



# Radiation Measurement Results of 167 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)
Germanium Semiconductor detector			
ORTEC GEM30-70		· Radioactivity measurement series. Quantitative analysis based on "Gamma-ray spectrometry with germanium semiconductor detector." · Relative efficiency 35%	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: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
Rice	Haramachi, Minamisoma, Fukushima	Oct-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 1.3 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 1.1 Bq/kg raw
Potato	Katsurao,Futaba, Fukushima	Nov-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 2.3 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 2.1 Bq/kg raw
Kukimo	Kusakidai,Iwaki	Oct-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 2.3 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 2.1 Bq/kg raw
Hodoimo (potatobean)	Hirata,Ishikawa, Fukushima	Nov-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 1.6 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 1.3 Bq/kg raw
Chinese cabbage	Hirata,Ishikawa, Fukushima	Nov-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 2.3 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 2.2 Bq/kg raw
Green pepper	Katsurao,Futaba, Fukushima	Nov-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 1.6 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 1.3 Bq/kg raw
Pumpkin	Iwaki city	Nov-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 2.2 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 2.0 Bq/kg raw
Lotus root	Fukushima Pref.	Sep-20	Cs137	4.5 Bq/kg raw	4.5	Cs137 1.4 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 1.3 Bq/kg raw
Yacon	Minamisoma, Fukushima	Nov-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 2.2 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 2.1 Bq/kg raw
Yacon	Hirata,Ishikawa, Fukushima	Nov-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 3.2 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 3.0 Bq/kg raw
Mirliton	Hirata,Ishikawa, Fukushima	Nov-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 1.9 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 1.5 Bq/kg raw
Butterbur	Iwaki city	Jul-20	Cs137	1.6 Bq/kg raw	1.6	Cs137 1.1 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 1.0 Bq/kg raw
Wild vegetable Mix (Boiled)	Japan (production)	Sep-20	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 2.2 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 2.1 Bq/kg raw
Citron	Kashima-ku, Minamisoma, Fukushima	Nov-20	Cs137	7.1 Bq/kg raw	7.1	Cs137 1.7 Bq/kg raw
			Cs134	— Bq/kg raw		Cs134 1.6 Bq/kg raw

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

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

★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
Apple	Aomori Pref.	Nov-20	Cs137	— Bq/kg raw	± — Bq/kg raw	Under Minimum Limit of Detection	Cs137 2.5 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 2.4 Bq/kg raw
Persimmon(pulp)	Okuma, Futaba, Fukushima	Oct-20	Cs137	25.9 Bq/kg raw	± 3.3 Bq/kg raw	25.9	Cs137 1.8 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 1.3 Bq/kg raw
Persimmon(pulp)	Nara Pref.	Nov-20	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 1.2 Bq/kg raw
Dried persimmon	Aizu, Fukushima	Oct-20	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
Fig	Fukushima Pref.	Nov-20	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 2.0 Bq/kg raw
Chinese quince	Iwaki city	Nov-20	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
Citrus sudachi (pulp)	Hashiriguma, Kashima, Iwaki	Nov-20	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 1.3 Bq/kg raw
Citrus sudachi (branch)	Hashiriguma, Kashima, Iwaki	Nov-20	Cs137	— Bq/kg raw	± — Bq/kg raw	Under Minimum Limit of Detection	Cs137 11.9 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 9.4 Bq/kg raw
Sarcodon aspratus mushroom(raw) wild	Akougi,Namie, Futaba, Fukushima	Nov-20	Cs137	119000.0 Bq/kg raw	± 24000.0 Bq/kg raw	124770.0	Cs137 20.8 Bq/kg raw
			Cs134	5770.0 Bq/kg raw	± 1150.0 Bq/kg raw		Cs134 16.4 Bq/kg raw
Boar (liver)	Onahama-kamikajiro, Iwaki	Nov-20	Cs137	4.8 Bq/kg raw	± 1.5 Bq/kg raw	4.8	Cs137 1.9 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 1.7 Bq/kg raw
Boar (heart)	Onahama-kamikajiro, Iwaki	Nov-20	Cs137	— Bq/kg raw	± — Bq/kg raw	Under Minimum Limit of Detection	Cs137 13.0 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 12.6 Bq/kg raw
Grasshoppers (boiled)	Kashima, Iwaki	Nov-20	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 2.5 Bq/kg raw
Yogurt (production)	Japan	Nov-20	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 1.8 Bq/kg raw
Konjac	Tabito, Iwaki	Nov-20	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 1.8 Bq/kg raw
Wild sesame	Kashima, Minamisoma, Fukushima	Nov-20	Cs137	— Bq/kg raw	± — Bq/kg raw	Under Minimum Limit of Detection	Cs137 4.9 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 4.6 Bq/kg raw
Mulberry leaves Powder	Nihonmatsu, Fukushima	Oct-20	Cs137	10.7 Bq/kg raw	± 2.6 Bq/kg raw	10.7	Cs137 2.1 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 1.5 Bq/kg raw
Pine cone	Akougi,Namie, Futaba, Fukushima	Nov-20	Cs137	11200.0 Bq/kg raw	± 2200.0 Bq/kg raw	11853.0	Cs137 17.0 Bq/kg raw
			Cs134	653.0 Bq/kg raw	± 131.0 Bq/kg raw		Cs134 16.2 Bq/kg raw
Pine cone (dropped)	Suetsugi, Hisanohama, Iwaki	Oct-20	Cs137	44.0 Bq/kg raw	± 11.0 Bq/kg raw	44.0	Cs137 10.3 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 9.8 Bq/kg raw
Pine cone (grows on trees)	Suetsugi, Hisanohama, Iwaki	Oct-20	Cs137	36.1 Bq/kg raw	± 7.9 Bq/kg raw	36.1	Cs137 7.8 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 6.3 Bq/kg raw
Pine leaves	Akougi,Namie, Futaba, Fukushima	Nov-20	Cs137	576.0 Bq/kg raw	± 115.0 Bq/kg raw	576.0	Cs137 27.2 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 21.2 Bq/kg raw
Pine leaves	Nogami, Okuma, Futaba, Fukushima	Oct-20	Cs137	789.0 Bq/kg raw	± 158.0 Bq/kg raw	833.7	Cs137 6.1 Bq/kg raw
			Cs134	44.7 Bq/kg raw	± 9.8 Bq/kg raw		Cs134 5.8 Bq/kg raw
Pine leaves	Suetsugi, Hisanohama, Iwaki	Oct-20	Cs137	13.9 Bq/kg raw	± 5.8 Bq/kg raw	13.9	Cs137 8.3 Bq/kg raw
			Cs134	— Bq/kg raw	± — Bq/kg raw		Cs134 7.4 Bq/kg raw
Cedar leaves	Tsushima,Namie, Futaba, Fukushima	Oct-20	Cs137	9470.0 Bq/kg raw	± 1890.0 Bq/kg raw	10032.0	Cs137 14.4 Bq/kg raw
			Cs134	562.0 Bq/kg raw	± 112.0 Bq/kg raw		Cs134 13.4 Bq/kg raw
Cedar leaves	Nogami, Okuma, Futaba, Fukushima	Oct-20	Cs137	1180.0 Bq/kg raw	± 240.0 Bq/kg raw	1238.1	Cs137 55.2 Bq/kg raw
			Cs134	58.1 Bq/kg raw	± 30.1 Bq/kg raw		Cs134 46.0 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.



★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	
Cedar leaves	Okawara, Okuma, Futaba, Fukushima	Oct-20	Cs137	764.0	Bq/kg raw ± 153.0	Bq/kg raw	<b>822.4</b>	Cs137 11.4 Bq/kg raw
			Cs134	58.4	Bq/kg raw ± 13.5	Bq/kg raw		Cs134 10.1 Bq/kg raw
Cedar leaves	Miyakojii, Tamura, Fukushima	Nov-20	Cs137	11.6	Bq/kg raw ± 5.2	Bq/kg raw	<b>11.6</b>	Cs137 7.4 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 7.0 Bq/kg raw
Cedar leaves	Suetsugi, Hisanohama, Iwaki	Oct-20	Cs137	14.8	Bq/kg raw ± 5.0	Bq/kg raw	<b>14.8</b>	Cs137 6.6 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 6.2 Bq/kg raw
Leaves	Nogami, Okuma, Futaba, Fukushima	Oct-20	Cs137	467.8	Bq/kg raw ± 45.7	Bq/kg raw	<b>490.4</b>	Cs137 11.5 Bq/kg raw
			Cs134	22.6	Bq/kg raw ± 8.3	Bq/kg raw		Cs134 9.9 Bq/kg raw
Leaves	Nogami, Okuma, Futaba, Fukushima	Oct-20	Cs137	36.4	Bq/kg raw ± 8.1	Bq/kg raw	<b>36.4</b>	Cs137 5.0 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 4.0 Bq/kg raw
Loquat leaves	Suetsugi, Hisanohama, Iwaki	Oct-20	Cs137	37.6	Bq/kg raw ± 10.8	Bq/kg raw	<b>37.6</b>	Cs137 12.5 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 11.9 Bq/kg raw
Leaves	Suetsugi, Hisanohama, Iwaki	Oct-20	Cs137	13.2	Bq/kg raw ± 6.8	Bq/kg raw	<b>13.2</b>	Cs137 9.3 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 7.0 Bq/kg raw
Green leopard plant	Suetsugi, Hisanohama, Iwaki	Oct-20	Cs137	11.7	Bq/kg raw ± 4.2	Bq/kg raw	<b>11.7</b>	Cs137 5.5 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 5.1 Bq/kg raw
Twig	Suetsugi, Hisanohama, Iwaki	Oct-20	Cs137	18.7	Bq/kg raw ± 4.1	Bq/kg raw	<b>18.7</b>	Cs137 3.8 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 2.8 Bq/kg raw
Nuts	Suetsugi, Hisanohama, Iwaki	Oct-20	Cs137	12.4	Bq/kg raw ± 3.4	Bq/kg raw	<b>12.4</b>	Cs137 3.6 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 3.3 Bq/kg raw
Fallen leaves	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	13.3	Bq/kg raw ± 6.5	Bq/kg raw	<b>13.3</b>	Cs137 8.6 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 6.7 Bq/kg raw
Fallen leaves	Oki Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	—	Bq/kg raw ± —	Bq/kg raw	Under Minimum Limit of Detection	Cs137 9.8 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 7.7 Bq/kg raw
Sasanqua	Chiba Pref.	Nov-20	Cs137	—	Bq/kg raw ± —	Bq/kg raw	Under Minimum Limit of Detection	Cs137 15.9 Bq/kg raw
			Cs134	—	Bq/kg raw ± —	Bq/kg raw		Cs134 11.7 Bq/kg raw
Soil	Nogami, Okuma, Futaba, Fukushima	Oct-20	Cs137	56400.0	Bq/kg raw ± 1130.0	Bq/kg raw	<b>59130.0</b>	Cs137 50.4 Bq/kg raw
			Cs134	2730.0	Bq/kg raw ± 55.0	Bq/kg raw		Cs134 40.4 Bq/kg raw
Soil①	Chuodaitakaku, Iwaki	Oct-20	Cs137	9190.0	Bq/kg dry ± 974.0	Bq/kg dry	<b>9694.0</b>	Cs137 11.7 Bq/kg dry
			Cs134	504.0	Bq/kg dry ± 63.9	Bq/kg dry		Cs134 12.6 Bq/kg dry
Soil②	Chuodaitakaku, Iwaki	Oct-20	Cs137	—	Bq/kg dry ± —	Bq/kg dry	Under Minimum Limit of Detection	Cs137 2.6 Bq/kg dry
			Cs134	—	Bq/kg dry ± —	Bq/kg dry		Cs134 3.3 Bq/kg dry
Soil	Ena, Iwaki	Nov-20	Cs137	—	Bq/kg dry ± —	Bq/kg dry	Under Minimum Limit of Detection	Cs137 2.6 Bq/kg dry
			Cs134	—	Bq/kg dry ± —	Bq/kg dry		Cs134 2.5 Bq/kg dry
Soil	Iritono, Tono, Iwaki	Nov-20	Cs137	—	Bq/kg dry ± —	Bq/kg dry	Under Minimum Limit of Detection	Cs137 2.7 Bq/kg dry
			Cs134	—	Bq/kg dry ± —	Bq/kg dry		Cs134 2.9 Bq/kg dry
Soil(in the park) Rest hut	Izumi Park Izumi, Iwaki	Oct-20	Cs137	2370.0	Bq/kg dry ± 252.0	Bq/kg dry	<b>2499.0</b>	Cs137 5.8 Bq/kg dry
			Cs134	129.0	Bq/kg dry ± 17.0	Bq/kg dry		Cs134 5.7 Bq/kg dry
Soil(in the park)	Izumi Park Izumi, Iwaki	Oct-20	Cs137	502.0	Bq/kg dry ± 56.4	Bq/kg dry	<b>531.4</b>	Cs137 8.5 Bq/kg dry
			Cs134	29.4	Bq/kg dry ± 6.1	Bq/kg dry		Cs134 12.2 Bq/kg dry
Soil(in the park)	Izumi Park Izumi, Iwaki	Oct-20	Cs137	363.0	Bq/kg dry ± 39.5	Bq/kg dry	<b>381.5</b>	Cs137 3.2 Bq/kg dry
			Cs134	18.5	Bq/kg dry ± 3.3	Bq/kg dry		Cs134 4.9 Bq/kg dry
Soil(in the park) Sandbox	Izumi Park Izumi, Iwaki	Oct-20	Cs137	269.0	Bq/kg dry ± 29.5	Bq/kg dry	<b>282.6</b>	Cs137 4.9 Bq/kg dry
			Cs134	13.6	Bq/kg dry ± 2.6	Bq/kg dry		Cs134 7.7 Bq/kg dry
Soil(in the park)	Izumi Park Izumi, Iwaki	Oct-20	Cs137	212.0	Bq/kg dry ± 23.5	Bq/kg dry	<b>223.2</b>	Cs137 2.8 Bq/kg dry
			Cs134	11.2	Bq/kg dry ± 2.4	Bq/kg dry		Cs134 3.3 Bq/kg dry
Soil(in the park)	Izumi Park Izumi, Iwaki	Oct-20	Cs137	72.0	Bq/kg dry ± 8.0	Bq/kg dry	<b>76.9</b>	Cs137 2.5 Bq/kg dry
			Cs134	4.9	Bq/kg dry ± 1.1	Bq/kg dry		Cs134 4.5 Bq/kg dry

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



## ★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	
Soil (in the park) under the Swing	Izumi Park Izumi, Iwaki	Oct-20	Cs137	62.2	Bq/kg dry ± 8.0	62.2	Cs137	6.9 Bq/kg dry
			Cs134	—	Bq/kg dry ± —		Cs134	11.3 Bq/kg dry
Soil(in the park)	Izumi Park Izumi, Iwaki	Oct-20	Cs137	60.3	Bq/kg dry ± 7.1	60.3	Cs137	3.8 Bq/kg dry
			Cs134	—	Bq/kg dry ± —		Cs134	5.4 Bq/kg dry
Soil(in the park)under the Playground equipment	Izumi Park Izumi, Iwaki	Oct-20	Cs137	24.0	Bq/kg dry ± 3.4	24.0	Cs137	5.6 Bq/kg dry
			Cs134	—	Bq/kg dry ± —		Cs134	7.3 Bq/kg dry
Soil(in the park)	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	1700.0	Bq/kg dry ± 181.0	1793.6	Cs137	8.4 Bq/kg dry
			Cs134	93.6	Bq/kg dry ± 12.6		Cs134	8.2 Bq/kg dry
Soil(in the park)	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	976.0	Bq/kg dry ± 115.0	1017.5	Cs137	7.0 Bq/kg dry
			Cs134	41.5	Bq/kg dry ± 10.0		Cs134	8.2 Bq/kg dry
Soil(in the park)	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	774.0	Bq/kg dry ± 84.9	816.2	Cs137	7.6 Bq/kg dry
			Cs134	42.2	Bq/kg dry ± 6.1		Cs134	8.3 Bq/kg dry
Soil(in the park)	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	525.0	Bq/kg dry ± 53.3	550.0	Cs137	2.7 Bq/kg dry
			Cs134	25.0	Bq/kg dry ± 3.1		Cs134	3.6 Bq/kg dry
Soil (in the park) under the slide	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	340.0	Bq/kg dry ± 37.7	361.4	Cs137	3.9 Bq/kg dry
			Cs134	21.4	Bq/kg dry ± 2.7		Cs134	5.5 Bq/kg dry
Soil(in the park)	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	286.0	Bq/kg dry ± 31.6	302.8	Cs137	5.2 Bq/kg dry
			Cs134	16.8	Bq/kg dry ± 2.7		Cs134	6.4 Bq/kg dry
Soil (in the park) under the Swing	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	168.0	Bq/kg dry ± 18.9	177.3	Cs137	3.9 Bq/kg dry
			Cs134	9.3	Bq/kg dry ± 2.1		Cs134	5.5 Bq/kg dry
Soil(in the park)	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	146.0	Bq/kg dry ± 17.0	153.0	Cs137	4.9 Bq/kg dry
			Cs134	7.0	Bq/kg dry ± 2.2		Cs134	6.3 Bq/kg dry
Soil(in the park) Sandbox①	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	—	Bq/kg dry ± —	Under Minimum Limit of Detection	Cs137	3.8 Bq/kg dry
			Cs134	—	Bq/kg dry ± —		Cs134	4.0 Bq/kg dry
Soil(in the park) Sandbox②	Izuminishi Park Izumi, Iwaki	Oct-20	Cs137	—	Bq/kg dry ± —	Under Minimum Limit of Detection	Cs137	3.8 Bq/kg dry
			Cs134	—	Bq/kg dry ± —		Cs134	3.9 Bq/kg dry
Soil(in the park)	Izumiminami Park Izumi, Iwaki	Oct-20	Cs137	791.0	Bq/kg dry ± 86.2	826.7	Cs137	3.7 Bq/kg dry
			Cs134	35.7	Bq/kg dry ± 6.2		Cs134	4.6 Bq/kg dry
Soil(in the park)	Izumiminami Park Izumi, Iwaki	Oct-20	Cs137	536.0	Bq/kg dry ± 65.0	561.4	Cs137	7.7 Bq/kg dry
			Cs134	25.4	Bq/kg dry ± 8.1		Cs134	8.8 Bq/kg dry
Soil(in the park)	Izumiminami Park Izumi, Iwaki	Oct-20	Cs137	372.0	Bq/kg dry ± 40.3	390.7	Cs137	3.9 Bq/kg dry
			Cs134	18.7	Bq/kg dry ± 3.3		Cs134	4.5 Bq/kg dry
Soil (in the park) under the slide	Izumiminami Park Izumi, Iwaki	Oct-20	Cs137	253.0	Bq/kg dry ± 27.9	266.1	Cs137	5.1 Bq/kg dry
			Cs134	13.1	Bq/kg dry ± 2.5		Cs134	6.2 Bq/kg dry
Soil (in the park) under the Swing	Izumiminami Park Izumi, Iwaki	Oct-20	Cs137	135.0	Bq/kg dry ± 15.0	142.9	Cs137	4.2 Bq/kg dry
			Cs134	7.9	Bq/kg dry ± 1.6		Cs134	5.2 Bq/kg dry
Soil(in the park)	Izumiminami Park Izumi, Iwaki	Oct-20	Cs137	136.0	Bq/kg dry ± 20.7	136.0	Cs137	3.9 Bq/kg dry
			Cs134	—	Bq/kg dry ± —		Cs134	5.7 Bq/kg dry
Soil(in the park)	Izumiminami Park Izumi, Iwaki	Oct-20	Cs137	83.0	Bq/kg dry ± 9.3	88.2	Cs137	2.5 Bq/kg dry
			Cs134	5.2	Bq/kg dry ± 1.2		Cs134	4.3 Bq/kg dry
Soil(in the park)under the Playground equipment	Izumiminami Park Izumi, Iwaki	Oct-20	Cs137	51.4	Bq/kg dry ± 6.3	51.4	Cs137	4.5 Bq/kg dry
			Cs134	—	Bq/kg dry ± —		Cs134	7.5 Bq/kg dry
Soil(in the park)Sandbox	Izumiminami Park Izumi, Iwaki	Oct-20	Cs137	—	Bq/kg dry ± —	Under Minimum Limit of Detection	Cs137	4.5 Bq/kg dry
			Cs134	—	Bq/kg dry ± —		Cs134	5.4 Bq/kg dry
Soil(in the park)	Izumishimizu Park Izumi, Iwaki	Oct-20	Cs137	1150.0	Bq/kg dry ± 125.0	1204.8	Cs137	4.7 Bq/kg dry
			Cs134	54.8	Bq/kg dry ± 8.8		Cs134	6.2 Bq/kg dry
Soil(in the park)	Izumishimizu Park Izumi, Iwaki	Oct-20	Cs137	850.0	Bq/kg dry ± 92.5	891.9	Cs137	7.0 Bq/kg dry
			Cs134	41.9	Bq/kg dry ± 7.1		Cs134	8.8 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.

## ★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	
Soil (in the park) under the Swing	Izumishimizu Park Izumi, Iwaki	Oct-20	Cs137	851.0	Bq/kg dry	± 86.3	Bq/kg dry	890.2	Cs137 3.6 Bq/kg dry
			Cs134	39.2	Bq/kg dry	± 4.7	Bq/kg dry		Cs134 4.8 Bq/kg dry
Soil (in the park) under the Horizontal bar	Izumishimizu Park Izumi, Iwaki	Oct-20	Cs137	456.0	Bq/kg dry	± 50.0	Bq/kg dry	477.9	Cs137 6.4 Bq/kg dry
			Cs134	21.9	Bq/kg dry	± 4.1	Bq/kg dry		Cs134 9.8 Bq/kg dry
Soil (in the park) under the slide	Izumishimizu Park Izumi, Iwaki	Oct-20	Cs137	226.0	Bq/kg dry	± 25.0	Bq/kg dry	235.0	Cs137 5.1 Bq/kg dry
			Cs134	9.0	Bq/kg dry	± 2.4	Bq/kg dry		Cs134 7.4 Bq/kg dry
Soil(in the park)	Izumishimizu Park Izumi, Iwaki	Oct-20	Cs137	201.0	Bq/kg dry	± 22.0	Bq/kg dry	211.0	Cs137 2.8 Bq/kg dry
			Cs134	10.0	Bq/kg dry	± 2.0	Bq/kg dry		Cs134 4.5 Bq/kg dry
Soil(in the park)	Izumishimizu Park Izumi, Iwaki	Oct-20	Cs137	194.0	Bq/kg dry	± 21.3	Bq/kg dry	203.7	Cs137 2.6 Bq/kg dry
			Cs134	9.7	Bq/kg dry	± 2.0	Bq/kg dry		Cs134 4.0 Bq/kg dry
Soil (in the park) Sandbox	Izumishimizu Park Izumi, Iwaki	Oct-20	Cs137	—	Bq/kg dry	± —	Bq/kg dry	Under Minimum Limit of Detection	Cs137 4.9 Bq/kg dry
			Cs134	—	Bq/kg dry	± —	Bq/kg dry		Cs134 4.6 Bq/kg dry
Soil(in the park)	Oki Park Izumi, Iwaki	Nov-20	Cs137	695.0	Bq/kg dry	± 74.9	Bq/kg dry	730.4	Cs137 5.3 Bq/kg dry
			Cs134	35.4	Bq/kg dry	± 5.9	Bq/kg dry		Cs134 7.6 Bq/kg dry
Soil (in the park) under the slide	Oki Park Izumi, Iwaki	Nov-20	Cs137	351.0	Bq/kg dry	± 38.3	Bq/kg dry	369.8	Cs137 5.9 Bq/kg dry
			Cs134	18.8	Bq/kg dry	± 3.5	Bq/kg dry		Cs134 9.0 Bq/kg dry
Soil(in the park)	Oki Park Izumi, Iwaki	Nov-20	Cs137	337.0	Bq/kg dry	± 37.5	Bq/kg dry	351.6	Cs137 5.9 Bq/kg dry
			Cs134	14.6	Bq/kg dry	± 3.2	Bq/kg dry		Cs134 8.4 Bq/kg dry
Soil(in the park)	Oki Park Izumi, Iwaki	Nov-20	Cs137	244.0	Bq/kg dry	± 27.9	Bq/kg dry	256.2	Cs137 2.9 Bq/kg dry
			Cs134	12.2	Bq/kg dry	± 3.2	Bq/kg dry		Cs134 3.5 Bq/kg dry
Soil (in the park) under the slide	Oki Park Izumi, Iwaki	Nov-20	Cs137	210.0	Bq/kg dry	± 27.0	Bq/kg dry	216.4	Cs137 2.6 Bq/kg dry
			Cs134	6.4	Bq/kg dry	± 1.4	Bq/kg dry		Cs134 4.1 Bq/kg dry
Soil(in the park)	Oki Park Izumi, Iwaki	Nov-20	Cs137	181.0	Bq/kg dry	± 20.1	Bq/kg dry	189.2	Cs137 2.5 Bq/kg dry
			Cs134	8.2	Bq/kg dry	± 2.0	Bq/kg dry		Cs134 3.2 Bq/kg dry
Soil (in the park) under the Swing	Oki Park Izumi, Iwaki	Nov-20	Cs137	154.0	Bq/kg dry	± 18.1	Bq/kg dry	162.6	Cs137 5.0 Bq/kg dry
			Cs134	8.6	Bq/kg dry	± 1.8	Bq/kg dry		Cs134 6.2 Bq/kg dry
Soil(in the park)	Oki Park Izumi, Iwaki	Nov-20	Cs137	125.0	Bq/kg dry	± 13.7	Bq/kg dry	131.2	Cs137 2.5 Bq/kg dry
			Cs134	6.2	Bq/kg dry	± 1.4	Bq/kg dry		Cs134 3.2 Bq/kg dry
Soil(in the park) under the Playground equipment	Oki Park Izumi, Iwaki	Nov-20	Cs137	—	Bq/kg dry	± —	Bq/kg dry	Under Minimum Limit of Detection	Cs137 4.7 Bq/kg dry
			Cs134	—	Bq/kg dry	± —	Bq/kg dry		Cs134 4.6 Bq/kg dry
Soil(in the park) Sandbox	Oki Park Izumi, Iwaki	Nov-20	Cs137	—	Bq/kg dry	± —	Bq/kg dry	Under Minimum Limit of Detection	Cs137 2.3 Bq/kg dry
			Cs134	—	Bq/kg dry	± —	Bq/kg dry		Cs134 2.8 Bq/kg dry
Soil(in the park) under the Playground equipment	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	313.0	Bq/kg dry	± 34.0	Bq/kg dry	328.7	Cs137 4.4 Bq/kg dry
			Cs134	15.7	Bq/kg dry	± 2.8	Bq/kg dry		Cs134 6.5 Bq/kg dry
Soil(in the park)	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	175.0	Bq/kg dry	± 18.1	Bq/kg dry	175.0	Cs137 2.8 Bq/kg dry
			Cs134	—	Bq/kg dry	± —	Bq/kg dry		Cs134 3.3 Bq/kg dry
Soil(in the park)	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	131.0	Bq/kg dry	± 14.9	Bq/kg dry	140.1	Cs137 3.3 Bq/kg dry
			Cs134	9.1	Bq/kg dry	± 2.2	Bq/kg dry		Cs134 5.6 Bq/kg dry
Soil(in the park)	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	132.0	Bq/kg dry	± 15.3	Bq/kg dry	132.0	Cs137 6.4 Bq/kg dry
			Cs134	—	Bq/kg dry	± —	Bq/kg dry		Cs134 10.7 Bq/kg dry
Soil(in the park)	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	55.5	Bq/kg dry	± 6.8	Bq/kg dry	55.5	Cs137 4.9 Bq/kg dry
			Cs134	—	Bq/kg dry	± —	Bq/kg dry		Cs134 7.6 Bq/kg dry
Soil (in the park) under the slide	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	47.3	Bq/kg dry	± 6.1	Bq/kg dry	47.3	Cs137 4.9 Bq/kg dry
			Cs134	—	Bq/kg dry	± —	Bq/kg dry		Cs134 6.1 Bq/kg dry
Soil(in the park)	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	—	Bq/kg dry	± —	Bq/kg dry	Under Minimum Limit of Detection	Cs137 5.4 Bq/kg dry
			Cs134	—	Bq/kg dry	± —	Bq/kg dry		Cs134 6.8 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.

## ★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	
Soil (in the park) Sandbox	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	— Bq/kg dry	± — Bq/kg dry	Under Minimum Limit of Detection	Cs137	4.4 Bq/kg dry
			Cs134	— Bq/kg dry	± — Bq/kg dry		Cs134	5.4 Bq/kg dry
Soil (in the park) under the Swing	Maehara Park Tamatsuyu, Izumi, Iwaki	Nov-20	Cs137	— Bq/kg dry	± — Bq/kg dry	Under Minimum Limit of Detection	Cs137	2.4 Bq/kg dry
			Cs134	— Bq/kg dry	± — Bq/kg dry		Cs134	3.0 Bq/kg dry
Vacuum cleaner dust	Onahama-hanabatake, Iwaki	Nov-20	Cs137	404.4 Bq/kg raw	± 38.7 Bq/kg raw	417.2		Cs137 8.3 Bq/kg raw
			Cs134	12.8 Bq/kg raw	± 5.3 Bq/kg raw			Cs134 6.2 Bq/kg raw

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



## ★Gamma-ray

Measuring instrument		Feature	Guide to lower limit※
NaI Scintillation Spectrometer			
Product of ATOMTEX AT1320A	Product of BERTHOLD LB2045	• Gamma-ray spectrometer with NaI 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
Germanium Semiconductor detector			
ORTEC GEM30-70		• Radioactivity measurement series. Quantitative analysis based on "Gamma-ray spectrometry with germanium semiconductor detector." • Relative efficiency 35%	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	Measurement Result	Uncertainty	Total Amount of Cesium	Minimum Limit of Detection
Taro stem	Kusakidai, Iwaki	Oct-20	Cs137 0.65 Bq/kg raw	± 0.06 Bq/kg raw	<b>0.65</b>	Cs137 0.11 Bq/kg raw
			Cs134 — Bq/kg raw	± — Bq/kg raw		Cs134 0.11 Bq/kg raw
Butterbur	Akougi, Namie, Futaba, Fukushima	Nov-20	Cs137 1264.9 Bq/kg raw	± 27.1 Bq/kg raw	<b>1334.6</b>	Cs137 11.0 Bq/kg raw
			Cs134 69.7 Bq/kg raw	± 8.0 Bq/kg raw		Cs134 11.7 Bq/kg raw
Kiwi fruit	Akougi, Namie, Futaba, Fukushima	Nov-20	Cs137 216.4 Bq/kg raw	± 2.0 Bq/kg raw	<b>227.5</b>	Cs137 0.6 Bq/kg raw
			Cs134 11.1 Bq/kg raw	± 0.5 Bq/kg raw		Cs134 0.6 Bq/kg raw
Kiwi fruit	Akougi, Namie, Futaba, Fukushima	Nov-20	Cs137 50.8 Bq/kg raw	± 1.1 Bq/kg raw	<b>54.0</b>	Cs137 0.4 Bq/kg raw
			Cs134 3.2 Bq/kg raw	± 0.3 Bq/kg raw		Cs134 0.5 Bq/kg raw
Wild Japanese pear	Miyakoji, Tamura, Fukushima	Oct-20	Cs137 2.1 Bq/kg raw	± 0.2 Bq/kg raw	<b>2.1</b>	Cs137 0.4 Bq/kg raw
			Cs134 — Bq/kg raw	± — Bq/kg raw		Cs134 0.4 Bq/kg raw
Persimmon(pulp)	Kurume, Koriyama, Fukushima	Nov-20	Cs137 0.3 Bq/kg raw	± 0.04 Bq/kg raw	<b>0.3</b>	Cs137 0.07 Bq/kg raw
			Cs134 — Bq/kg raw	± — Bq/kg raw		Cs134 0.06 Bq/kg raw
Persimmon(pulp)	Aizu, Fukushima	Oct-20	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 0.6 Bq/kg raw
Walnut	Yoshima, Iwaki	Oct-20	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 0.7 Bq/kg raw
Shitake mushroom grown in log(raw)	Aizubange, Kawanuma, Fukushima	Nov-20	Cs137 22.4 Bq/kg raw	± 0.2 Bq/kg raw	<b>23.4</b>	Cs137 0.1 Bq/kg raw
			Cs134 1.0 Bq/kg raw	± 0.09 Bq/kg raw		Cs134 0.1 Bq/kg raw
Shimeji mushroom(raw)wild	Minamiaizu, Minamiaizu, Fukushima	Nov-20	Cs137 62.1 Bq/kg raw	± 0.9 Bq/kg raw	<b>63.9</b>	Cs137 0.6 Bq/kg raw
			Cs134 1.8 Bq/kg raw	± 0.3 Bq/kg raw		Cs134 0.7 Bq/kg raw
Sarcodon Aspratus mushroom(dry)	Minamiaizu, Minamiaizu, Fukushima	Nov-20	Cs137 78.1 Bq/kg raw	± 1.3 Bq/kg raw	<b>78.1</b>	Cs137 1.2 Bq/kg raw
			Cs134 — Bq/kg raw	± — Bq/kg raw		Cs134 1.2 Bq/kg raw
Late Fall Oyster mushroom(raw) wild	Minamiaizu, Minamiaizu, Fukushima	Nov-20	Cs137 15.0 Bq/kg raw	± 0.4 Bq/kg raw	<b>15.0</b>	Cs137 0.5 Bq/kg raw
			Cs134 — Bq/kg raw	± — Bq/kg raw		Cs134 0.6 Bq/kg raw
Oyster mushroom cultivation	Minamiaizu, Minamiaizu, Fukushima	Nov-20	Cs137 0.22 Bq/kg raw	± 0.06 Bq/kg raw	<b>0.22</b>	Cs137 0.1 Bq/kg raw
			Cs134 — Bq/kg raw	± — Bq/kg raw		Cs134 0.1 Bq/kg raw
Japanese sardine(flesh)	OnahamaPort, Iwaki	Oct-20	Cs137 0.97 Bq/kg raw	± 0.03 Bq/kg raw	<b>0.97</b>	Cs137 0.05 Bq/kg raw
			Cs134 — Bq/kg raw	± — Bq/kg raw		Cs134 0.04 Bq/kg raw
Roasted green tea	Japan (production)	Jun-20	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 1.4 Bq/kg raw
Milk	Hyogo Pref.	Oct-20	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 0.04 Bq/kg raw

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

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

## ★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
Lake bottom soil①/ Lake shore	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	73.2	Bq/kg dry	± 0.7 Bq/kg dry	76.3	Cs137 0.4 Bq/kg dry
			Cs134	3.1	Bq/kg dry	± 0.2 Bq/kg dry		Cs134 0.4 Bq/kg dry
Lake bottom soil②/ Lake shore	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	67.5	Bq/kg dry	± 2.2 Bq/kg dry	70.3	Cs137 1.6 Bq/kg dry
			Cs134	2.8	Bq/kg dry	± 0.7 Bq/kg dry		Cs134 1.4 Bq/kg dry
Lake bottom soil/ Center of lake0-5cm	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	440.6	Bq/kg dry	± 7.6 Bq/kg dry	459.3	Cs137 3.3 Bq/kg dry
			Cs134	18.7	Bq/kg dry	± 2.0 Bq/kg dry		Cs134 2.9 Bq/kg dry
Lake bottom soil/ Center of lake5-10cm	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	10.2	Bq/kg dry	± 0.3 Bq/kg dry	10.2	Cs137 0.5 Bq/kg dry
			Cs134	—	Bq/kg dry	± — Bq/kg dry		Cs134 0.5 Bq/kg dry
Lake bottom soil/ Center of lake10-15cm	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	26.7	Bq/kg dry	± 0.5 Bq/kg dry	26.7	Cs137 0.5 Bq/kg dry
			Cs134	—	Bq/kg dry	± — Bq/kg dry		Cs134 0.5 Bq/kg dry
Lake bottom soil/ Center of lake15-20cm	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	28.3	Bq/kg dry	± 0.6 Bq/kg dry	28.3	Cs137 0.6 Bq/kg dry
			Cs134	—	Bq/kg dry	± — Bq/kg dry		Cs134 0.6 Bq/kg dry
Lake bottom soil/ Center of lake20-25cm	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	4.6	Bq/kg dry	± 0.6 Bq/kg dry	4.6	Cs137 1.1 Bq/kg dry
			Cs134	—	Bq/kg dry	± — Bq/kg dry		Cs134 1.1 Bq/kg dry
Lake bottom soil/ Center of lake25-30cm	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	1.4	Bq/kg dry	± 0.4 Bq/kg dry	1.4	Cs137 0.8 Bq/kg dry
			Cs134	—	Bq/kg dry	± — Bq/kg dry		Cs134 0.9 Bq/kg dry
Lake bottom soil/ Center of lake 30cmover	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	—	Bq/kg dry	± — Bq/kg dry	Under Minimum Limit of Detection	Cs137 1.0 Bq/kg dry
			Cs134	—	Bq/kg dry	± — Bq/kg dry		Cs134 1.0 Bq/kg dry
Lake bottom soil/ Center of lake	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	0.9	Bq/kg dry	± 0.3 Bq/kg dry	0.9	Cs137 0.7 Bq/kg dry
			Cs134	—	Bq/kg dry	± — Bq/kg dry		Cs134 0.8 Bq/kg dry
Lake water/ Center of lake surface	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	0.004	Bq/L	± 0.0005 Bq/L	0.004	Cs137 0.0009 Bq/L
			Cs134	—	Bq/L	± — Bq/L		Cs134 0.001 Bq/L
Lake water/ Center of lake lower	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	0.030	Bq/L	± 0.0008 Bq/L	0.03	Cs137 0.0009 Bq/L
			Cs134	—	Bq/L	± — Bq/L		Cs134 0.001 Bq/L
Lake water/ Lake shore lower	Inawashiro lake/ Fukushima Pref.	Oct-20	Cs137	0.004	Bq/L	± 0.0005 Bq/L	0.004	Cs137 0.0009 Bq/L
			Cs134	—	Bq/L	± — Bq/L		Cs134 0.001 Bq/L
Sea water	Fukuoka Pref.	Nov-20	Cs137	—	Bq/L	± — Bq/L	Under Minimum Limit of Detection	Cs137 0.03 Bq/L
			Cs134	—	Bq/L	± — Bq/L		Cs134 0.03 Bq/L
Air dust	Futabamachi, Futaba, Fukushima	Oct-20	Cs137	0.118	mBq/m³	± 0.008 mBq/m³	0.118	Cs137 0.01 mBq/m³
			Cs134	—	mBq/m³	± — mBq/m³		Cs134 0.01 mBq/m³

※"—"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.



## ★Beta-ray

Measuring instrument		Feature
Liquid Scintillation Counter		
Product of Hidex HIDEX 300SLL	Product of PerkinElmer Japan Quantulus GCT 622	Equipment for measuring low-energy beta-ray emission nuclides
		<p>Measuring nuclide          Strontium90      Half-life 30 years          Organically bound 3H    Half-life 12.3 years          Free-water 3H      Half-life 12.3 years</p> <p>All samples are measured in liquid condition after several days of pretreatment.</p>

(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	Fukuoka Pref.	Nov-20	T (Freedum) Under Minimum Limit of Detection	± — Bq/L	1.93 Bq/L
Rice	Hirono, Futaba, Fukushima	Oct-18	Sr90 Under Minimum Limit of Detection	± — Bq/kg dry	0.13 Bq/kg dry
Milk	Motomiya, Fukushima	Nov-20	Sr90 Under Minimum Limit of Detection	± — Bq/L	0.02 Bq/L
Milk	Hyogo Pref.	Nov-20	Sr90 Under Minimum Limit of Detection	± — Bq/L	0.02 Bq/L
Pine leaves	Soma, Fukushima	Sep-20	Sr90 <b>0.53</b>	± 0.21 Bq/kg dry	0.29 Bq/kg dry
Soil	Kashima, Minamisoma, Fukushima	Nov-18	Sr90 <b>2.60</b>	± 1.15 Bq/kg dry	1.72 Bq/kg dry
Soil (Including Moss)	Kawamata, Futaba, Fukushima	Sep-18	Sr90 Under Minimum Limit of Detection	± — Bq/kg dry	1.72 Bq/kg dry
Soil	Ogawa, Iwaki	Aug-18	Sr90 <b>4.16</b>	± 1.34 Bq/kg dry	1.99 Bq/kg dry
Soil Home yard	Suetsugi, Hisanohama, Iwaki	Oct-20	Sr90 Under Minimum Limit of Detection	± — Bq/kg dry	1.50 Bq/kg dry
Soil Around home	Suetsugi, Hisanohama, Iwaki	Oct-20	Sr90 Under Minimum Limit of Detection	± — Bq/kg dry	1.56 Bq/kg dry
Soil①	Chuodai, Iwaki	Oct-20	Sr90 <b>4.22</b>	± 1.00 Bq/kg dry	1.47 Bq/kg dry
Soil②	Chuodai, Iwaki	Oct-20	Sr90 <b>1.62</b>	± 1.03 Bq/kg dry	1.56 Bq/kg dry
Soil 0-5cm	Tokaimura, Naka, Ibaraki	Sep-20	Sr90 Under Minimum Limit of Detection	± — Bq/kg dry	1.61 Bq/kg dry
Soil 5-10cm	Tokaimura, Naka, Ibaraki	Sep-20	Sr90 Under Minimum Limit of Detection	± — Bq/kg dry	1.51 Bq/kg dry
Soil 10-15cm	Tokaimura, Naka, Ibaraki	Sep-20	Sr90 Under Minimum Limit of Detection	± — Bq/kg dry	2.37 Bq/kg dry
Lake sand (surface)	Inawashiro Lake/Shidahama	Oct-20	Sr90 Under Minimum Limit of Detection	± — Bq/kg dry	1.77 Bq/kg dry
Sea water (surface)	Soma Port, Fukushima	Sep-20	Sr90 <b>0.0007</b>	± 0.0004 Bq/L	0.0006 Bq/L
Sea water (lower)	Soma Port, Fukushima	Sep-20	Sr90 <b>0.0014</b>	± 0.0005 Bq/L	0.0007 Bq/L

## ★Beta-ray

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

Samples	Sampling Point	Sampling Month	Measuremnnt Result			Uncertainty		Minimum Limit of Detection	
Sea water (surface)	Onahama Port/Iwaki	Aug-20	Sr90	0.0008	Bq/L	± 0.0004	Bq/L	0.0006	Bq/L
Sea water (lower)	Onahama Port/Iwaki	Aug-20	Sr90	0.0009	Bq/L	± 0.0004	Bq/L	0.0006	Bq/L
Lake water/ Center of lake Surface	Inawashiro Lake/ Fukushima	Oct-20	Sr90	0.0007	Bq/L	± 0.0004	Bq/L	0.0006	Bq/L
Lake water/ Center of lake lower	Inawashiro Lake/ Fukushima	Oct-20	Sr90	0.0008	Bq/L	± 0.0004	Bq/L	0.0006	Bq/L
Lake water (Surface)	Inawashiro Lake/ Fukushima	Oct-20	Sr90	0.0007	Bq/L	± 0.0004	Bq/L	0.0006	Bq/L



# Measurement results of 16 items by germanium semiconductor detector

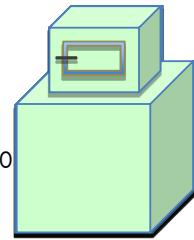
Dr.Tetsuji Imanaka, Institute of Multiple Nuclear Science, Kyoto University

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	Measurement Result	Uncertainty	Total Amount of Cesium	Minimum Limit of Detection
Potato	Izumi, Iwaki	Aug-20	CA	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 0.09 Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Green pepper	Yatabe, Tsukuba, Ibaraki	Aug-20	CA	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 0.1 Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Burdock	Aomori Pref.	Aug-20	CA	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 0.1 Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Lotus root	Fukushima Pref.	Sep-20	CA	Cs137	3.8 Bq/kg raw	3.91	Cs137 — Bq/kg raw
				Cs134	0.11 Bq/kg raw		Cs134 — Bq/kg raw
Sweet potato	Ouse, Koriyama, Fukushima	Oct-19	CA	Cs137	0.7 Bq/kg raw	0.7	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Butterbur	Iwaki city	Jul-20	CA	Cs137	2.4 Bq/kg raw	2.4	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Shiitake mushroom	Minamiuonuma Niigata	Aug-20	CA	Cs137	1.0 Bq/kg raw	1.0	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Shitake mushroom grown in log(dried)	Hananomaki, Iwate	Sep-20	CA	Cs137	38.0 Bq/kg raw	38.0	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Oyster mushroom	Minamiuonuma Niigata	Sep-20	CA	Cs137	0.08 Bq/kg raw	0.08	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Chestnut	Ibaraki, Pref.	Sep-20	OR	Cs137	0.3 Bq/kg raw	0.3	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Dried small sardines	Sanuki, Kagawa	Sep-20	OR	Cs137	— Bq/kg raw	Under Minimum Limit of Detection	Cs137 0.7 Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Fermented rice bran for pickles	Gifu Pref.	Jul-20	CA	Cs137	0.4 Bq/kg raw	0.4	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Wild sesame (powder)	Samegawa Fukushima	Sep-20	CA	Cs137	1.2 Bq/kg raw	1.2	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Mulberry leaves powder	Nihonmatsu, Fukushima	Sep-20	CA	Cs137	8.1 Bq/kg raw	8.1	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Wild Mulberry tea	Nihonmatsu, Fukushima	Sep-20	CA	Cs137	6.5 Bq/kg raw	6.5	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw
Wild Mulberry tea	Nihonmatsu, Fukushima	Sep-20	CA	Cs137	6.1 Bq/kg raw	6.1	Cs137 — Bq/kg raw
				Cs134	— Bq/kg raw		Cs134 — Bq/kg raw