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Monitoring and assessment of treated river, rain, gully pot and grey waters for irrigation of *Capsicum annuum*

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Table 2 Comparison of the water quality of the inflow waters received by the vegetable pots

Water type	COD ^a (mg/l)	BOD ^b (mg/l)	NH ₄ -N ^c (mg/l)	NO ₃ -N ^d (mg/l)	PO ₄ -P ^e (mg/l)	SS ^f (mg/l)	Turb ^g (NTU)	pH (-)	mV ^h (milli Volt)	EC ⁱ (µs/cm)	DO ^j (mg/l)	Fe ^k (mg/l)	K ^l (mg/l)	Mn ^m (mg/l)	Cd ⁿ (mg/l)	Cu ^o (mg/l)	SAR ^p (me/l)
River water																	
Overall ^q	6.3	5.6	8.1	20.1	5.6	3.7	2.9	7.3	130.4	200.4	8.2	2.8	5.5	0.20	ND ^v	ND ^v	0.7
FRP ^r	2.3	2.4	1.1	3.4	1.5	0.9	2.1	6.9	32.4	85.0	9.9	2.7	6.0	0.20	ND ^v	ND ^v	0.7
SRPBF ^s	6.3	5.2	8.1	20.1	5.6	3.3	2.8	7.3	120.3	201.3	8.5	2.9	5.2	0.24	ND ^v	ND ^v	0.9
SRPAF ^t	6.3	6.0	8.1	20.1	5.6	4.1	2.9	7.2	140.5	199.6	7.9	2.8	5.5	0.12	ND ^v	ND ^v	0.6
Rain water																	
Overall ^q	15.9	9.9	0.0	0.7	1.7	5.0	4.8	6.6	98.9	74.6	7.2	0.4	0.8	0.17	ND ^v	ND ^v	1.0
FRP ^r	2.3	2.4	1.1	3.4	1.5	0.9	2.1	6.9	32.4	85.0	9.9	0.4	0.4	0.20	ND ^v	ND ^v	0.8
SRPBF ^s	15.9	10.0	0.0	0.7	1.7	3.4	4.0	6.2	98.4	61.5	8.1	0.2	0.5	0.15	ND ^v	ND ^v	1.0
SRPAF ^t	15.9	9.8	0.0	0.7	1.7	6.6	5.6	6.9	99.4	87.6	6.2	0.5	1.1	0.18	ND ^v	ND ^v	0.2
Gully water																	
Overall ^q	17.7	64.8	11.1	17.8	14.2	106.3	88.1	7.2	41.5	897.9	5.9	3.1	6.1	0.20	0.13	ND ^v	1.3
FRP ^r	2.3	2.4	10.1	3.4	1.5	0.9	2.1	6.9	32.4	85.0	9.9	2.2	6.0	0.24	0.05	ND ^v	1.6
SRPBF ^s	17.7	72.5	11.1	17.8	14.2	112.4	97.6	6.9	94.0	1008	8.1	4.0	6.4	0.21	0.10	ND ^v	2.2
SRPAF ^t	17.7	57.0	11.1	17.8	14.2	100.2	78.6	7.4	-11.8	787.8	3.7	3.3	5.5	0.11	0.30	ND ^v	0.6
Real grey water																	
Overall ^q	301.0	64.3	2.3	1.2	12.0	449.9	249.5	7.2	129.4	509.4	6.5	0.2	1.3	0.26	ND ^v	ND ^v	1.0
FRP ^r	2.3	2.4	1.1	3.4	1.5	0.9	2.1	6.9	32.4	85.0	9.9	0.3	2.1	0.25	ND ^v	ND ^v	1.2
SRPBF ^s	301.0	63.0	2.3	1.2	12.0	329.1	239.7	7.3	156.0	531.1	7.5	0.4	0.8	0.34	ND ^v	ND ^v	1.9
SRPAF ^t	301.0	65.6	2.3	1.2	12.0	570.6	259.2	7.0	102.8	487.6	5.4	0.1	0.9	0.19	ND ^v	ND ^v	0.7
Artificial grey water																	
Overall ^q	87.5	29.8	1.3	0.9	9.0	54.0	24.8	8.0	-36.5	1447.5	6.8	0.3	2.0	0.17	0.16	0.27	2.0
FRP ^r	2.3	2.4	1.1	3.4	1.5	0.9	2.1	6.9	32.4	85.0	9.9	0.2	2.4	0.16	0.16	0.23	2.9
SRPBF ^s	87.5	14.0	1.3	0.9	9.0	52.7	23.3	7.9	-11.0	1440.0	6.9	0.3	1.4	0.18	0.19	0.35	3.5
SRPAF ^t	87.5	15.8	1.3	0.9	9.0	55.4	26.2	8.0	-62.8	1455.3	6.6	0.3	2.0	0.17	0.14	0.24	0.4
Standards ^u	-	-	<5.0	<30.0	<2	-	-	6.5- 8.4	-	<3000	-	0.1-1.5	2	0.2	<0.01	<0.2	0-15

^achemical oxygen demand; ^bbiochemical oxygen demand; ^cammonia-nitrogen; ^dnitrate-nitrogen; ^eortho-phosphate-phosphorus; ^fsuspended solids; ^gnephelometric turbidity unit; ^hredox potential; ⁱelectric conductivity; ^jdissolved oxygen; ^kiron; ^lpotassium; ^mmanganese; ⁿcadmium; ^ocopper; ^psodium adsorption ratio (sodium/((calcium+magnesium)/2)0.5); ^q08/04/14 to 24/12/14; ^rFirst replanting period (tap water was used for all plants): 12/02/14 to 07/04/14; ^sSecond replanting period before fruiting: 08/04/14 to 17/05/14; ^tSecond replanting period after fruiting: 18/05/14 to 24/12/14; ^uFAO, 2003; ^vnot detected.