

Table S1. Sampling information and environmental data.

Group	Prefecture	City/Town	Sampling date	Temperature [°C]	Ground dose [$\mu\text{Sv/h}$]
Tohoku	Yamagata	Yamagata	2016/11/26	8.1	0.0880
	Miyagi	Sendai-1	2016/11/26	9.7	0.0400
		Sendai-2	2020/7/11	22.2	0.0760
	Fukushima	Ryozen	2016/11/27	8.1	0.3960
		Tomioka-1	2016/11/28	10.9	0.4680
		Iwaki-1	2016/11/28	11.8	0.1320
		Minamisoma	2020/7/11	25.7	0.4050
		Namie-1	2020/7/11	25.7	2.6060
		Soma	2020/7/12	19.1	0.2533
		Iitate-1	2020/7/12	17.2	2.3960
		Iitate-2	2020/7/12	17.6	1.5650
		Namie-2	2020/7/13	25.7	3.4757
		Tomioka-2	2020/7/13	19.4	1.1225
		Iwaki-2	2020/7/13	19.7	0.1500
Niigata	Niigata	Joetsu	2018/7/28	30.5	0.0433
		Kashiwazaki	2018/7/28	35.0	0.0300
		Murakami	2018/7/29	36.4	0.0700
		Niigata	2018/7/30	32.8	0.0533
		Yahiko	2018/7/30	30.3	0.0400
Kyushu	Kagoshima	Satsumasendai	2016/12/3	17.2	0.0520
		Izumi	2016/12/4	13.7	0.0600
	Kumamoto	Kumamoto	2016/12/4	11.0	0.0380
		Yatsushiro	2016/12/5	13.5	0.0540
	Okinawa	Nishihara-AM	2016/12/10	21.3	-
		Nishihara-PM	2016/12/10	22.6	0.0460

Note: Ground dose was calculated as the mean value of 3 to 7 spots. -: Not applicable.

Table S2. Nutrient contents and ⁴⁰K and ¹³⁷Cs radioactivity concentrations in *Oxalis* leaves in the Tohoku group.

City/Town	Replication, mean ± SD (<i>n</i>)	Nutrient contents and radioactivity concentrations								
		EN [kcal/100g]	PR [g/100g]	LI [g/100g]	CA [g/100g]	Na [mg/100g]	WA [g/100g]	AS [g/100g]	K [Bq/kg]	Cs [Bq/kg]
Yamagata	1	65	4.0	1.2	9.6	10	83.7	1.5	1190.95	9.97
	2	66	4.2	1.2	9.5	10	83.5	1.6	-	-
	3	66	4.3	1.2	9.5	11	83.5	1.5	-	-
	Mean	65.67	4.167	1.200	9.533	10.33	83.567	1.533	-	-
	± SD (<i>n</i> = 3)	± 0.47	± 0.125	± 0	± 0.047	± 0.47	± 0.094	± 0.047	-	-
Sendai-1	1	72	3.7	1.2	11.7	9	82.0	1.4	719.66	ND
	2	72	3.9	1.1	11.5	9	82.1	1.4	-	-
	3	72	3.8	1.1	11.6	9	82.1	1.4	-	-
	Mean	72.00	3.800	1.133	11.600	9.00	82.067	1.400	-	-
	± SD (<i>n</i> = 3)	± 0	± 0.082	± 0.047	± 0.082	± 0	± 0.047	± 0	-	-
Sendai-2	1	60	3.9	0.8	9.9	4	84.2	1.1	819.12	8.41
	2	62	3.8	0.8	9.8	4	84.5	1.1	-	-
	3	63	3.8	0.9	9.4	4	84.9	1.1	-	-
	Mean	61.67	3.833	0.833	9.700	4.00	84.533	1.100	-	-
	± SD (<i>n</i> = 3)	± 1.25	± 0.047	± 0.047	± 0.216	± 0	± 0.287	± 0	-	-
Ryozen	1	75	4.2	1.3	11.7	4	81.6	1.2	653.99	66.16
	2	76	4.2	1.2	12.0	5	81.4	1.2	-	-
	3	77	4.3	1.3	11.9	4	81.3	1.2	-	-
	Mean	76.00	4.233	1.267	11.867	4.33	81.433	1.200	-	-
	± SD (<i>n</i> = 3)	± 0.82	± 0.047	± 0.047	± 0.125	± 0.47	± 0.125	± 0	-	-
Tomioka-1	1	61	3.2	1.0	9.7	7	84.6	1.5	879.29	564.49
	2	60	3.2	1.0	9.5	7	84.8	1.5	-	-
	3	60	3.3	0.9	9.6	7	84.7	1.5	-	-
	Mean	60.33	3.233	0.967	9.600	7.00	84.700	1.500	-	-
	± SD (<i>n</i> = 3)	± 0.47	± 0.047	± 0.047	± 0.082	± 0	± 0.082	± 0	-	-
Iwaki-1	1	61	3.8	1.3	8.6	8	84.9	1.4	852.81	17.38
	2	60	3.9	1.2	8.5	8	85.0	1.4	-	-
	3	60	3.9	1.1	8.6	8	85.0	1.4	-	-
	Mean	60.33	3.867	1.200	8.567	8.00	84.967	1.400	-	-
	± SD (<i>n</i> = 3)	± 0.47	± 0.047	± 0.082	± 0.047	± 0	± 0.047	± 0	-	-
Minamisoma	1	59	3.2	1.0	9.2	3	85.7	1.0	691.00	28.90
	2	58	3.2	0.9	9.2	3	85.7	1.0	-	-
	3	58	3.2	0.9	9.2	3	85.6	1.0	-	-
	Mean	58.33	3.200	0.933	9.200	3.00	85.667	1.000	-	-
	± SD (<i>n</i> = 3)	± 0.47	± 0	± 0.047	± 0	± 0	± 0.047	± 0	-	-
Namie-1	1	59	3.6	1.0	9.0	4	85.2	1.1	860.58	328.06
	2	59	3.6	1.0	8.8	4	85.5	1.1	-	-
	3	59	3.6	1.0	9.0	4	85.3	1.2	-	-
	Mean	59.00	3.600	1.000	8.933	4.00	85.333	1.133	-	-
	± SD (<i>n</i> = 3)	± 0	± 0	± 0	± 0.094	± 0	± 0.125	± 0.047	-	-

Table S2. Continued.

City/Town	Replication, mean ± SD (<i>n</i>)	Nutrient contents and radioactivity concentrations								
		EN [kcal/100g]	PR [g/100g]	LI [g/100g]	CA [g/100g]	Na [mg/100g]	WA [g/100g]	AS [g/100g]	K [Bq/kg]	Cs [Bq/kg]
Soma	1	55	3.3	0.9	8.6	3	86.1	1.1	550.98	39.19
	2	55	3.3	0.9	8.3	3	86.4	1.1	-	-
	3	56	3.3	0.9	8.5	3	86.2	1.1	-	-
	Mean	55.33	3.300	0.900	8.467	3.00	86.233	1.100	-	-
	± SD (<i>n</i> = 3)	± 0.47	± 0	± 0	± 0.125	± 0	± 0.125	± 0	-	-
Iitate-1	1	60	3.0	0.8	10.1	1	85.1	0.9	719.69	257.78
	2	61	2.9	0.9	10.4	1	84.9	0.9	-	-
	3	61	2.9	0.9	10.2	2	85.2	0.9	-	-
	Mean	60.67	2.933	0.867	10.233	1.33	85.067	0.900	-	-
	± SD (<i>n</i> = 3)	± 0.47	± 0.047	± 0.047	± 0.125	± 0.47	± 0.125	± 0	-	-
Iitate-2	1	61	3.5	0.8	9.7	2	84.9	1.0	511.17	300.37
	2	61	3.6	0.8	9.8	1	84.8	1.0	-	-
	3	61	3.6	0.9	9.8	1	84.8	1.0	-	-
	Mean	61.00	3.567	0.833	9.767	1.33	84.833	1.000	-	-
	± SD (<i>n</i> = 3)	± 0	± 0.047	± 0.047	± 0.047	± 0.47	± 0.047	± 0	-	-
Namic-2	1	57	3.6	1.0	9.0	3	85.2	1.3	617.14	211.32
	2	59	3.6	0.9	9.0	3	85.3	1.2	-	-
	3	59	3.6	1.0	8.4	3	85.7	1.2	-	-
	Mean	58.33	3.600	0.967	8.800	3.00	85.400	1.233	-	-
	± SD (<i>n</i> = 3)	± 0.94	± 0	± 0.047	± 0.283	± 0	± 0.216	± 0.047	-	-
Tomioka-2	1	62	3.5	1.0	9.7	3	84.4	1.4	580.89	198.08
	2	60	3.4	0.8	9.8	3	84.5	1.5	-	-
	3	61	3.4	0.9	9.8	3	84.4	1.5	-	-
	Mean	61.00	3.433	0.900	9.767	3.00	84.433	1.467	-	-
	± SD (<i>n</i> = 3)	± 0.82	± 0.047	± 0.082	± 0.047	± 0	± 0.047	± 0.047	-	-
Iwaki-2	1	57	3.5	0.9	8.8	7	85.8	1.0	757.34	15.56
	2	57	3.6	0.9	8.6	7	85.9	1.0	-	-
	3	57	3.5	0.9	8.7	7	85.9	1.0	-	-
	Mean	57.00	3.533	0.900	8.700	7.00	85.867	1.000	-	-
	± SD (<i>n</i> = 3)	± 0	± 0.047	± 0	± 0.082	± 0	± 0.047	± 0	-	-

Note: EN: energy, PR: protein, LI: lipid, CA: carbohydrate, Na: sodium, WA: water, AS: ash, K: ⁴⁰K (potassium-40), Cs: ¹³⁷Cs (cesium-137). -: Not applicable, ND: Not determined (below detection limit). For mean and SD values, two digits after significant digits were saved just for reference.

Table S3. Nutrient contents and ⁴⁰K and ¹³⁷Cs radioactivity concentrations in *Oxalis* leaves in the Niigata group.

City/Town	Replication, mean ± SD (<i>n</i>)	Nutrient contents and radioactivity concentrations								
		EN [kcal/100g]	PR [g/100g]	LI [g/100g]	CA [g/100g]	Na [mg/100g]	WA [g/100g]	AS [g/100g]	K [Bq/kg]	Cs [Bq/kg]
Joetsu	1	69	3.7	1.0	11.4	11	82.5	1.4	908.18	ND
	2	70	3.8	1.0	11.4	11	82.4	1.4	-	-
	Mean	69.50	3.750	1.000	11.400	11.00	82.450	1.400	-	-
	± SD (<i>n</i> = 2)	± 0.50	± 0.050	± 0	± 0	± 0	± 0.050	± 0		
Kashiwazaki	1	59	3.7	1.0	8.8	12	85.2	1.3	899.00	ND
	2	60	3.8	1.0	8.9	12	85.0	1.3	-	-
	Mean	59.50	3.750	1.000	8.850	12.00	85.100	1.300	-	-
	± SD (<i>n</i> = 2)	± 0.50	± 0.050	± 0	± 0.050	± 0	± 0.100	± 0		
Murakami	1	67	4.4	1.3	9.5	23	83.3	1.5	965.80	ND
	2	67	4.0	1.3	9.9	23	83.3	1.5	-	-
	Mean	67.00	4.200	1.300	9.700	23.00	83.300	1.500	-	-
	± SD (<i>n</i> = 2)	± 0	± 0.200	± 0	± 0.200	± 0	± 0	± 0		
Niigata	1	64	3.9	1.2	9.4	18	84.1	1.4	961.16	ND
	2	62	3.8	1.2	9.1	17	84.5	1.4	-	-
	Mean	63.00	3.850	1.200	9.250	17.50	84.300	1.400	-	-
	± SD (<i>n</i> = 2)	± 1.00	± 0.050	± 0	± 0.150	± 0.50	± 0.200	± 0		
Yahiko	1	75	4.1	1.5	11.2	32	81.6	1.6	927.00	ND
	2	75	4.3	1.5	11.0	30	81.6	1.6	-	-
	Mean	75.00	4.200	1.500	11.100	31.00	81.600	1.600	-	-
	± SD (<i>n</i> = 2)	± 0	± 0.100	± 0	± 0.100	± 1.00	± 0	± 0		

Note: EN: energy, PR: protein, LI: lipid, CA: carbohydrate, Na: sodium, WA: water, AS: ash, K: ⁴⁰K (potassium-40), Cs: ¹³⁷Cs (cesium-137). -: Not applicable, ND: Not determined (below detection limit). For mean and SD values, two digits after significant digits were saved just for reference.

Table S4. Nutrient contents and ⁴⁰K and ¹³⁷Cs radioactivity concentrations in *Oxalis* leaves in the Kyushu group.

City/Town	Replication, mean ± SD (<i>n</i>)	Nutrient contents and radioactivity concentrations								
		EN [kcal/100g]	PR [g/100g]	LI [g/100g]	CA [g/100g]	Na [mg/100g]	WA [g/100g]	AS [g/100g]	K [Bq/kg]	Cs [Bq/kg]
Satsumasendai	1	72	3.6	1.3	11.5	14	82.1	1.5	777.02	ND
	2	72	3.6	1.3	11.4	14	82.2	1.5	-	-
	3	72	3.6	1.3	11.4	14	82.2	1.5	-	-
	Mean	72.00	3.600	1.300	11.433	14.00	82.167	1.500	-	-
	± SD (<i>n</i> = 3)	± 0	± 0	± 0	± 0.047	± 0	± 0.047	± 0	-	-
Izumi	1	62	3.7	1.2	9.1	8	83.4	2.6	969.25	ND
	2	61	3.8	1.1	8.9	8	83.6	2.6	-	-
	3	61	3.8	1.1	9.0	8	83.5	2.6	-	-
	Mean	61.33	3.767	1.133	9.000	8.00	83.500	2.600	-	-
	± SD (<i>n</i> = 3)	± 0.47	± 0.047	± 0.047	± 0.082	± 0	± 0.082	± 0	-	-
Kumamoto	1	54	3.2	1.0	8.0	8	85.4	2.4	737.21	ND
	2	52	3.3	1.0	7.5	8	85.8	2.4	-	-
	3	53	3.2	1.0	7.8	8	85.5	2.5	-	-
	Mean	53.00	3.233	1.000	7.767	8.00	85.567	2.433	-	-
	± SD (<i>n</i> = 3)	± 0.82	± 0.047	± 0	± 0.205	± 0	± 0.170	± 0.047	-	-
Yatsushiro	1	65	3.5	1.1	10.3	8	83.6	1.5	840.27	ND
	2	66	3.5	1.1	10.4	8	83.4	1.6	-	-
	3	65	3.5	1.0	10.6	9	83.3	1.6	-	-
	Mean	65.33	3.500	1.067	10.433	8.33	83.433	1.567	-	-
	± SD (<i>n</i> = 3)	± 0.47	± 0	± 0.047	± 0.125	± 0.47	± 0.125	± 0.047	-	-
Nishihara-AM	1	60	3.6	1.1	8.8	13	85.0	1.5	931.66	ND
	2	60	3.7	1.2	8.6	13	85.0	1.5	-	-
	3	60	3.6	1.1	9.0	13	84.8	1.5	-	-
Nishihara-PM	1	67	3.6	1.3	10.3	16	83.2	1.6	-	-
	2	67	3.7	1.3	10.2	16	83.2	1.6	-	-
	3	67	3.6	1.2	10.5	16	83.1	1.6	-	-
	Mean	63.50	3.633	1.200	9.567	14.50	84.050	1.540	-	-
	± SD (<i>n</i> = 6)	± 3.50	± 0.047	± 0.082	± 0.780	± 1.50	± 0.886	± 0.050	-	-

Note: EN: energy, PR: protein, LI: lipid, CA: carbohydrate, Na: sodium, WA: water, AS: ash, K: ⁴⁰K (potassium-40), Cs: ¹³⁷Cs (cesium-137). -: Not applicable, ND: Not determined (below detection limit). For mean and SD values, two digits after significant digits were saved just for reference.

Table S5. Pearson correlation coefficients and their associated p -values among nutrient contents, ^{40}K and ^{137}Cs radioactivity concentrations in *Oxalis* leaves, temperature, and ground radiation dose in 3 groups combined ($n = 24$).

	EN	PR	LI	CA	Na	WA	AS	K	Cs	Temperature
PR	$r = 0.65$ $p = 5.4 \times 10^{-4}***$									
LI	$r = 0.71$ $p = 9.9 \times 10^{-5}**$	$r = 0.71$ $p = 1.1 \times 10^{-4}***$								
CA	$r = 0.92$ $p = 2.8 \times 10^{-10}*$	$r = 0.35$ $p = 0.094$	$r = 0.41$ $p = 0.048*$							
Na	$r = 0.52$ $p = 0.0090**$	$r = 0.59$ $p = 0.0026**$	$r = 0.81$ $p = 1.3 \times 10^{-6}**$	$r = 0.25$ $p = 0.23$						
WA	$r = -0.97$ $p = 1.0 \times 10^{-14}***$	$r = -0.64$ $p = 6.9 \times 10^{-4}***$	$r = -0.72$ $p = 6.6 \times 10^{-5}**$	$r = -0.87$ $p = 2.5 \times 10^{-8}**$	$r = -0.53$ $p = 0.0072**$					
AS	$r = 0.0050$ $p = 0.98$	$r = 0.13$ $p = 0.54$	$r = 0.37$ $p = 0.077$	$r = -0.16$ $p = 0.45$	$r = 0.31$ $p = 0.13$	$r = -0.24$ $p = 0.26$				
K	$r = 0.24$ $p = 0.26$	$r = 0.49$ $p = 0.015*$	$r = 0.53$ $p = 0.0083**$	$r = 0.0036$ $p = 0.99$	$r = 0.59$ $p = 0.0023**$	$r = -0.30$ $p = 0.16$	$r = 0.38$ $p = 0.063$			
Cs	$r = -0.26$ $p = 0.21$	$r = -0.44$ $p = 0.031*$	$r = -0.42$ $p = 0.039*$	$r = -0.086$ $p = 0.69$	$r = -0.43$ $p = 0.038*$	$r = 0.30$ $p = 0.15$	$r = -0.27$ $p = 0.21$	$r = -0.28$ $p = 0.18$		
Temperature	$r = -0.021$ $p = 0.92$	$r = 0.17$ $p = 0.44$	$r = 0.071$ $p = 0.74$	$r = -0.093$ $p = 0.67$	$r = 0.46$ $p = 0.022*$	$r = 0.091$ $p = 0.67$	$r = -0.23$ $p = 0.27$	$r = 0.16$ $p = 0.46$	$r = -0.16$ $p = 0.44$	
Ground dose	$r = -0.29$ $p = 0.16$	$r = -0.35$ $p = 0.099$	$r = -0.41$ $p = 0.049*$	$r = -0.16$ $p = 0.47$	$r = -0.48$ $p = 0.018*$	$r = 0.36$ $p = 0.080$	$r = -0.38$ $p = 0.070$	$r = -0.42$ $p = 0.040*$	$r = 0.63$ $p = 9.6 \times 10^{-4}***$	$r = 0.075$ $p = 0.73$

Note: EN: energy, PR: protein, LI: lipid, CA: carbohydrate, Na: sodium, WA: water, AS: ash, K: ^{40}K (potassium-40), CS: ^{137}Cs (cesium-137). ND (not determined) measurements were considered zero to obtain the values in this table. LI vs Cs: $r = -0.48$, $p = 0.022*$, Na vs Cs: $r = -0.53$, $p = 0.0088**$, and K vs Cs: $r = -0.49$, $p = 0.017*$ without Tomioka-1. *: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$.

Table S6. Pearson correlation coefficients and their associated p -values among nutrient contents, ^{40}K and ^{137}Cs radioactivity concentrations in *Oxalis* leaves, temperature, and ground radiation dose in the Tohoku group ($n = 14$).

	EN	PR	LI	CA	Na	WA	AS	K	Cs	Temperature
PR	$r = 0.66$ $p = 0.011^*$									
LI	$r = 0.69$ $p = 0.0059^{**}$	$r = 0.73$ $p = 0.0031^{**}$								
CA	$r = 0.91$ $p = 4.7 \times 10^{-6}^{***}$	$r = 0.33$ $p = 0.24$	$r = 0.39$ $p = 0.17$							
Na	$r = 0.35$ $p = 0.23$	$r = 0.54$ $p = 0.046^*$	$r = 0.66$ $p = 0.0098^{**}$	$r = 0.084$ $p = 0.78$						
WA	$r = -0.99$ $p = 4.1 \times 10^{-12}^{***}$	$r = -0.66$ $p = 0.0097^{**}$	$r = -0.68$ $p = 0.0072^{**}$	$r = -0.91$ $p = 8.2 \times 10^{-6}^{***}$	$r = -0.38$ $p = 0.18$					
AS	$r = 0.33$ $p = 0.24$	$r = 0.43$ $p = 0.12$	$r = 0.57$ $p = 0.033^*$	$r = 0.13$ $p = 0.66$	$r = 0.68$ $p = 0.0071^{**}$	$r = -0.43$ $p = 0.13$				
K	$r = 0.13$ $p = 0.66$	$r = 0.38$ $p = 0.18$	$r = 0.45$ $p = 0.10$	$r = -0.092$ $p = 0.75$	$r = 0.74$ $p = 0.0026^{**}$	$r = -0.15$ $p = 0.60$	$r = 0.47$ $p = 0.093$			
Cs	$r = -0.23$ $p = 0.44$	$r = -0.47$ $p = 0.093$	$r = -0.31$ $p = 0.28$	$r = -0.056$ $p = 0.85$	$r = -0.30$ $p = 0.30$	$r = 0.19$ $p = 0.52$	$r = 0.083$ $p = 0.78$	$r = -0.070$ $p = 0.81$		
Temperature	$r = -0.69$ $p = 0.0061^{**}$	$r = -0.48$ $p = 0.081$	$r = -0.69$ $p = 0.0062^{**}$	$r = -0.56$ $p = 0.038^*$	$r = -0.63$ $p = 0.015^*$	$r = 0.71$ $p = 0.0044^{**}$	$r = -0.57$ $p = 0.034^*$	$r = -0.37$ $p = 0.19$	$r = 0.083$ $p = 0.78$	
Ground dose	$r = -0.28$ $p = 0.32$	$r = -0.33$ $p = 0.24$	$r = -0.30$ $p = 0.29$	$r = -0.17$ $p = 0.56$	$r = -0.57$ $p = 0.032^*$	$r = 0.29$ $p = 0.31$	$r = -0.28$ $p = 0.32$	$r = -0.28$ $p = 0.33$	$r = 0.52$ $p = 0.058$	$r = 0.54$ $p = 0.049^*$

Note: EN: energy, PR: protein, LI: lipid, CA: carbohydrate, Na: sodium, WA: water, AS: ash, K: ^{40}K (potassium-40), Cs: ^{137}Cs (cesium-137). ND (not determined) measurements were considered zero to obtain the values in this table. LI vs Cs: $r = -0.39$, $p = 0.19$, Na vs Cs: $r = -0.65$, $p = 0.016^*$, K vs Cs: $r = -0.33$, $p = 0.27$, Cs vs Ground dose: $r = 0.86$, $p = 1.5 \times 10^{-4}^{***}$, and Cs vs Temperature: $r = 0.41$, $p = 0.16$ without Tomioka-1. *: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$.

Table S7. Pearson correlation coefficients and their associated p -values among nutrient contents, ^{40}K radioactivity concentration in *Oxalis* leaves, temperature, and ground radiation dose in the Niigata group ($n = 5$).

	EN	PR	LI	CA	Na	WA	AS	K	Temperature
PR	$r = 0.61$ $p = 0.27$								
LI	$r = 0.67$ $p = 0.21$	$r = 0.91$ $p = 0.029^*$							
CA	$r = 0.89$ $p = 0.044^*$	$r = 0.21$ $p = 0.73$	$r = 0.26$ $p = 0.67$						
Na	$r = 0.68$ $p = 0.21$	$r = 0.93$ $p = 0.022^*$	$r = 0.99$ $p = 4.8 \times 10^{-4}***$	$r = 0.27$ $p = 0.66$					
WA	$r = -0.99$ $p = 6.7 \times 10^{-4}***$	$r = -0.55$ $p = 0.34$	$r = -0.59$ $p = 0.30$	$r = -0.93$ $p = 0.022^*$	$r = -0.60$ $p = 0.29$				
AS	$r = 0.88$ $p = 0.050^*$	$r = 0.90$ $p = 0.038^*$	$r = 0.93$ $p = 0.022^*$	$r = 0.57$ $p = 0.32$	$r = 0.93$ $p = 0.022^*$	$r = -0.83$ $p = 0.082$			
K	$r = -0.014$ $p = 0.98$	$r = 0.50$ $p = 0.39$	$r = 0.45$ $p = 0.44$	$r = -0.28$ $p = 0.65$	$r = 0.39$ $p = 0.52$	$r = 0.044$ $p = 0.94$	$r = 0.35$ $p = 0.57$		
Temperature	$r = -0.65$ $p = 0.23$	$r = 0.12$ $p = 0.85$	$r = -0.16$ $p = 0.80$	$r = -0.79$ $p = 0.11$	$r = -0.14$ $p = 0.82$	$r = 0.67$ $p = 0.22$	$r = -0.32$ $p = 0.59$	$r = 0.38$ $p = 0.53$	
Ground dose	$r = 0.10$ $p = 0.87$	$r = 0.53$ $p = 0.35$	$r = 0.34$ $p = 0.58$	$r = -0.074$ $p = 0.91$	$r = 0.29$ $p = 0.63$	$r = -0.11$ $p = 0.86$	$r = 0.37$ $p = 0.54$	$r = 0.90$ $p = 0.038^*$	$r = 0.43$ $p = 0.47$

Note: EN: energy, PR: protein, LI: lipid, CA: carbohydrate, Na: sodium, WA: water, AS: ash, K: ^{40}K (potassium-40). *: $p < 0.05$, ***: $p < 0.001$.

Table S8. Pearson correlation coefficients and their associated p -values among nutrient contents, ^{40}K radioactivity concentration in *Oxalis* leaves, temperature, and ground radiation dose in the Kyushu group ($n = 5$).

	EN	PR	LI	CA	Na	WA	AS	K	Temperature
PR	$r = 0.58$ $p = 0.31$								
LI	$r = 0.85$ $p = 0.071$	$r = 0.64$ $p = 0.24$							
CA	$r = 0.98$ $p = 0.0024^{**}$	$r = 0.45$ $p = 0.45$	$r = 0.76$ $p = 0.14$						
Na	$r = 0.62$ $p = 0.26$	$r = 0.32$ $p = 0.60$	$r = 0.85$ $p = 0.071$	$r = 0.56$ $p = 0.32$					
WA	$r = -0.96$ $p = 0.0089^{**}$	$r = -0.68$ $p = 0.21$	$r = -0.81$ $p = 0.096$	$r = -0.93$ $p = 0.024^*$	$r = -0.46$ $p = 0.44$				
AS	$r = -0.74$ $p = 0.15$	$r = -0.12$ $p = 0.85$	$r = -0.56$ $p = 0.33$	$r = -0.80$ $p = 0.11$	$r = -0.71$ $p = 0.18$	$r = 0.54$ $p = 0.35$			
K	$r = 0.11$ $p = 0.86$	$r = 0.83$ $p = 0.084$	$r = 0.19$ $p = 0.76$	$r = -0.017$ $p = 0.98$	$r = 0.057$ $p = 0.93$	$r = -0.19$ $p = 0.76$	$r = 0.12$ $p = 0.84$		
Temperature	$r = 0.53$ $p = 0.36$	$r = 0.52$ $p = 0.37$	$r = 0.73$ $p = 0.16$	$r = 0.44$ $p = 0.45$	$r = 0.91$ $p = 0.034^*$	$r = -0.37$ $p = 0.54$	$r = -0.65$ $p = 0.23$	$r = 0.43$ $p = 0.47$	
Ground dose	$r = 0.56$ $p = 0.33$	$r = 0.83$ $p = 0.082$	$r = 0.36$ $p = 0.55$	$r = 0.50$ $p = 0.40$	$r = -0.11$ $p = 0.86$	$r = -0.73$ $p = 0.16$	$r = -0.0049$ $p = 0.99$	$r = 0.62$ $p = 0.27$	$r = 0.038$ $p = 0.95$

Note: EN: energy, PR: protein, LI: lipid, CA: carbohydrate, Na: sodium, WA: water, AS: ash, K: ^{40}K (potassium-40). *: $p < 0.05$, **: $p < 0.01$.

Table S9. Coefficient of variation (CV) among nutrient contents and ⁴⁰K radioactivity concentration in *Oxalis* leaves.

Group		EN	PR	LI	CA	Na	WA	AS	K
3 groups	SD	5.93	0.334	0.171	1.073	6.97	1.370	0.393	155.89
	Mean	63.16	3.658	1.067	9.718	8.99	84.149	1.408	805.05
	CV	0.0939	0.0912	0.161	0.1104	0.776	0.01628	0.279	0.19365
Tohoku	SD	5.51	0.354	0.141	1.000	2.76	1.324	0.205	168.09
	Mean	61.90	3.593	0.993	9.624	4.88	84.579	1.212	743.19
	CV	0.0889	0.0984	0.142	0.1039	0.565	0.01566	0.168	0.22618
Niigata	SD	5.33	0.207	0.190	1.013	7.42	1.252	0.102	27.11
	Mean	66.80	3.950	1.200	10.060	18.90	83.350	1.440	932.23
	CV	0.0799	0.0525	0.158	0.1007	0.393	0.01502	0.0708	0.02908
Kyushu	SD	6.16	0.179	0.104	1.246	3.01	1.101	0.483	88.35
	Mean	63.03	3.545	1.140	9.640	10.57	83.743	1.928	851.08
	CV	0.0977	0.0503	0.0913	0.1293	0.285	0.01315	0.251	0.1038

Note: EN: energy, PR: protein, LI: lipid, CA: carbohydrate, Na: sodium, WA: water, AS: ash, K: ⁴⁰K (potassium-40).

Table S10. Shapiro-Wilk test for normality (*p*-values) using raw data, ratio transformed (rt) data, and centered log-ratio transformed (clr) data.

	Group	EN	PR	LI	CA	Na	WA	AS	K	Cs	Temperature	Ground dose
Raw	3 groups	0.12	0.49	0.13	0.15	0.0024	0.14	4.6×10 ⁻⁴	0.74	-	0.24	-
	Tohoku	0.0067	0.94	0.039	0.038	0.13	0.033	0.21	0.20	0.0087	0.12	0.0032
	Niigata	0.98	0.048	0.47	0.38	0.56	0.94	0.81	0.25	-	0.45	-
	Kyushu	0.91	0.66	0.98	1.0	0.020	0.79	0.041	0.67	-	0.57	-
Rt	3 groups	-	0.79	0.31	0.98	-	0.33	3.3×10 ⁻⁵	-	-	-	-
	Tohoku	-	0.95	0.53	0.99	-	0.20	0.30	-	-	-	-
	Niigata	-	0.38	0.82	0.046	-	0.98	0.42	-	-	-	-
	Kyushu	-	0.71	0.46	0.53	-	0.37	0.062	-	-	-	-
Clr	3 groups	-	0.67	0.47	0.86	-	0.42	0.0012	-	-	-	-
	Tohoku	-	0.90	0.6	1.0	-	0.14	0.42	-	-	-	-
	Niigata	-	0.37	0.78	0.061	-	0.96	0.47	-	-	-	-
	Kyushu	-	0.69	0.48	0.51	-	0.35	0.080	-	-	-	-

Note: EN: energy, PR: protein, LI: lipid, CA: carbohydrate, Na: sodium, WA: water, AS: ash, K: ⁴⁰K (potassium-40), Cs: ¹³⁷Cs (cesium-137).

-: Not applicable. Cs: *p* = 0.0079 without Tomioka in the Tohoku Group.

Table S11. Pearson correlation coefficients and their associated *p*-values between raw data and ratio transformed (rt) data and between raw data and centered log-ratio transformed (clr) data.

		PR	LI	CA	WA	AS
Raw vs Rt	3 groups	$r = 0.49$ $p = 0.015^*$	$r = 0.91$ $p = 6.1 \times 10^{-10}***$	$r = 0.69$ $p = 1.9 \times 10^{-4}***$	$r = 0.83$ $p = 4.8 \times 10^{-7}***$	$r = 0.97$ $p = 2.3 \times 10^{-15}***$
	Tohoku	$r = 0.64$ $p = 0.013^*$	$r = 0.90$ $p = 8.8 \times 10^{-6}***$	$r = 0.69$ $p = 0.0066^{**}$	$r = 0.86$ $p = 9.3 \times 10^{-5}***$	$r = 0.93$ $p = 1.4 \times 10^{-6}***$
	Niigata	$r = -0.097$ $p = 0.88$	$r = 0.98$ $p = 0.0047^{**}$	$r = 0.80$ $p = 0.11$	$r = 0.89$ $p = 0.045^*$	$r = 0.91$ $p = 0.033^*$
	Kyushu	$r = 0.66$ $p = 0.22$	$r = 0.92$ $p = 0.026^*$	$r = 0.96$ $p = 0.0085^{**}$	$r = 0.68$ $p = 0.21$	$r = 0.99$ $p = 0.0021^{**}$
Raw vs Clr	3 groups	$r = 0.49$ $p = 0.015^*$	$r = 0.90$ $p = 1.3 \times 10^{-9}***$	$r = 0.69$ $p = 1.9 \times 10^{-4}***$	$r = 0.84$ $p = 2.8 \times 10^{-7}***$	$r = 0.97$ $p = 1.1 \times 10^{-15}***$
	Tohoku	$r = 0.65$ $p = 0.013^*$	$r = 0.89$ $p = 1.6 \times 10^{-5}***$	$r = 0.68$ $p = 0.0069^{**}$	$r = 0.87$ $p = 5.8 \times 10^{-5}***$	$r = 0.93$ $p = 1.1 \times 10^{-6}***$
	Niigata	$r = -0.095$ $p = 0.88$	$r = 0.97$ $p = 0.0075^{**}$	$r = 0.80$ $p = 0.10$	$r = 0.89$ $p = 0.046^*$	$r = 0.93$ $p = 0.022^*$
	Kyushu	$r = 0.67$ $p = 0.22$	$r = 0.92$ $p = 0.029^*$	$r = 0.96$ $p = 0.0090^{**}$	$r = 0.67$ $p = 0.22$	$r = 0.99$ $p = 0.0022^{**}$

Note: PR: protein, LI: lipid, CA: carbohydrate, WA: water, AS: ash. *: $p < 0.05$, **: $p < 0.01$, ***: $p < 0.001$.