Radiation Measurement Results of 112 Items in November

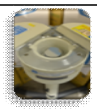
When samples include natural radionuclides we can't deny the possibility of their radiation value counted together in our results.

The list below only shows the measurement results of the samples brought in.

Radioactive contamination level may differ according to sampling points even within the same address.

★Gamma-ray

Measuring instrument		Feature	Guide to lower limit※
Na I Scintillation Spectrometer			
Product of ATOMTEX AT1320A	Product of BERTHOLD LB2045	・Gamma-ray spectrometer with Na I scintillation detector.	Food (Sample 1kg) Lower limit 1.0Bq/Kg Soil (Sample 1kg) Lower limit 2.5Bq/Kg Material (Sample 1kg) Lower limit 1.0Bq/Kg Water (Sample 20L) Lower limit 0.02Bq/L

※The lower limit varies depending on the sample weight and measurement time.

Measuring instrument:Na I Scintillation Spectrometer (Bq/kg raw:Weight of raw sample Bq/kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measurement Result		Uncertainty		Total Amount of Cesium	Minimum Limit of Detection	
Sweet potato	Sukagawa, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.7 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.5 Bq/kg raw
Sweet potato	Miharu,Tamura, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.2 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.0 Bq/kg raw
Potato	Minamiaizu, Fukushima	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.1 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.9 Bq/kg raw
Taro	Tomioka, Futaba,Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.8 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.4 Bq/kg raw
Pumpkin	Naraha,Futaba, Fukushima	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.8 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.4 Bq/kg raw
Pumpkin	Tomioka, Futaba,Fukushima	Nov-24	Cs137	1.7 Bq/kg raw	±	1.2 Bq/kg raw	1.7	Cs137	1.6 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.3 Bq/kg raw
Turnip	Koriyama, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.6 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.3 Bq/kg raw
Red turnip	Kakuta,Miyagi	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.9 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.7 Bq/kg raw
Red turnip (leaf,stalk)	Kakuta,Miyagi	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	3.1 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.8 Bq/kg raw
Japanese white radish	Koriyama, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.1 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.0 Bq/kg raw
Japanese white radish	Kakuta,Miyagi	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.4 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.2 Bq/kg raw
Japanese red radish	Minamiaizu, Fukushima	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.2 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.0 Bq/kg raw
Carrot	Tomioka, Futaba,Fukushima	Nov-24	Cs137	2.3 Bq/kg raw	±	1.3 Bq/kg raw	2.3	Cs137	2.2 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.0 Bq/kg raw
Chinese cabbage	Koriyama, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.2 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.0 Bq/kg raw
Green onion	Koriyama, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.7 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.4 Bq/kg raw
Yacon	Nihonmatsu, Fukushima	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.3 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.1 Bq/kg raw
Wax gourd	Nihonmatsu, Fukushima	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.0 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.9 Bq/kg raw

※"—" used in Measurement Result and Uncertainty shows that the value is below the detection limit.
But it does not necessary mean 0(zero)Bq/kg.

Mothers' Radiation Lab Fukushima

★Gamma-ray

(Bq/kg raw:Weight of raw sample Bq/kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measurement Result		Uncertainty		Total Amount of Cesium	Minimum Limit of Detection	
Chayote	Tomioka,Futaba, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.3 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.2 Bq/kg raw
Chayote	Minamiaizu, Fukushima	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.2 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.1 Bq/kg raw
White eggplant	Marumori,Igu, Miyagi	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	3.2 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	3.0 Bq/kg raw
Broccoli	Koriyama, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.2 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.7 Bq/kg raw
Cauliflower	Otama,Adachi, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	16.6 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	13.1 Bq/kg raw
Green pepper	Minamiaizu, Fukushima	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	3.0 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.8 Bq/kg raw
Lotus root	Ibaraki Pref.	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.6 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.4 Bq/kg raw
Burdock	Tamura, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.4 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.2 Bq/kg raw
Sweet chili pepper	Koriyama, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	3.7 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	3.4 Bq/kg raw
Ginger	Kakuta,Miyagi	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.8 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.6 Bq/kg raw
Common bean	Kakuta,Miyagi	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.2 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.7 Bq/kg raw
Spinach	Koriyama, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.4 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.2 Bq/kg raw
Spinach	Ibaraki Pref.	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.1 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.6 Bq/kg raw
Japanese mustard spinach	Tamura, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	3.0 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.8 Bq/kg raw
Garland chrysanthemum	Marumori,Igu, Miyagi	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	3.7 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	3.4 Bq/kg raw
Chinese quince	Miharu,Tamura, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.9 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.5 Bq/kg raw
Persimmon	Aizuwakamatsu, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	2.2 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.8 Bq/kg raw
Kiwi fruit	Koriyama, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.6 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.3 Bq/kg raw
Kiwi fruit	Miharu,Tamura, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.6 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.2 Bq/kg raw
Tofu	Maebashi, Gunma	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.9 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.4 Bq/kg raw
Green beans	Koriyama, Fukushima	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.4 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.1 Bq/kg raw
Nameko mushroom	Koriyama, Fukushima	Nov-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	3.0 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	2.3 Bq/kg raw
Nameko mushroom	Kakuta,Miyagi	Nov-24	Cs137	3.3 Bq/kg raw	±	1.4 Bq/kg raw	3.3	Cs137	1.8 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.4 Bq/kg raw
Oyster mushroom (cultivation)	Date,Fukushima	Oct-24	Cs137	— Bq/kg raw	±	— Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.5 Bq/kg raw
			Cs134	— Bq/kg raw	±	— Bq/kg raw		Cs134	1.1 Bq/kg raw

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★Gamma-ray

(Bq/kg raw:Weight of raw sample Bq/kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measurement Result			Uncertainty			Total Amount of Cesium	Minimum Limit of Detection		
Oyster mushroom	Marumori, Igu,Miyagi	Nov-24	Cs137	3.6	Bq/kg raw	±	2.0	Bq/kg raw	3.6	Cs137	3.3	Bq/kg raw
			Cs134	—	Bq/kg raw	±	—	Bq/kg raw		Cs134	3.1	Bq/kg raw
Shimeji mushroom	Marumori, Igu,Miyagi	Nov-24	Cs137	8.4	Bq/kg raw	±	2.2	Bq/kg raw	8.4	Cs137	2.4	Bq/kg raw
			Cs134	—	Bq/kg raw	±	—	Bq/kg raw		Cs134	2.2	Bq/kg raw
Shitake mushroom grown in bacteria-bed(dried)	Iwaki City	Oct-24	Cs137	39.8	Bq/kg raw	±	9.6	Bq/kg raw	39.8	Cs137	9.2	Bq/kg raw
			Cs134	—	Bq/kg raw	±	—	Bq/kg raw		Cs134	7.3	Bq/kg raw
Shitake mushroom grown in bacteria-bed	Nihonmatsu, Fukushima	Oct-24	Cs137	—	Bq/kg raw	±	—	Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.1	Bq/kg raw
			Cs134	—	Bq/kg raw	±	—	Bq/kg raw		Cs134	1.0	Bq/kg raw
Soil	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	656.0	Bq/kg dry	±	66.8	Bq/kg dry	667.6	Cs137	1.7	Bq/kg dry
			Cs134	11.6	Bq/kg dry	±	1.6	Bq/kg dry		Cs134	1.9	Bq/kg dry
Soil	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	345.0	Bq/kg dry	±	35.6	Bq/kg dry	350.1	Cs137	1.4	Bq/kg dry
			Cs134	5.1	Bq/kg dry	±	0.9	Bq/kg dry		Cs134	1.7	Bq/kg dry
Soil	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	253.0	Bq/kg dry	±	26.8	Bq/kg raw	253.0	Cs137	3.5	Bq/kg dry
			Cs134	—	Bq/kg dry	±	—	Bq/kg raw		Cs134	3.2	Bq/kg dry
Soil	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	231.0	Bq/kg dry	±	24.7	Bq/kg dry	231.0	Cs137	3.8	Bq/kg dry
			Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	3.5	Bq/kg dry
Soil(under the Horizontal bar)	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	483.0	Bq/kg dry	±	49.3	Bq/kg dry	488.3	Cs137	1.4	Bq/kg dry
			Cs134	5.3	Bq/kg dry	±	0.9	Bq/kg dry		Cs134	1.7	Bq/kg dry
Soil(under the playground equipment②)	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	299.0	Bq/kg dry	±	30.9	Bq/kg dry	303.6	Cs137	1.3	Bq/kg dry
			Cs134	4.6	Bq/kg dry	±	0.8	Bq/kg dry		Cs134	1.6	Bq/kg dry
Soil (under the bench①)	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	263.0	Bq/kg dry	±	27.2	Bq/kg dry	263.0	Cs137	2.1	Bq/kg dry
			Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	1.9	Bq/kg dry
Soil (under the swing)	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	235.0	Bq/kg dry	±	25.0	Bq/kg dry	235.0	Cs137	3.5	Bq/kg dry
			Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	3.2	Bq/kg dry
Soil (under the bench②)	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	210.0	Bq/kg dry	±	22.5	Bq/kg dry	210.0	Cs137	3.6	Bq/kg dry
			Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	3.3	Bq/kg dry
Soil (under the swing)	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	176.0	Bq/kg dry	±	18.8	Bq/kg dry	176.0	Cs137	3.0	Bq/kg dry
			Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	2.8	Bq/kg dry
Soil(under the playground equipment①)	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	150.0	Bq/kg dry	±	16.2	Bq/kg dry	150.0	Cs137	2.9	Bq/kg dry
			Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	2.7	Bq/kg dry
Soil (under the slide)	Ozima,Uchigo,Iwaki Ozima Park1	Aug-24	Cs137	102.0	Bq/kg dry	±	10.8	Bq/kg dry	102.0	Cs137	1.3	Bq/kg dry
			Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	1.2	Bq/kg dry

※"—" used in Measurement Result and Uncertainty shows that the value is below the detection limit.
But it does not necessary mean 0(zero)Bq/kg.

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★Gamma-ray

Measuring instrument		Feature	Guide to lower limit※
Germanium Semiconductor detector			
ORTEC GEM30-70	CANBERRA GC4020	・Radioactivity measurement series. Quantitative analysis based on "Gamma-ray spectrometry with germanium semiconductor detector." ・ORTEC GEM30-70 Relative efficiency 35% ・CANBERRA GC4020 Relative efficiency 43%	Food (Sample 2kg) Lower limit 0.04Bq/Kg Soil (Sample 1kg) Lower limit 0.06Bq/Kg Material (Sample 1kg) Lower limit 0.06Bq/Kg Water (Sample 20L) Lower limit 0.001Bq/L
			

※The lower limit varies depending on the sample weight and measurement time.

Measuring instrument:Germanium Semiconductor detector (Bq/kg raw:Weight of raw sample Bq/kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measuring instrument type	Measurement Result		Uncertainty		Total Amount of Cesium	Minimum Limit of Detection	
Rice	Iwaki City	Oct-23	CA	Cs137	0.12 Bq/kg raw	± 0.01	Bq/kg raw	0.12	Cs137	0.04 Bq/kg raw
				Cs134	— Bq/kg raw	± —	Bq/kg raw		Cs134	0.05 Bq/kg raw
Rice	Aizuwakamatsu, Fukushima	Oct-23	OR	Cs137	0.13 Bq/kg raw	± 0.01	Bq/kg raw	0.13	Cs137	0.02 Bq/kg raw
				Cs134	— Bq/kg raw	± —	Bq/kg raw		Cs134	0.03 Bq/kg raw
Sweet potato	Iwaki City	Nov-24	OR	Cs137	1.46 Bq/kg raw	± 0.02	Bq/kg raw	1.49	Cs137	0.03 Bq/kg raw
				Cs134	0.03 Bq/kg raw	± 0.01	Bq/kg raw		Cs134	0.02 Bq/kg raw
Horse mackerel	Iwaki City Numanouchi Port	Nov-24	OR	Cs137	0.31 Bq/kg raw	± 0.04	Bq/kg raw	0.31	Cs137	0.09 Bq/kg raw
				Cs134	— Bq/kg raw	± —	Bq/kg raw		Cs134	0.09 Bq/kg raw
Dried shiitake mushrooms (log-grown)	Ayabe,Kyoto	Oct-24	OR	Cs137	3.0 Bq/kg raw	± 0.1	Bq/kg raw	3.0	Cs137	0.2 Bq/kg raw
				Cs134	— Bq/kg raw	± —	Bq/kg raw		Cs134	0.3 Bq/kg raw
Pholiota squarrosa	Funehiki, Tamura,Fukushima	Nov-24	CA	Cs137	— Bq/kg raw	± —	Bq/kg raw	Under Minimum Limit of Detection	Cs137	1.4 Bq/kg raw
				Cs134	— Bq/kg raw	± —	Bq/kg raw		Cs134	1.3 Bq/kg raw
Shimeji mushroom	Marumori, Igu,Miyagi	Nov-24	OR	Cs137	6.9 Bq/kg raw	± 0.1	Bq/kg raw	6.9	Cs137	0.1 Bq/kg raw
				Cs134	— Bq/kg raw	± —	Bq/kg raw		Cs134	0.1 Bq/kg raw
Easter lily (root)	Izumigaoka, Iwaki	Oct-24	CA	Cs137	— Bq/kg raw	± —	Bq/kg raw	Under Minimum Limit of Detection	Cs137	0.5 Bq/kg raw
				Cs134	— Bq/kg raw	± —	Bq/kg raw		Cs134	0.4 Bq/kg raw
Easter lily (root)	Izumigaoka, Iwaki	Oct-24	CA	Cs137	— Bq/kg raw	± —	Bq/kg raw	Under Minimum Limit of Detection	Cs137	0.6 Bq/kg raw
				Cs134	— Bq/kg raw	± —	Bq/kg raw		Cs134	0.5 Bq/kg raw
Tap water	Tadami,Minamiaizu, Fukushima	Oct-24	CA	Cs137	— Bq/L	± —	Bq/L	Under Minimum Limit of Detection	Cs137	0.0009 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.001 Bq/L
River water	Tadami,Minamiaizu, Fukushima	Oct-24	OR	Cs137	0.001 Bq/L	± 0.0004	Bq/L	0.001	Cs137	0.0009 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.001 Bq/L
Sea water	Iwaki City Onahama Port	Oct-24	OR	Cs137	0.005 Bq/L	± 0.0005	Bq/L	0.005	Cs137	0.001 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.001 Bq/L
Sea water	Tomioka,Futaba, Fukushima Tomioka Port	Oct-24	OR	Cs137	0.017 Bq/L	± 0.0007	Bq/L	0.017	Cs137	0.0009 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.001 Bq/L
Sea water	Watari,Miyagi Arahama Coast	Nov-24	OR	Cs137	0.002 Bq/L	± 0.0005	Bq/L	0.002	Cs137	0.0009 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.001 Bq/L
Sea water	Miyagi Pref. Hamaichi Coast	Nov-24	OR	Cs137	0.002 Bq/L	± 0.0005	Bq/L	0.002	Cs137	0.0009 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.001 Bq/L
Sea water (suspended solid)	Iwaki City Onahama Port	Oct-24	CA	Cs137	0.002 Bq/L	± 0.001	Bq/L	0.002	Cs137	0.002 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.002 Bq/L
Sea water (suspended solid)	Iwaki City Ena Port	Oct-24	CA	Cs137	— Bq/L	± —	Bq/L	Under Minimum Limit of Detection	Cs137	0.002 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.002 Bq/L
Sea water (suspended solid)	Iwaki City Obama Port	Oct-24	CA	Cs137	— Bq/L	± —	Bq/L	Under Minimum Limit of Detection	Cs137	0.001 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.001 Bq/L
Sea water (suspended solid)	Naraha,Futaba, Fukushima Iwasawa Beach	Nov-24	CA	Cs137	0.001 Bq/L	± 0.0009	Bq/L	0.001	Cs137	0.001 Bq/L
				Cs134	— Bq/L	± —	Bq/L		Cs134	0.001 Bq/L

※"_"used in Measurement Result and Uncertainty shows that the value is below the detection limit.
But it does not necessary mean 0(zero)Bq/kg.

Mothers' Radiation Lab Fukushima

★Gamma-ray

(Bq/kg raw:Weight of raw sample Bq/kg dry:Weight of dried sample)

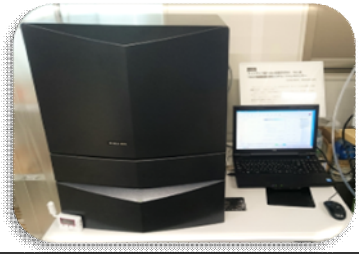
Samples	Sampling Point	Sampling Month	Measuring instrument type	Measurement Result			Uncertainty			Total Amount of Cesium	Minimum Limit of Detection		
Sea water (suspended solid)	Miyagi Arahama Port	Nov-24	CA	Cs137	—	Bq/L	±	—	Bq/L	Under Minimum Limit of Detection	Cs137	0.002	Bq/L
				Cs134	—	Bq/L	±	—	Bq/L		Cs134	0.002	Bq/L
Sea water (suspended solid)	Watari,Miyagi Arahama Coast	Nov-24	CA	Cs137	0.008	Bq/L	±	0.001	Bq/L	0.008	Cs137	0.001	Bq/L
				Cs134	—	Bq/L	±	—	Bq/L		Cs134	0.001	Bq/L
Sea water (suspended solid)	Miyagi Pref. Sendaishin Port	Nov-24	CA	Cs137	—	Bq/L	±	—	Bq/L	Under Minimum Limit of Detection	Cs137	0.002	Bq/L
				Cs134	—	Bq/L	±	—	Bq/L		Cs134	0.002	Bq/L
Lichenobionta	Minamisoma, Fukushima	Aug-24	CA	Cs137	48901.0	Bq/kg dry	±	60.0	Bq/kg dry	49636.7	Cs137	10.4	Bq/kg dry
				Cs134	735.7	Bq/kg dry	±	6.1	Bq/kg dry		Cs134	11.8	Bq/kg dry
Soil (field)	Iwaki City	Nov-24	OR	Cs137	158.0	Bq/kg dry	±	1.0	Bq/kg dry	160.3	Cs137	0.3	Bq/kg dry
				Cs134	2.3	Bq/kg dry	±	0.1	Bq/kg dry		Cs134	0.3	Bq/kg dry
Soil (under the jungle gym)	Ozima,Uchigo, Iwaki Ozima Park1	Aug-24	CA	Cs137	457.0	Bq/kg dry	±	6.1	Bq/kg dry	464.3	Cs137	2.4	Bq/kg dry
				Cs134	7.3	Bq/kg dry	±	1.0	Bq/kg dry		Cs134	2.5	Bq/kg dry
Soil	Tadami,Minamiaizu, Fukushima Kameoka Park	Oct-24	CA	Cs137	2.9	Bq/kg dry	±	1.0	Bq/kg dry	2.9	Cs137	2.0	Bq/kg dry
				Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	1.8	Bq/kg dry
Soil	Tadami,Minamiaizu, Fukushima Kameoka Park	Oct-24	CA	Cs137	5.3	Bq/kg dry	±	0.9	Bq/kg dry	5.3	Cs137	1.7	Bq/kg dry
				Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	1.5	Bq/kg dry
Soil	Tadami,Minamiaizu, Fukushima Kameoka Park	Oct-24	CA	Cs137	28.5	Bq/kg dry	±	1.3	Bq/kg dry	28.5	Cs137	1.5	Bq/kg dry
				Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	1.4	Bq/kg dry
Soil	Tadami,Minamiaizu, Fukushima Kameoka Park	Oct-24	OR	Cs137	4.9	Bq/kg dry	±	0.6	Bq/kg dry	4.9	Cs137	1.1	Bq/kg dry
				Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	1.1	Bq/kg dry
Soil	Tadami,Minamiaizu, Fukushima Kameoka Park	Oct-24	OR	Cs137	3.7	Bq/kg dry	±	0.6	Bq/kg dry	3.7	Cs137	1.1	Bq/kg dry
				Cs134	—	Bq/kg dry	±	—	Bq/kg dry		Cs134	1.2	Bq/kg dry

※"_"used in Measurement Result and Uncertainty shows that the value is below the detection limit.

But it does not necessary mean 0(zero)Bq/kg.

Mothers' Radiation Lab Fukushima

★Beta-ray

Measuring instrument		Feature
Liquid Scintillation Counter		
Product of Hidex **HIDEX 300SLL**	Product of PerkinElmer Japan **Quantulus GCT 6220**	Equipment for measuring low-energy beta-ray emission nuclides Measuring nuclide Strontium90 Half-life 30 years Organic bound Harf-life 12.3 years Free-water tritium Harf-life 12.3 years All samples are measured in liquid condition after several days of pretreatment.
		

(Bq/Kg raw:Weight of raw sample Bq/Kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measurement Result			Uncertainty			Minimum Limit of Detection	
Black rockfish(sebastes schlegelii)	Fukushima Daiichi Nuclear Power Station Offing	Jul-24	T(Tissue free water)	Under Minimum Limit of Detection	Bq/L	±	-	Bq/L	0.37	Bq/L
Flounder	Miyagi Pref. Sendai Bay	Sep-24	T(Tissue free water)	Under Minimum Limit of Detection	Bq/L	±	-	Bq/L	0.37	Bq/L
Sea water A (surface)	Fukushima Daiichi Nuclear Power Station Offing	Mar-24	T(Free)	0.14	Bq/L	±	0.05	Bq/L	0.04	Bq/L
Sea water A (lower)	Fukushima Daiichi Nuclear Power Station Offing	Mar-24	T(Free)	0.09	Bq/L	±	0.04	Bq/L	0.04	Bq/L
Sea water B (lower)	Fukushima Daiichi Nuclear Power Station Offing	Mar-24	T(free)	Under Minimum Limit of Detection	Bq/L	±	-	Bq/L	0.04	Bq/L
Sea water C (surface)	Fukushima Daiichi Nuclear Power Station Offing	Mar-24	T(free)	0.09	Bq/L	±	0.04	Bq/L	0.04	Bq/L
Sea water C (lower)	Fukushima Daiichi Nuclear Power Station Offing	Mar-24	T(free)	0.13	Bq/L	±	0.05	Bq/L	0.04	Bq/L
Sea water (surface)	Fukushima Pref. Tomioka Port	Mar-24	T(free)	0.15	Bq/L	±	0.05	Bq/L	0.04	Bq/L
Sea water D (surface)	Fukushima Daiichi Nuclear Power Station Offing	Jul-24	T(free)	0.30	Bq/L	±	0.05	Bq/L	0.04	Bq/L
Sea water D (lower)	Fukushima Daiichi Nuclear Power Station Offing	Jul-24	T(free)	0.14	Bq/L	±	0.05	Bq/L	0.04	Bq/L
Gurnard	Unknown	Dec-21	Sr90	Under Minimum Limit of Detection	Bq/kg dry	±	-	Bq/kg dry	0.12	Bq/kg dry
Sea robin	Unknown	Dec-21	Sr90	Under Minimum Limit of Detection	Bq/kg dry	±	-	Bq/kg dry	0.18	Bq/kg dry
Sea robin	Fukushima Pref. Nakanosaku Port	Jun-23	Sr90	Under Minimum Limit of Detection	Bq/kg dry	±	-	Bq/kg dry	0.12	Bq/kg dry
Sebastes cheni	Fukushima Daiichi Nuclear Power Station Offing	Apr-24	Sr90	Under Minimum Limit of Detection	Bq/kg dry	±	-	Bq/kg dry	0.12	Bq/kg dry
Sea water A (lower)	Miyagi Pref. Sendaishin Port Offing	Sep-24	Sr90	0.0007	Bq/L	±	0.0003	Bq/L	0.0004	Bq/L
Sea water B (surface)	Miyagi Pref. Abukuma Estuary Offing	Sep-24	Sr90	0.0008	Bq/L	±	0.0003	Bq/L	0.0004	Bq/L
Sea water B (lower)	Miyagi Pref. Abukuma Estuary Offing	Sep-24	Sr90	0.0007	Bq/L	±	0.0003	Bq/L	0.0004	Bq/L
Sea water C (surface)	Miyagi Pref. Abukuma Estuary Offing	Sep-24	Sr90	0.0011	Bq/L	±	0.0003	Bq/L	0.0005	Bq/L

(Bq/Kg raw:Weight of raw sample Bq/Kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measurement Result			Uncertainty			Minimum Limit of Detection	
Sea water C (lower)	Miyagi Pref. Higashimatsushima Offing	Sep-24	Sr90	0.0008	Bq/L	± 0.0003	Bq/L		0.0004	Bq/L
Sea water (surface)	Fukushima Pref. Tomioka Port	Oct-24	Sr90	0.0008	Bq/L	± 0.0003	Bq/L		0.0004	Bq/L
Sea water (surface)	Fukushima Pref. Ena Port	Oct-24	Sr90	0.0007	Bq/L	± 0.0003	Bq/L		0.0004	Bq/L
Sea water (surface)	Fukushima Pref. Obama Port	Oct-24	Sr90	0.0006	Bq/L	± 0.0003	Bq/L		0.0004	Bq/L
Tap water	Tadami,Minamiaizu, Fukushima	Oct-24	Sr90	Under Minimum Limit of Detection	Bq/L	± -	Bq/L		0.0004	Bq/L

Mothers' Radiation Lab Fukushima

Measuring instrument		Feature	
Germanium Semiconductor detector			
ORTEC GEM30-70	CANBERRA GC4020	・Radioactivity measurement series Quantitative analysis based on "Gamma-ray spectrometry with germanium semiconductor detector." ・ORTEC GEM30-70 Relative efficiency 35% ・CANBERRA GC4020 Relative efficiency 43%	・Measuring nuclides Cerium Half-life 284 days Ruthenium Half-life 374 days Niobium Half-life 20300 years Manganese Half-life 312 days Zinc Half-life 12.5 days Iron Half-life 45 days Cobalt Half-life 5.27 years
			

※The lower limit varies depending on the sample weight and measurement

Measuring instrument:Germanium Semiconductor detector

(Bq/kg raw:Weight of raw sample Bq/kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measuring instrument type	Measurement Result			Uncertainty			Minimum Limit of Detection		
Sea water D (surface)	Fukushima Daiichi Nuclear Power Station Offing	2024年7月	OR	Ce144	—	Bq/L	±	—	Bq/L	Ce144	0.01	Bq/L
				Ru106	—	Bq/L	±	—	Bq/L	Ru106	0.01	Bq/L
				Nb94	—	Bq/L	±	—	Bq/L	Nb94	0.001	Bq/L
				Mn54	—	Bq/L	±	—	Bq/L	Mn54	0.001	Bq/L
				Zn65	—	Bq/L	±	—	Bq/L	Zn65	0.003	Bq/L
				Fe59	—	Bq/L	±	—	Bq/L	Fe59	0.009	Bq/L
				Co60	—	Bq/L	±	—	Bq/L	Co60	0.001	Bq/L
Sea water D (lower)	Fukushima Daiichi Nuclear Power Station Offing	2024年7月	OR	Ce144	—	Bq/L	±	—	Bq/L	Ce144	0.01	Bq/L
				Ru106	—	Bq/L	±	—	Bq/L	Ru106	0.01	Bq/L
				Nb94	—	Bq/L	±	—	Bq/L	Nb94	0.001	Bq/L
				Mn54	—	Bq/L	±	—	Bq/L	Mn54	0.001	Bq/L
				Zn65	—	Bq/L	±	—	Bq/L	Zn65	0.003	Bq/L
				Fe59	—	Bq/L	±	—	Bq/L	Fe59	0.009	Bq/L
				Co60	—	Bq/L	±	—	Bq/L	Co60	0.001	Bq/L

※"_"used in Measurement Result and Uncertainty shows that the value is below the detection limit.
But it does not necessary mean 0(zero)Bq/kg.

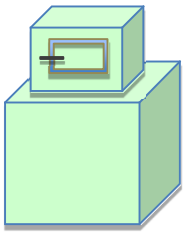
Mothers' Radiation Lab Fukushima

Measurement results of 16 items by germanium semiconductor detector

Dr.Tetsuji Imanaka,Institute of Multiple Nuclear Science,Kyoto University

In order to convey more measurement results to everyone, we have asked Dr. Tetsuji Imanaka of the Institute of Advanced Nuclear Science, Kyoto University, to measure low-dose samples using germanium semiconductor detectors. Measurement samples are not only from Fukushima Prefecture but also come from other prefectures. Please compare data based on measurements from various regions and use them to protect your children from radiation exposure.

★Gamma-ray



Measuring instrument：Germanium Semiconductor detector

・Product of CANBERRA(CA),USA GX3018 Relative efficiency 30% or more

・Product of ORTEC(OR),USA GMX25－70 Relative efficiency 35%

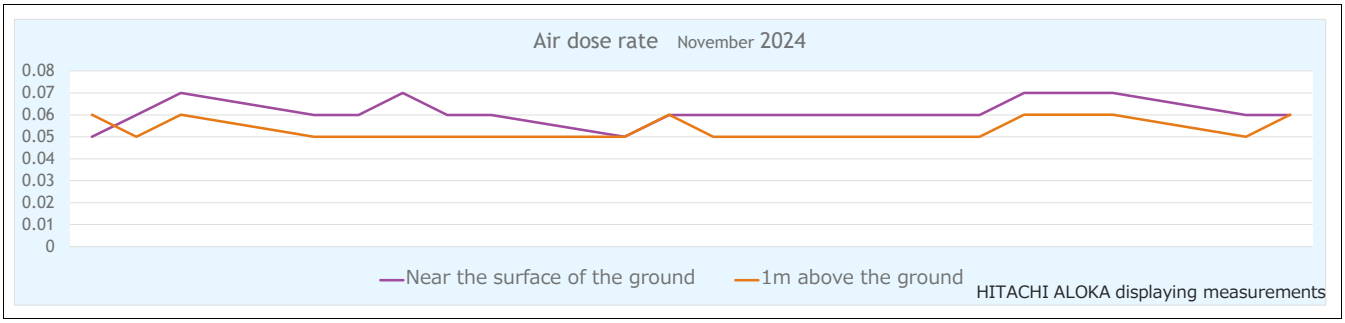
(Bq/kg raw:Weight of raw sample Bq/kg dry:Weight of dried sample)

Samples	Sampling Point	Sampling Month	Measuring instrument type	Measurement Result		Uncertainty		Total Amount of Cesium	Minimum Limit of Detection	
Potato	Otama,Adachi, Fukushima	Jul-24	CA	Cs137	0.12 Bq/kg raw	± 0.03 Bq/kg raw	0.12	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Spaghetti squash	Namie,Futaba, Fukushima	Sep-24	CA	Cs137	0.52 Bq/kg raw	± 0.03 Bq/kg raw	0.52	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Butternut squash	Hidaka, Saitama	Aug-24	OR	Cs137	0.06 Bq/kg raw	± 0.02 Bq/kg raw	0.06	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Japanese white radish	Katashina,Tone, Gunma	Aug-24	OR	Cs137	0.14 Bq/kg raw	± 0.05 Bq/kg raw	0.14	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Eggplant	Tsurugashima, Saitama	Aug-24	CA	Cs137	— Bq/kg raw	± — Bq/kg raw	Under Minimum Limit of Detection	Cs137	0.04 Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Green pepper shishito	Itate,Soma, Fukushima	Sep-24	OR	Cs137	0.8 Bq/kg raw	± 0.1 Bq/kg raw	0.8	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Water melon	Itate,Soma, Fukushima	Sep-24	CA	Cs137	0.23 Bq/kg raw	± 0.02 Bq/kg raw	0.23	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Grape	Kawauchi, Futaba,Fukushima	Sep-24	CA	Cs137	0.19 Bq/kg raw	± 0.04 Bq/kg raw	0.19	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Melon	Niigata Pref.	Jul-24	CA	Cs137	0.025 Bq/kg raw	± 0.017 Bq/kg raw	0.025	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Fig	Iwaki City	Aug-24	CA	Cs137	0.26 Bq/kg raw	± 0.03 Bq/kg raw	0.26	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Nectarine	Koriyama, Fukushima	Sep-24	OR	Cs137	0.04 Bq/kg raw	± 0.02 Bq/kg raw	0.04	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Malabar spinach	Namie,Futaba, Fukushima	Sep-24	CA	Cs137	2.3 Bq/kg raw	± 0.1 Bq/kg raw	2.3	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Perilla (seed)	Kawauchi, Futaba,Fukushima	Sep-24	OR	Cs137	1.1 Bq/kg raw	± 0.2 Bq/kg raw	1.1	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Ginger	Ibaraki Pref.	Aug-24	OR	Cs137	0.07 Bq/kg raw	± 0.03 Bq/kg raw	0.07	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Soybeans	Soma,Fukushima	Jul-24	OR	Cs137	— Bq/kg raw	± — Bq/kg raw	Under Minimum Limit of Detection	Cs137	0.5 Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw
Hen-of-the-woods	Yamagata Pref. Imori Mountain	Jun-24	OR	Cs137	2.1 Bq/kg raw	± 0.11 Bq/kg raw	2.1	Cs137	Bq/kg raw
				Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134	Bq/kg raw

Mothers' Radiation Lab Fukushima

Air dose rate November 2024

Measuring Instrument		Measuring Place
CsI Scintillation survey meter	NaI Scintillation survey meter	Yokocho Park, Onahama, Iwaki, Fukushima
⑧HITACHI ALOKA TCS-1172	⑦HORIBA Radi PA-1100	
		
Feature:Measuring air (space) radiation dose and radioactive surface contamination of human body and other things.		



	Measuring instrument	HITACHI ALOKA	HORIBA Radi	HITACHI ALOKA	HORIBA Radi
Measuring Date	Weather	Near the surface of the ground(μSv/h)		1m above the ground(μSv/h)	
2024/11/1	☀	0.05	0.049	0.06	0.058
Measuring Date	Weather	Near the surface of the ground(μSv/h)		1m above the ground(μSv/h)	
2024/11/5	☀	0.06	0.067	0.05	0.059
2024/11/6	☁	0.07	0.077	0.06	0.063
2024/11/7	☀	0.06	0.069	0.05	0.058
2024/11/8	☀	0.06	0.066	0.05	0.055
Measuring Date	Weather	Near the surface of the ground(μSv/h)		1m above the ground(μSv/h)	
2024/11/11	☀	0.07	0.072	0.05	0.057
2024/11/12	☀	0.06	0.061	0.05	0.059
2024/11/13	☀	0.06	0.067	0.05	0.064
2024/11/14	☀	0.05	0.067	0.05	0.063
2024/11/15	☂	0.06	0.069	0.06	0.061
Measuring Date	Weather	Near the surface of the ground(μSv/h)		1m above the ground(μSv/h)	
2024/11/18	☀	0.06	0.069	0.05	0.059
2024/11/19	☀	0.06	0.069	0.05	0.061
2024/11/21	☁	0.06	0.072	0.05	0.059
2024/11/22	☀	0.07	0.065	0.06	0.059
測定日	天気	地表付近(μSv/h)		地表 1m(μSv/h)	
2024/11/25	☀	0.07	0.070	0.06	0.061
2024/11/26	☀	0.06	0.064	0.05	0.060
2024/11/27	☁	0.06	0.067	0.06	0.059
2024/11/28	☀	0.07	0.071	0.06	0.060
2024/11/29	☀	0.06	0.069	0.06	0.061

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