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Community exposure to Arsenic in the Mekong river delta, southern Vietnam

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Table S1. Difference between As concentrations in water and rice in control and target areas

Pair	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
AP.As.gw - PT.As.gw	88.245	236.06604	50.32945	-16.4208	192.9108	1.753	21	0.094
AC.As.rice - AP.As.rice	-49.16667	148.15049	60.48218	-204.641	106.3077	-0.813	5	0.453
AC.As.rice - PT.As.rice	-99.33333	99.47797	40.61171	-203.729	5.06239	-2.446	5	0.058
AP.As.rice - PT.As.rice	1.21053	93.30391	21.40539	-43.7605	46.18157	0.057	18	0.956

Table S2. Arsenic concentration in drinking water, rice, and human hair, and calculation of daily i-As intake

Sample ID	As-DW1 (µg/L)	As-DW2 (µg/L)	As-R (µg/kg)	As-H (µg/g)	W1-As intake (µg/day)	W2-As intake (µg/day)	R i-As intake (µg/day)	i-As intake1 (µg/day)	i-As intake2 (µg/day)	i-As dose1 (µg/kg bw/d)	i-As dose2 (µg/kg bw/d)	%W-As intake1	%W-As intake2	%R i-As intake1	%R i-As intake2
AC01.F	0	0	172	0.54	0	0	34.4	34.4	34.4	0.69	0.69	0	0	100	100
AC02.F	0	0	140	0.17	0	0	28	28	28	0.56	0.56	0	0	100	100
AC04.F	0	0	165	0.46	0	0	33	33	33	0.66	0.66	0	0	100	100
AC05.F	0	0	187	0.25	0	0	37.4	37.4	37.4	0.75	0.75	0	0	100	100
AC01.M	0	0	172	0.38	0	0	41.3	41.3	41.3	0.71	0.71	0	0	100	100
AC03.M	0	0	324	0.26	0	0	77.8	77.8	77.8	1.34	1.34	0	0	100	100
AC04.M	0	0	165	0.24	0	0	39.6	39.6	39.6	0.68	0.68	0	0	100	100
AC06.M	0	0	243	0.40	0	0	58.3	58.3	58.3	1.01	1.01	0	0	100	100
AC07.M	0	0	n.a	0.28	0	0	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
AP08.F	171	0	157	0.92	461	0	31.4	492	31.4	9.84	0.6	93.6	0	6.4	100
AP09.F1	354	0	245	11.29	955	0	48.9	1004	48.9	20.08	1.0	95.1	0	4.9	100
AP09.F2	354	0	245	10.59	955	0	48.9	1004	48.9	20.08	1.0	95.1	0	4.9	100
AP11.F	977	0	471	15.38	2638	0	94.2	2732	94.2	54.64	1.9	96.6	0	3.4	100
AP12.F1	750	0	252	14.68	2025	0	50.5	2076	50.5	41.52	1.0	97.6	0	2.4	100
AP12.F2	750	0	252	24.60	2025	0	50.5	2076	50.5	41.52	1.0	97.6	0	2.4	100
AP13.F	767	0	423	21.50	2072	0	84.7	2156	84.7	43.13	1.7	96.1	0	3.9	100
AP15.F	96	0	148	0.89	260	0	29.6	290	29.6	5.79	0.6	89.8	0	10.2	100
AP21.F	133	0.48	245	0.51	359	1.30	48.9	408	50.2	8.17	1.0	88.0	2.6	12.0	97.4
AP23.F1	134	0.48	220	3.55	362	1.30	44.1	406	45.4	8.12	0.9	89.1	2.9	10.9	97.1
AP23.F2	134	0.48	220	3.30	362	1.30	44.1	406	45.4	8.12	0.9	89.1	2.9	10.9	97.1
AP24.F	85	0.48	227	3.92	229	1.30	45.3	274	46.6	5.48	0.9	83.5	2.8	16.5	97.2
AP26.F	114	0.48	154	1.13	306	1.30	30.8	337	32.1	6.75	0.6	90.9	4.1	9.1	95.9
AP27.F	154	0.48	199	4.89	416	1.30	39.8	456	41.1	9.11	0.8	91.3	3.2	8.7	96.8
AP29.F1	78	0.48	230	0.41	211	1.30	45.9	257	47.2	5.14	0.9	82.1	2.8	17.9	97.2
AP29.F2	78	0.48	230	0.72	211	1.30	45.9	257	47.2	5.14	0.9	82.1	2.8	17.9	97.2
AP30.F	44	0.48	198	2.47	120	1.30	39.5	159	40.8	3.18	0.8	75.2	3.2	24.8	96.8

Sample ID	As-DW1 (µg/L)	As-DW2 (µg/L)	As-R (µg/kg)	As-H (µg/g)	W1-As intake (µg/day)	W2-As intake (µg/day)	R i-As intake (µg/day)	i-As intake1 (µg/day)	i-As intake2 (µg/day)	i-As dose1 (µg/kg bw/d)	i-As dose2 (µg/kg bw/d)	%W-As intake1	%W-As intake2	%R i-As intake1	%R i-As intake2
PT32.F1	45	0.48	172	2.68	122	1.30	34.4	157	35.7	3.13	0.7	78.0	3.6	22.0	96.4
PT32.F2	45	0.48	172	1.95	122	1.30	34.4	157	35.7	3.13	0.7	78.0	3.6	22.0	96.4
PT32.F3	45	0.48	172	1.25	122	1.30	34.4	157	35.7	3.13	0.7	78.0	3.6	22.0	96.4
PT33.F	61	0.48	189	2.79	164	1.30	37.8	201	39.1	4.03	0.8	81.2	3.3	18.8	96.7
PT41.F	353	0	323	14.34	953	0	64.6	1018	64.6	20.36	1.3	93.7	0	6.3	100
PT42.F1	383	0	357	12.19	1035	0	71.3	1107	71.3	22.13	1.4	93.6	0	6.4	100
PT42.F2	383	0	357	9.32	1035	0	71.3	1107	71.3	22.13	1.4	93.6	0	6.4	100
PT43.F	357	0	298	0.54	963	0	59.7	1023	59.7	20.46	1.2	94.2	0	5.8	100
PT44.F	390	0	323	3.91	1052	0	64.6	1116	64.6	22.33	1.3	94.2	0	5.8	100
PT45.F	345	0	303	0.81	932	0	60.5	992	60.5	19.85	1.2	93.9	0	6.1	100
PT46.F1	336	0	225	15.76	906	0	45.0	951	45.0	19.02	0.9	95.3	0	4.7	100
PT46.F2	336	0	225	37.75	906	0	45.0	951	45.0	19.02	0.9	95.3	0	4.7	100
PT47.F1	127	0.27	194	3.62	344	0.73	38.8	383	39.6	7.65	0.8	89.9	1.8	10.1	98.2
PT47.F2	127	0.27	194	1.88	344	0.73	38.8	383	39.6	7.65	0.8	89.9	1.8	10.1	98.2
PT50.F	300	0	344	3.51	810	0	68.8	879	68.8	17.58	1.4	92.2	0	7.8	100
PT51.F1	121	0.29	181	4.56	326	0.78	36.2	362	37.0	7.24	0.7	90.0	2.1	10.0	97.9
PT51.F2	121	0.29	181	0.44	326	0.78	36.2	362	37.0	7.24	0.7	90.0	2.1	10.0	97.9
PT52.F	118	17.42	132	0.56	320	47.04	26.4	346	73.4	6.93	1.5	92.4	64.0	7.6	36.0
PT53.F	151	0.48	171	0.41	408	1.30	34.1	442	35.4	8.85	0.7	92.3	3.7	7.7	96.3
PT54.F	165	0.48	132	1.01	446	1.30	26.4	473	27.7	9.45	0.6	94.4	4.7	5.6	95.3
PT55.F1	4.9	0.48	150	0.17	13	1.30	30.0	43.1	31.3	0.86	0.6	30.4	4.2	69.6	95.8
PT55.F2	4.9	0.48	150	0.26	13	1.30	30.0	43.1	31.3	0.86	0.6	30.4	4.2	69.6	95.8
PT61.F	394	0.48	286	4.62	1063	1.30	57.1	1120	58.4	22.40	1.2	94.9	2.2	5.1	97.8
PT72.F	0.20	0.20	159	0.18	0.54	0.54	31.8	32.3	32.3	0.65	0.6	1.7	1.7	98.3	98.3
PT74.F1	0.21	0.21	184	0.14	0.56	0.56	36.7	37.3	37.3	0.75	0.7	1.5	1.5	98.5	98.5
PT74.F2	0.21	0.21	184	0.20	0.56	0.56	36.7	37.3	37.3	0.75	0.7	1.5	1.5	98.5	98.5
PT75.F	2.11	2.11	144	0.17	5.71	5.71	28.8	34.5	34.5	0.69	0.7	16.5	16.5	83.5	83.5
AP08.M	171	0	157	0.43	631	0	37.7	669	37.7	11.54	0.7	94.4	0	5.6	100

Sample ID	As-DW1 (µg/L)	As-DW2 (µg/L)	As-R (µg/kg)	As-H (µg/g)	W1-As intake (µg/day)	W2-As intake (µg/day)	R i-As intake (µg/day)	i-As intake1 (µg/day)	i-As intake2 (µg/day)	i-As dose1 (µg/kg bw/d)	i-As dose2 (µg/kg bw/d)	%W-As intake1	%W-As intake2	%R i-As intake1	%R i-As intake2
AP09.M	354	0	245	3.27	1309	0	58.7	1368	58.7	23.58	1.0	95.7	0	4.3	100
AP10.M	592	0	252	2.53	2189	0	60.6	2250	60.6	38.79	1.0	97.3	0	2.7	100
AP13.M	767	0	423	6.96	2839	0	101.6	2941	101.6	50.70	1.8	96.5	0	3.5	100
AP15.M	96	0	148	4.54	356	0	35.5	392	35.5	6.76	0.6	90.9	0	9.1	100
AP21.M	133	0.48	245	1.03	492	1.78	58.7	551	60.5	9.50	1.0	89.3	2.9	10.7	97.1
AP24.M	85	0.48	227	0.59	314	1.78	54.4	368	56.2	6.34	1.0	85.2	3.2	14.8	96.8
AP26.M	114	0.48	154	2.10	420	1.78	37.0	457	38.8	7.88	0.7	91.9	4.6	8.1	95.4
AP27.M	154	0.48	199	0.94	570	1.78	47.8	618	49.5	10.65	0.9	92.3	3.6	7.7	96.4
AP28.M	359	0.48	146	3.21	1330	1.78	34.9	1365	36.7	23.53	0.6	97.4	4.9	2.6	95.1
AP31.M	50	0.48	187	1.38	187	1.78	45.0	232	46.7	3.99	0.8	80.6	3.8	19.4	96.2
PT34.M	111	0.48	168	1.35	409	1.78	40.2	449	42.0	7.75	0.7	91.0	4.2	9.0	95.8
PT41.M	353	0	323	7.29	1306	0	77.5	1384	77.5	23.86	1.3	94.4	0	5.6	100
PT43.M	357	0	298	6.66	1320	0	71.6	1392	71.6	24.00	1.2	94.9	0	5.1	100
PT44.M	390	0	323	1.21	1441	0	77.5	1519	77.5	26.19	1.3	94.9	0	5.1	100
PT45.M	345	0	303	1.09	1277	0	72.6	1350	72.6	23.27	1.3	94.6	0	5.4	100
PT46.M	336	0	225	8.91	1242	0	54.0	1296	54.0	22.34	0.9	95.8	0	4.2	100
PT49.M	362	0	203	0.98	1339	0	48.8	1388	48.8	23.94	0.8	96.5	0	3.5	100
PT53.M	151	0.48	171	0.75	560	1.78	40.9	601	42.7	10.35	0.7	93.2	4.2	6.8	95.8
PT62.M	364	0.48	151	3.06	1346	1.78	36.1	1382	37.9	23.82	0.7	97.4	4.7	2.6	95.3
PT71.M	0.12	0.12	144	2.37	0.45	0.45	34.6	35.0	35.0	0.60	0.6	1.3	1.3	98.7	98.7
PT75.M	2.11	2.11	144	0.12	7.82	7.82	34.6	42.4	42.4	0.73	0.7	18.4	18.4	81.6	81.6

n.a: not available