
<i>Asterina gibbosa</i>	4.65	D	5
<i>Hyale</i> sp.	1.99	D	2
<i>Lysianassa</i> sp.	1.38	D	1.5
<i>Calcinus tubularis</i>	0.89	D	1
<i>Anapagurus</i> sp.	0.79	D	1
Cumacea sp.	0.5	D	0.5
Syllidae sp.	0.49	D	0.5
<i>Mitromorpha olivoidea</i>	0.5	D	0.5
Opheliidae	0.4	D	0.5
Heterobranchia sp.	0.4	D	0.5
<i>Trivia mediterranea</i>	0.4	D	0.5
<i>Idotea linearis</i>	0.39	D	0.5
<i>Eurydice</i> sp.	0.39	D	0.5
<i>Monophorus</i> sp.	0.39	D	0.5
<i>Aspidosiphon muelleri</i>	0.39	D	0.5



**Figure S1.** Number of *Posidonia oceanica* leaves of different growth stages at the site of thermal outflow (Il-Hofra z-Zghira) and the reference site (Il-Hofra I-Kbira). Bars and error bars are means and 95% confidence intervals (n = 40). Letters indicate groups of statistical similarity at the 95% confidence level.



**Figure S2.** *Posidonia oceanica* leaf area (a), leaf dry mass (b) and specific leaf area (c) for leaves of different growth stages in relation to distance from the effluent source (Il-Hofra z-Zghira) and at the reference (Il-Hofra I-Kbira). Point-ranges are means  $\pm$  s.e.m. Lines and ribbons are model predictions and 95% confidence intervals. Solid lines indicate significant change with distance at the 95% confidence level, while dashed lines indicate no change.



**Figure S3.** Areal *Posidonia oceanica* leaf density (a), area (b), dry mass (c) and epiphyte dry mass (d) in relation to distance from the effluent source (Il-Hofra ž-Žghira) and at the reference (Il-Hofra I-Kbira). Point-ranges are means  $\pm$  s.e.m. Lines and ribbons are model predictions and 95% confidence intervals. Solid lines indicate significant change with distance at the 95% confidence level, while dashed lines indicate no change. Coloured y axis ticks show overall means for each site.