Supplementary Information

Target and suspect analysis with High-Resolution Mass Spectrometry for the exhaustive monitoring of PCBs and pesticides in *Posidonia oceanica* meadows and sediments

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Chemical reagents: Standards

The analytical standards here employed showed a purity above 97%. A multiclass standard mixture containing the target POPs (PCBs and priority pesticides) was prepared in acetone at a concentration of 100 µg l^{-1}. The additional 246 current-use pesticides were collected into two mix-standards solutions prepared in acetone of 5 mg l^{-1}. In the case of the IIS, hexachlorobenzene-13C and PCB 28F, a 500 µg l^{-1} solution in acetone was prepared. For correct preservation, all standard working solutions were kept in amber screw-capped glass vials and stored at -20 ºC when not in use.

Table S1. Target PCBs, pesticides and the IIS included in this study with their corresponding CAS number and n-octanol/water partition coefficient (log K_{ow}).

Compound	CAS number	log K_{ow}	Compound	CAS number	log K_{ow}
PCB 18	37680-65-2	5.60	PCB 169	32774-16-6	7.41
PCB 28+31	7012-37-5	5.62	PCB 170	35065-30-6	7.27
PCB 28F (IIS)	863314-89-0	5.80	PCB 180	35065-29-3	7.72
PCB 44	41464-39-5	5.81	PCB 189	39635-31-9	7.71
PCB 52	35693-99-3	6.09	PCB 194	35694-08-7	8.68
PCB 66	32598-10-0	5.90	PCB 206	40186-72-9	8.09
PCB 77	32598-13-3	6.72	Aldrin	309-00-2	6.50
PCB 81	70362-50-4	6.36	Atrazine	1912-24-9	2.61
PCB 101	37680-73-2	5.68	Chlorpyrifos	2921-88-2	4.96
PCB 105	32598-14-4	6.79	Dieldrin	60-57-1	5.40
PCB 114	74472-37-0	6.65	Endrin	72-20-8	5.20
PCB 118	31508-00-6	7.12	Hexachlorobenzene	118-74-1	5.73
PCB 123	65510-44-3	6.74	Hexachlorobenzene 13C (IIS)	93952-14-8	5.70
PCB 126	57465-28-8	6.89	Isodrin	465-73-6	6.75
PCB 128	11096-82-5	7.31	o,p'-DDT	789-02-6	6.70
PCB 138	35065-28-2	7.44	p,p'-DDD	72-54-8	6.02
PCB 153	35065-27-1	6.34	p,p'-DDT	50-29-3	6.91
PCB 156	38380-08-4	7.60	Pentachlorobenzene	608-93-5	5.18
PCB 157	69782-90-7	7.60	Simazine	122-34-9	2.18
PCB 167	52663-72-6	7.50	Trifluralin	1582-09-8	5.34

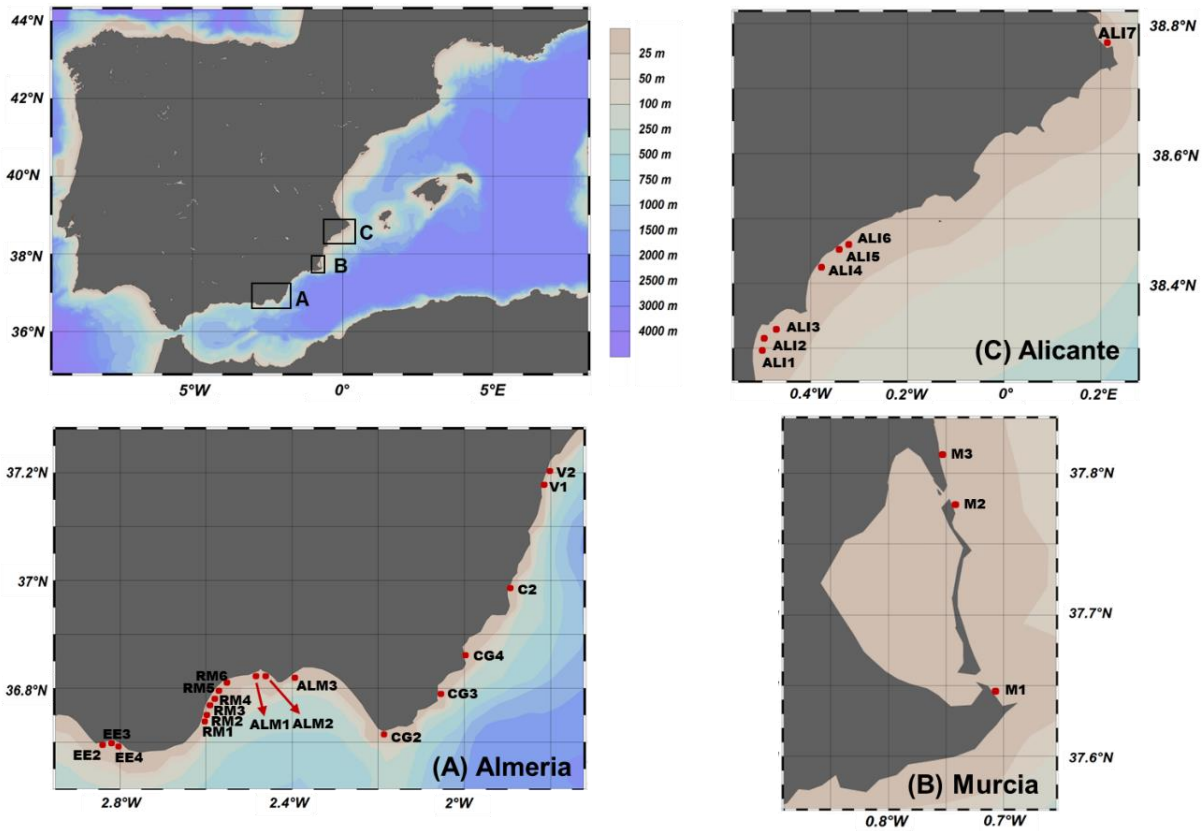

Figure S1. Maps with the three regions belonging to the Mediterranean Spanish coast surveyed in this study: (A) Almeria region, (B) Murcia and (C) Alicante. Figure made by the authors using Ocean Data View (Schlitzer, R., Ocean Data View, https://odv.awi.de, 2021).

Study area and sampling

Table S2. Sampling areas description, from west to east orientation. Non-vegetated sediment (▒, n = 23), leaves (◊, n = 21), rhizome (■, n = 20), vegetated sediment (▓, n = 20).

Region	Sampling stations	Location (WGS84)	ID	Analyzed samples	Area description	Depth(m) ◊	Depth(m) ■	Depth(m) ▓	Depth(m) ▒	Distance from coast (m)	Sampling date
Almeria	Guardias Viejas water course	36.695692, -2.842181	EE2	◊ ■ ▓ ▒	In front of a watercourse exit and influenced by greenhouses	4.2	4.2	3.7	4.2	180	Oct 2019
	Almerimar marina	36.698113, -2.789602	EE3	▒	Recreational marina with intense seasonal tourism	-	-	-	2.9; 3.1	-	Oct 2020
	Almerimar Punta Entinas	36.682722, -2.781789	EE4	◊ ■ ▓ ▒	Punta Entinas-Sabinar Natural Area, reserve, and Site of Community Importance (SCI). Closeness to intensive agriculture areas (greenhouses)	10.3	10.3	10.2	10.3	670	Oct 2019
	Roquetas de Mar Port	36.759793, -2.605386	RM1	◊ ■ ▓ ▒	Small recreational marina and fishing port	2.8	2.8	3	2.8	62	Nov 2019
	Roquetas de Mar	36.765929, -2.601214	RM2	▓ ▒	Hotel complex area and exit to a sewage pipe	-	3.4	-	2.9	230	Oct 2019
	Cura Ravine (W)	36.769575, -2.600480	RM3	◊ ■ ▓ ▒	Exit to a watercourse and draining system from an artificial wetland surrounded by greenhouses (Balsa del Sapo, "Toad Pond")	4.3	4.3	6.6	4.3	164	Oct 2019
	Cura Ravine (E)	36.772200, -2.600321	RM4	◊ ■ ▓ ▒		4.6	4.6	5.3	4.6	22	Nov 2019
	Algaida	36.783936, -2.591814	RM5	◊ ■ ▓ ▒	SCI, subject to occasional illegal direct spills	1	1	1.5	1	53	Oct 2019
	Aguadulce Harbor	36.815391, -2.561088	RM6	▒	Recreational marina with elevated seasonal touristic activity	-	-	-	7.0; 6.2	-	Mar 2021
	San Telmo	36.830635, -2.487396	ALM1	◊ ■ ▓ ▒	Outer Almeria Harbor (commercial, fishing, and recreational harbor). Near an outflow of municipal wastewater	7.5	7.5	8.5	7.5	57	Oct 2019
	Almeria Promenade	36.824700, -2.452053	ALM2	◊ ■ ▓ ▒	Closeness to the urban center of the city. Intense touristic activity	7.8	7.8	8.4	7.8	80	Dec 2019
	Costacabana	36.828550, -2.385822	ALM3*	◊ ■ ▓	Exit to a watercourse passing along greenhouses and irrigating extensive crops. Proximity to a sewage pipe. Running airport in the proximity	7.8	7.8	-	7.8; 8.1	540	Nov 2019
	Gata Cape beach	36.723349, -2.194234	CG2	◊ ■ ▓ ▒	Gata Cape MPA and Natural Park and a watercourse exit and human wastewater effluents	4.5	4.5	5	4.5	63	Jan 2020
	Los Escullos	36.796096, -2.061859	CG3	◊ ■ ▓ ▒	Area with irrigated extensive crops, several watercourses exit. Inside Gata Cape MPA and Natural Park	1	1	1.5	1	29	Jan 2020

	El Playazo	36.862794, -2.003661	CG4	◊ ■ ▓ ▒	Area with non-irrigated and irrigated extensive crops, small and fractionated settlements. Affected by several watercourses exit. Inside Gata Cape MPA and Natural Park	0.5	0.5	2	0.5	5	Jan 2020
	Isla de San Andrés	36.995175, -1.889448	C2	◊ ■ ▓ ▒	Special Area of Conservation (SAC)	1	1	1.4	1	70	Feb 2020
	Villaricos 1	37.243813, -1.772810	V1	▒	Seasonal Almanzora river watercourse with agricultural influence, and closeness to a pharmaceutical industry	-	-	-	2.2; 2.3	140	Feb 2020
	Deretil	37.255522, -1.758341	V2	◊	Pharmaceutical industry influence, receiving plume of treated waters, Almanzora river watercourses with agriculture influence and proximity to urban area.	12.4	-	-	-	215	Julio 2021
	Mar Menor North Chanel	37.653726, -0.716768	M1	▒			-	-	2;2.5	72	Mar 2020
Murcia	Mar Menor Harbor Chanel	37.778983, -0.74429	M2	▒	Exists to the open sea of a semi-enclosed and highly touristic lagoon, impacted by agricultural activity.	-	-	-	1.1; 1.5	61	Mar 2020
	Mar Menor Encañizadas Chanel	37.823707, -0.756447	M3	▒			-	-	2.5; 2.9	90	Mar 2020
	Urba 1	38.291326, -0.494084	ALI1	◊ ■ ▓ ▒	Closeness to former functioning salt pans, moderately urbanized, agriculture activity and maritime traffic of small to medium watercraft.	16	16	16	16	2270	Feb 2020
	Desal	38.302493, -0.488727	ALI2*	◊ ■ ▓	Area influenced by brine discharge from a desalination plant, waste-water treatment plant, watercourse exist and Alicante Harbor	16	16	16; 16.3	-	2510	Feb 2020
	Alicante Harbor	38.326396, -0.477619	ALI3*	◊ ■ ▓	Outer Alicante Harbor (commercial, fishing, and recreational activities) and waste-water treatment plant effluent and watercourse	16.6	16.6	16.6	-	1200	Feb 2020
Alicante	Campello	38.414186, -0.391352	ALI4	◊ ■ ▓ ▒	Closeness to a desalination plant, brine outflow and sewage plant. Exist of a seasonal watercourse influenced by agriculture. Breakwaters, traffic pleasure boats and closeness to fish farm	1.8	1.8	3.4	1.8	120	Mar 2020
	Cala Nostra	38.443518, -0.370742	ALI5	◊ ■ ▓ ▒	Area with septic tanks, closeness to a watercourse exits influenced by agriculture	1.7	1.7	2.8	1.7	30	Mar 2020
	Cala Morro Blanc	38.445734, -0.364306	ALI6	◊ ■ ▓ ▒	Artificial beach, with breakwaters and subjected to frequent dragging activities. Exceptional inputs of urban stormwater runoff. Closeness to a small fish farm and watercourse influenced by agriculture.	4.1	4.1	5	4.1	19	Mar 2020
	Cala Sardinera	38.762431, 0.219156	ALI7	◊ ■ ▓ ▒	Intense seasonal tourism and boats	3	3	3	4.5	140	Mar 2020

* Stations where non-vegetated sediment was not sampled due to the impossibility to reach the meadow's limit.

Analysis of organic contaminants: GC-Q-Orbitrap MS parameters

Table S3. Oven program

Time span (min)	Temperature (ºC)	Increase rate (ºC min^{-1})
1	50	
6	170	20
14	310	10
8	310	

The filament on delay was set for 5 min, with a runtime of 5 to 29 min. The temperature chosen for the ion source and the MS transfer line was 250 ºC. The employed FS MS acquisition mode in positive polarity had a scan range of *m/z* 40 to 500 and 1 μscan maximum injection time, a resolution power of 60.000 full widths at half maximum (FWHM) and 1e6 ions AGC (automatic gain control) target. The software Xcalibur version 4.1 (in Qual browser mode) and TraceFinder 4.1 (Thermo Fisher Scientific, Les Ulis, France) were used to process the chromatograms.

Peak detection and integration were automated using the software TraceFinder 4.1. For this purpose, the following parameters were established:

- Detection Algorithm: ICIS
- Detection method: Highest peak
- Area noise factor: 5
- Peak noise factor/tolerance: 5
- Baseline window: 40
- Minimum peak height (S/N): 3.00
- Noise method: repetitive
- Min peak width: 3
- Area tail extension: 5
- Area scan window: 0
- Mass/time interval: 30 s
- Peak threshold: 10%

When necessary, the analysts performed an adjustment or a manual integration of the peaks through the software Xcalibur 4.1.

Bear in mind that when an Orbitrap analyzer in full scan mode is used, the subsequent Total Ion Chromatogram (TIC or "Raw Chromatographic") offers abundant information from multiple residues, possibly overlapping information. Hence, to correctly observe the studied microcontaminants, extracted ion chromatograms of each compound must be used.

Table S4. Retention time and *m/z* ions selected for the quantification and confirmation of the PCB and pesticide compounds in the present study and the IIS.

Mean RT (min)	Compound Name	Molecular Formula	Quantification ion 1 (*m/z*)	Ion 2 (*m/z*)	Ion 3 (*m/z*)
9.21 ± 0.03	Pentachlorobenzene	C_6HCl_5	249.84850	107.97609	214.87968
10.20 ± 0.04	Trifluralin	$C_{11}H_{11}F_3N_3O_4$	264.02258	306.06960	248.02769
10.88 ± 0.02	PCB 18	$C_{12}H_7Cl$	283.80954	201.07741	186.05460
10.88 ± 0.01	Hexachlorobenzene	C_6Cl_6	283.80956	248.84075	141.93712
10.89 ± 0.03	Hexachlorobenzene 13C (IIS)	$^{13}C_6Cl_6$	289.82962	248.84073	186.05405
10.89 ± 0.03	Simazine	$C_7H_{12}ClN_5$	201.07745	186.05402	173.04620
10.95 ± 0.03	Atrazine	$C_7H_{11}ClN_5$	200.06961	215.09315	202.06668
11.33 ± 0.03	PCB 28F (IIS)	$C_{12}H_6Cl_3F$	274.95983	276.95625	285.25761
12.28 ± 0.01	PCB 28+31	$C_{12}H_7Cl_3$	255.96070	186.02292	150.04635
12.88 ± 0.04	PCB 52	$C_{12}H_6Cl_4$	219.98397	291.91890	254.95288
13.08 ± 0.04	Chlorpyrifos	$C_5H_2Cl_3NO$	196.92020	114.96132	170.92166
13.24 ± 0.04	PCB 44	$C_{12}H_6Cl_4$	219.98397	291.91890	254.95288
13.26 ± 0.05	Aldrin	$C_7H_2Cl_5$	262.85635	292.92680	152.06200
13.79 ± 0.05	Isodrin	$C_7H_2Cl_5$	192.93721	266.93759	146.97622
14.05 ± 0.04	PCB 66	$C_{12}H_6Cl_4$	219.98397	291.91890	254.95288
14.45 ± 0.04	PCB 101	$C_{12}H_5Cl_5$	325.87967	253.94508	184.00729
14.97 ± 0.01	PCB 81	$C_{12}H_6Cl_4$	291.91874	219.98400	150.04642
15.11 ± 0.05	Dieldrin	$C_7H_2Cl_5$	262.85637	264.85350	236.84068
15.16 ± 0.01	PCB 77	$C_{12}H_6Cl_4$	291.91874	219.98400	150.04642
15.54 ± 0.04	PCB 123	$C_{12}H_5Cl_5$	325.87967	253.94508	184.00729
15.60 ± 0.04	PCB 118	$C_{12}H_5Cl_5$	325.87967	253.94508	184.00729
15.69 ± 0.05	Endrin	$C_7H_2Cl_5$	262.85638	264.85352	242.95303
15.70 ± 0.04	o,p'-DDT	$C_{13}H_9Cl$	235.00744	165.06981	199.03076
15.76 ± 0.06	p,p'-DDD	$C_{13}H_9Cl$	235.00760	165.06985	176.06192
15.80 ± 0.04	PCB 114	$C_{12}H_5Cl_5$	325.87967	253.94508	184.00729
15.98 ± 0.04	PCB 153	$C_{12}H_4Cl_6$	359.84067	289.90308	144.95128
16.06 ± 0.04	PCB 105	$C_{12}H_5Cl_5$	325.87967	253.94508	184.00729
16.39 ± 0.05	p,p'-DDT	$C_{13}H_9Cl_2$	235.00754	165.06984	176.06199
16.47 ± 0.04	PCB 138	$C_{12}H_4Cl_6$	359.84067	289.90308	144.95128
16.68 ± 0.03	PCB 126	$C_{12}H_5Cl_5$	325.87967	253.94508	184.00729
16.95 ± 0.04	PCB 128	$C_{12}H_4Cl_6$	359.84067	289.90308	144.95128
17.00 ± 0.04	PCB 167	$C_{12}H_4Cl_6$	359.84067	289.90308	144.95128
17.40 ± 0.04	PCB 156	$C_{12}H_4Cl_6$	359.84067	289.90308	144.95128
17.48 ± 0.04	PCB 157	$C_{12}H_4Cl_6$	359.84067	289.90308	144.95128
17.68 ± 0.04	PCB 180	$C_{12}H_3Cl_7$	323.86399	393.80166	161.93174
18.09 ± 0.03	PCB 169	$C_{12}H_4Cl_6$	359.84067	289.90308	144.95128
18.18 ± 0.04	PCB 170	$C_{12}H_3Cl_7$	323.86399	393.80166	161.93174
18.71 ± 0.04	PCB 189	$C_{12}H_3Cl_7$	323.86399	393.80166	161.93174
19.30 ± 0.04	PCB 194	$C_{12}H_2Cl_8$	429.75952	357.82515	178.91229
19.94 ± 0.04	PCB 206	$C_{12}HCl_9$	196.89132	463.72044	391.78607

Extraction procedures

Agitation extraction consisted of the addition of 3 ml hexane/ethyl acetate 9:1 *v/v* solvent to 150 mg d.w. sample in a 15 ml Falcon tube, which was agitated for 10 min through a rotary shaker Reax 2 (Heidolph, Schwabach, Germany). For the UAE the same amount of solvent and sample were used, followed by a sonicating bath (Ultrasonic Elmasonic S 80 H, Elma Schmidbauer GmbH, Singen, Germany) for 4

min at room temperature (~25 °C). In the case of the QuEChERS, 150 mg d.w. sample were weighed in a 50 ml Falcon tube, afterward 10 ml milli-Q water and 10 ml hexane/ethyl acetate (9:1) were added. Finally, the extraction salts were incorporated (1.2 g $MgSO_4$ and 0.3 g NaCl) and vortexed for 1 minute. The QuEChERS-UAE extraction was performed similarly to QuEChERS but replacing the vortex step with 1 min sonication. In all cases, a centrifugation was carried out (5000 rpm, 10 min), then the organic layers were subtracted, filtered (0.22 µm nylon filter) and transferred into 2 ml vials.

Table S5. Minimum and maximum recoveries (%) per class of POP, regarding the extraction procedures in *P. oceanica* leaves and rhizomes.

Matrix	Compounds	Polytron (2 min)	Agitation (10 min)	UAE (4 min)	QuEChERS	QuEChERS-UAE
Leaves	Pesticides	109-119	46-152	73-140	12-157	11-67
	PCBs	106-117	60-80	29-108	12-22	3-15
Rhizomes	Pesticides	110-117	61-189	77-126	14-83	50-140
	PCBs	107-120	61-80	78-108	12-22	3-15

PCBs: Polychlorinated biphenyls; UAE: Ultrasound-assisted extraction

Table S6. Minimum and maximum recoveries (%) per class of POP, regarding the extraction solvent employed during UAE of surficial sediments.

Compounds	Solvent	
	DCM	hexane/ethyl acetate
Pesticides	65-103	84-119
PCBs	53-75	101-115

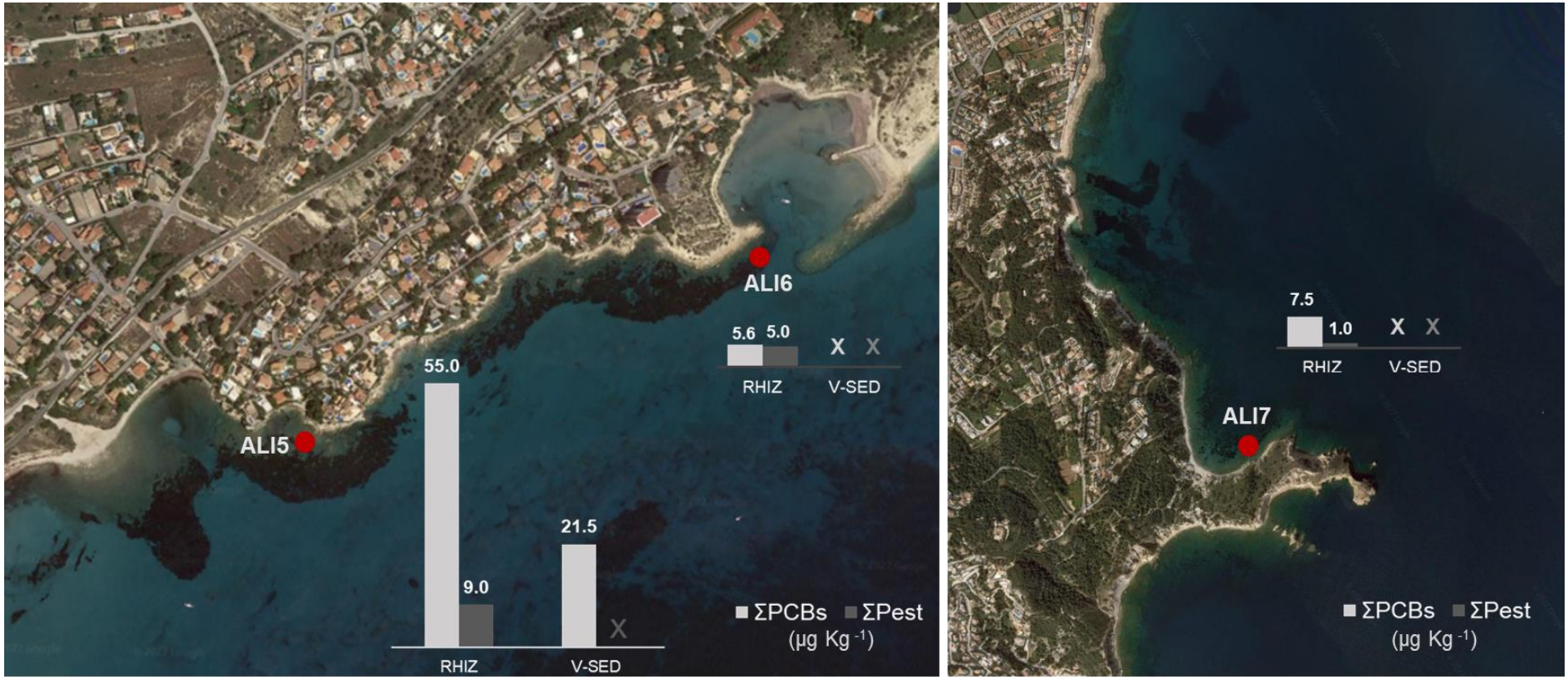

Figure S2. Location of ALI5, ALI6 and ALI7 sampling areas from Alicante and their corresponding ΣPCBs and ΣPriority Pesticides values (µg kg^{-1}) in rhizomes (RHIZ) and vegetated sediment (V-SED). Images retrieved from Google (©Images 2022 CNES, NOAA, U.S. Navy. NGA, GEBCO, TerraMetrics, Landsat, Copernicus).

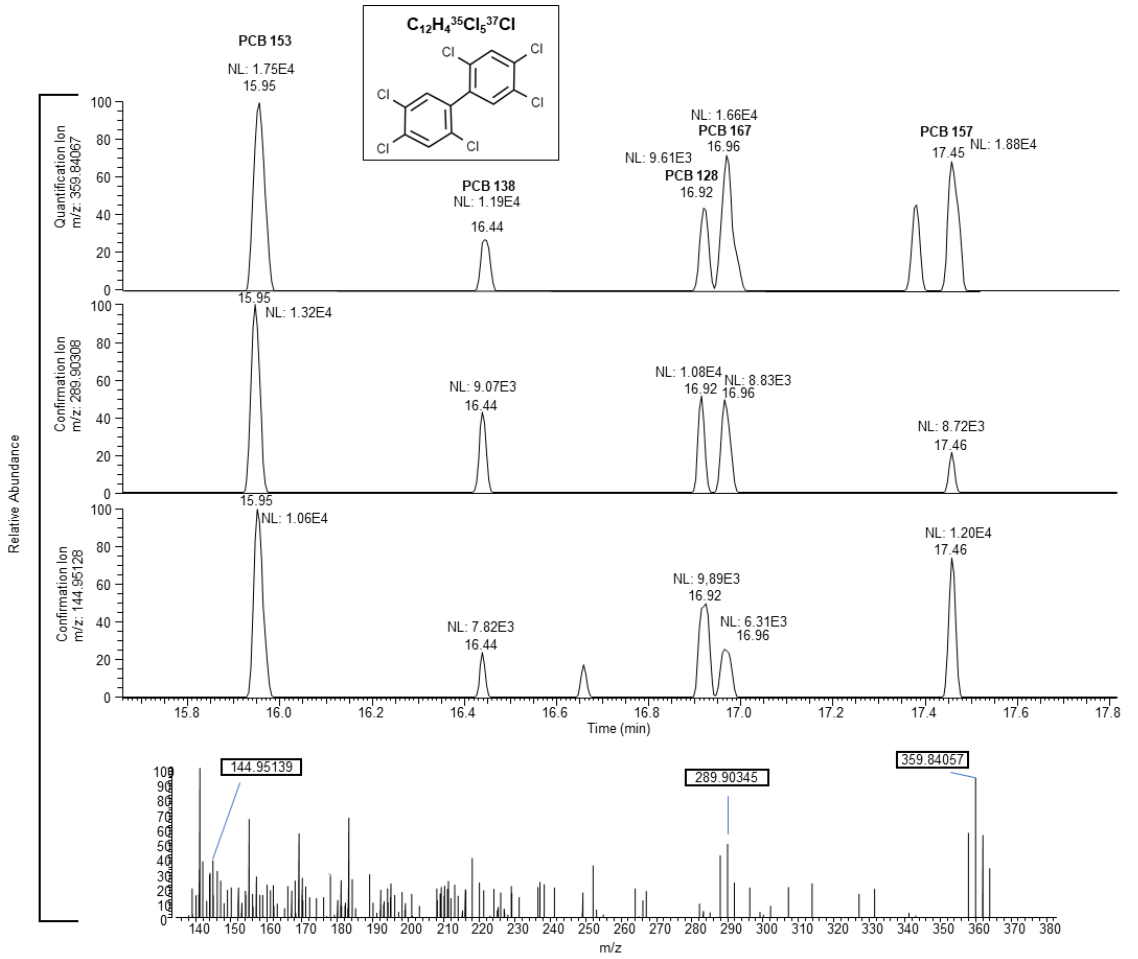

Figure S3. Extracted ion chromatogram and mass spectrum of PCB 153, 138, 128, 167, and 157 isomers detected in the vegetated sediment at ALI5.

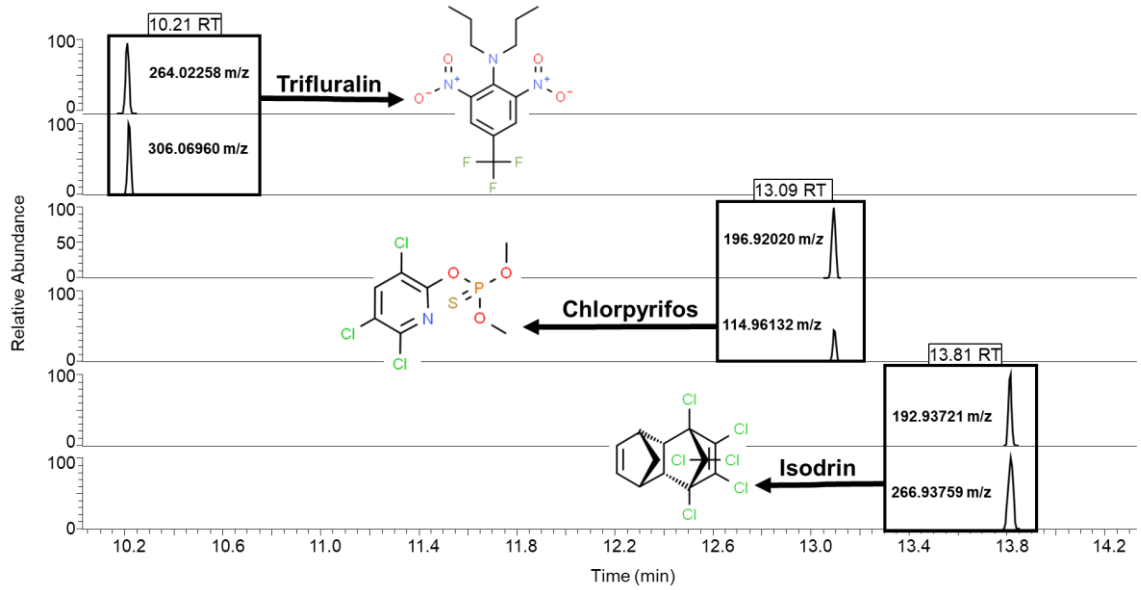

Figure S4. Extracted ion chromatograms of trifluralin, chlorpyrifos and isodrin detected in the rhizomes at ALI5.

Table S7. Current-use pesticides identified in this study and their corresponding RT, molecular weight, log K_{ow}, and their quantification and confirmation ions.

RT (min)	Compound Name	Molecular weight	log K_{ow}	Quantification Ion 1 (m/z)	Ion 2 (m/z)	Ion 3 (m/z)
7.81	2,4,6-trichlorophenol	197.4	3.69	195.92423	197.92135	96.98392
8.52	1,4-Dimethyl naphthalene	156.2	4.37	141.07042	156.09390	142.07330
9.07	2-Phenylphenol	170.2	3.09	169.06480	170.07239	141.06990
11.25	Lindane	290.8	3.72	180.93717	182.93420	218.91092
11.42	Pyrimethanil	199.3	2.84	198.10240	183.07907	118.05251
12.67	Terbutryn	241.4	3.74	170.04945	185.07291	226.11209
13.17	Tetraconazole	372.1	3.56	336.05173	170.97610	158.97623
13.82	Penconazole	284.2	4.40	158.97630	160.97333	248.09490
14.02	Prallethrin	300.4	4.49	123.11737	81.07042	77.03912
14.69	Fludioxonil	248.2	4.12	248.03912	127.04166	154.05247
16.61	Piperonylbutoxide	338.4	4.75	176.08373	177.09155	193.08647
19.48	Fenbuconazole	336.8	3.23	129.05784	125.01580	198.09054
21.19	Difenoconazole	406.3	4.30	264.98204	323.02363	202.01799

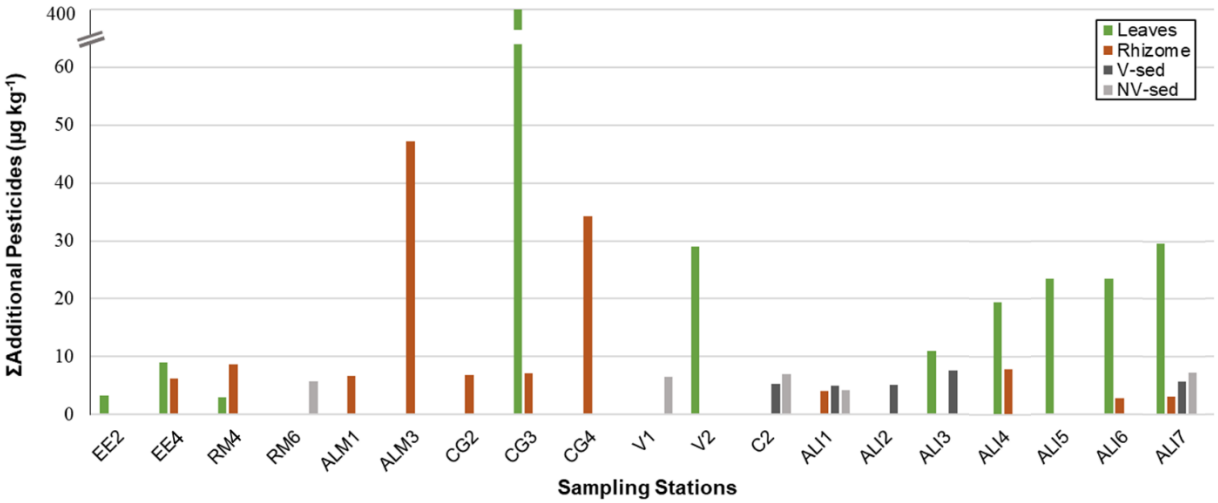

Figure S5. ΣCurrent-use pesticides of concern (µg kg^{-1}) seen in the different studied matrices of the aquatic plant *P. oceanica*, vegetated sediments (V-sed) and non-vegetated (NV-sed) among different sampling stations.

Table S8. Summary of the known POPs extraction methods in *P. oceanica*. PLE: Pressurized Liquid Extraction.

Source	Solvent	Solvent volume (ml)	Sample (d.w. g)	Extraction Method and time
This Study	hexane/ethyl acetate (9:1)	3	0.15	Polytron, ~12 min
[15]	hexane/ethyl acetate (9:1)	10	5.0	QuEChERS-rotavapor, n.d.
[18]	hexane/acetone (3:1)	n.d.	0.5	Soxhlet, 24 h
[16]	hexane/dichloromethane (1:1)	n.d.	n.d.	PLE, n.d.
[17]	n.d.	n.d.	0.5	PLE, n.d.

n.d.: not described.

Table S9. PCBs concentration in rhizomes (μg kg^{-1} w.w.) compared to BAC and EAC for fish (*M. barbatus*) and mussels (*M. galloprovincialis*) used by OSPAR and Marine Strategy Framework Directive (MSFD). Wet weight values were obtained by considering the moisture content (%) of each sample.

Site	PCB 28+31	PCB 52	PCB 44	PCB 81	PCB 77	PCB 153	PCB 167	ΣPCBs	∑7 PCBs
ALI5	10.07	1.51	10.54	9.13	10.45	1.88	8.19	51.77	13.46
ALI6	1.72	0.57	1.82	--	1.24	--	--	5.36	2.30
ALI7	2.47	0.57	1.52	1.05	1.52	--	--	7.13	3.04
BAC fish	0.10	0.08	--	--	--	0.10	--	--	--
BAC mussel	0.15	0.15	--	--	--	0.12	--	--	--
EAC mussel	0.64	1.08	--	--	--	16.00	--	--	--

Table S10. PCBs (μg kg^{-1} d.w.) concentrations detected in the Mediterranean Sea[a,b,c,d]. Only the sampling areas where contamination was detected have been included in the table.

Matrix	Site	PCB 18	PCB 28+31	PCB 52	PCB 44	PCB 101	PCB 81	PCB 77	PCB 123	PCB 118	PCB 114	PCB 153	PCB 105	PCB 138	PCB 126	PCB 128	PCB 167	PCB 157	PCB 180	PCB 170	PCB 189	ΣPCBs	∑7 PCBs	Source
Leaf	Tunisia[a]	n.s.	2.5-41.0	* -3.0	n.s.	0.7-1.6	--	0.6-0.8	1.1-1.3	* -0.2	*	1.5-1.9	--	1.3-1.7	1.2-3.5	n.s.	--	--	1.5-1.9	n.s.	0.9-1.0	10.9-55.6	7.0-50.0	[15]
Mussel	Spain[a]	n.s.	--	--	n.s.	--	n.s.	n.s.	n.s.	--	n.s.	0.6-0.8	n.s.	*	n.s.	n.s.	n.s.	n.s.	-- ; *	n.s.	n.s.	n.s.	0.58	[39]
	Adriatic Sea[a]	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	7.7-115.4	[46]
Fish	Tunisia[a]	n.s.	0.5-4.5	0.3-1.1	n.s.	0.2-1.1		0.2-0.4	0.3-0.9	0.3-0.7	0.02-0.2	0.5-1.0	n.s.	0.4-0.8	0.4-0.7	n.s.	n.s.	n.s.	0.3-0.8	n.s.	*	3.8-11.9	0.8-7.1	[15]
	Tunisia[a]	n.s.	0.5-1.1	*-0.7	n.s.	*-0.7	n.s.	0.2-0.5	*-0.6	*-0.5	*-0.4	*-0.9	n.s.	*-0.5	0.3-1.1	n.s.	n.s.	n.s.	*-0.5	n.s.	*	3.6-6.2	0.8-5.3	[15]
n.s. sed	Tunisia[a]	n.s.	0.1	0.1	n.s.	*	--	*	*	*	*	0.1-0.3	--	0.03-0.2	0.1	n.s.	--	--	0.2	n.s.	0.1-0.2	1.9-2.2	0.6-0.7	[15]
	Spain[b]	n.s.	*-0.8	*-0.3	n.s.	*-0.8	n.s.	n.s.	n.s.	*-1.5	n.s.	*-4.5	*	* -2.8	n.s.	n.s.	n.s.	n.s.	*-2.8	n.s.	n.s.	* -14.4	n.s.	[40]
	Egypt[c]	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	1.0-2.0	n.s.	[41]
	Spain[a]	n.s.	0.03	0.03	n.s.	0.05	n.s.	n.s.	n.s.	0.05	0.21	n.s.	n.s.	0.15	n.s.	n.s.	n.s.	n.s.	0.12	n.s.	n.s.	n.s.	0.64	[39]
	Italy[c]	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	3.7-54.9	n.s.	[42]
	Italy[d]	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	6-30	n.s.	[43]

Note that in this study PCB 28 congener eluted together with its isomer PCB 31, being both counted as only one compound, thus the ∑7 PCBs value might be slightly overrated.
(n.s.): not specified or not studied; (--) analyte not found or detected. (*) < LOQ.
[a] Coast
[b] Continental Shelf
[c] Estuary
[d] Port

Table S11. Priority pesticide concentrations (μg kg^{-1} d.w.) detected in biota and sediments from other studies.

Matrix	Site	Trifluralin	Chlorpyrifos	Isodrin	o,p´-DDT	ΣPesticides	Source
Leaf	Tunisia[a]	--	--	n.s.	*-0.6	54.7-88.9	[15]
Mussel	Adriatic Sea[a]	n.s.	n.s.	n.s.	n.s.	~4 to ~56	[46]
Fish	Tunisia[a]	--	--	n.s.	*-0.3	2.1-48.3	[15]
Sediment	Italy[c]	n.s.	n.s.	n.s.	n.s.	0.6-6.3	[42]
	Tunisia[a]	--	--	n.s.	0.03-0.06	1.4-2.4	[15]
	Egypt[c]	n.s.	n.s.	n.s.	n.s.	3.5-10.5	[41]
	Spain[b]	n.s.	*-2.4	n.s.	n.s.	*-4.6	[40]

(n.s.): not specified or not studied; (--) analyte not found or detected. (*) < LOQ.

[a] Coast

[b] Continental Shelf

[c] Estuary

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