



# Radiation Measurement Results of 148 Items in September



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<br>Soil (Sample 1kg) Lower limit 2.5Bq/Kg<br>Material (Sample 1kg) Lower limit 1.0Bq/Kg<br>Water (Sample 20L) Lower limit 0.02Bq/L     |
| Germanium Semiconductor detector |                            |  |   |
| ORTEC GEM30-70                   |                            | · Radioactivity measurement series.<br>Quantitative analysis based on "Gamma-ray spectrometry with germanium semiconductor detector."<br>· Relative efficiency 35% | Food (Sample 2kg) Lower limit 0.04Bq/Kg<br>Soil (Sample 1kg) Lower limit 0.06Bq/Kg<br>Material (Sample 1kg) Lower limit 0.06Bq/Kg<br>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 |
|-----------------|--------------------------|----------------|---------------------|------------------|----------------------------------|----------------------------|
| Taro            | Iwaki city               | Sep-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 1.4 Bq/kg raw        |
| Sweet potato    | Taira shimotakaku, Iwaki | Sep-20         | Cs137 2.8 Bq/kg raw | ± 1.00 Bq/kg raw | 2.8                              | Cs137 1.3 Bq/kg raw        |
|                 |                          |                | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 1.2 Bq/kg raw        |
| Sweet potato    | Ibaraki pref.            | Sep-20         | 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        |
| Sweet potato    | Chiba pref.              | Sep-20         | 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 1.2 Bq/kg raw        |
| Eggplant        | Iwaki city               | Sep-20         | 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 1.4 Bq/kg raw        |
| Burdock         | Aomori pref.             | Sep-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        |
| Lotus root      | Ibaraki pref.            | Sep-20         | 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        |
| Welsh onion     | Naroyo, Hokkaido         | Sep-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 2.0 Bq/kg raw        |
| Leek            | Iwaki city               | Sep-20         | 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 1.7 Bq/kg raw        |
| Cauliflower     | Nagano Pref.             | Sep-20         | 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        |
| Green bean      | Fukushima Pref.          | Sep-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 1.7 Bq/kg raw        |
| Asparagus       | Fukushima Pref.          | Sep-20         | 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        |
| Malabar spinach | Iwaki city               | Sep-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        |
| Potherb mustard | Iwaki city               | Sep-20         | 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 3.1 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 |               |
|----------------------------------|---|----------------|--------------------|---------------|-----------------|----------------------------------|----------------------------|---------------|
| Moloheiya                        | Iwaki city                              | Sep-20         | Cs137              | — Bq/kg raw   | ± — Bq/kg raw   | Under Minimum Limit of Detection | Cs137                      | 4.2 Bq/kg raw |
|                                  |   |                | Cs134              | — Bq/kg raw   | ± — Bq/kg raw   |                                  | Cs134                      | 3.2 Bq/kg raw |
| Moloheiya                        | Iwaki city                              | Sep-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                      | 3.7 Bq/kg raw |
| Celery                           | USA<br>(production)                     | Sep-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                      | 1.4 Bq/kg raw |
| Celery                           | Nagano pref.                            | Aug-20         | 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                      | 1.7 Bq/kg raw |
| Wax gourd                        | Iwaki city                              | Sep-20         | 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                      | 1.7 Bq/kg raw |
| Pumpkin                          | Izumi, Iwaki                            | Sep-20         | 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                      | 1.6 Bq/kg raw |
| Spaghetti squash                 | Okayama pref.                           | Sep-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                      | 1.5 Bq/kg raw |
| Butternut                        | Iwaki city                              | Aug-20         | 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 |
| Perilla (seed)                   | Taira<br>shimohirakubo,<br>Iwaki        | Sep-20         | Cs137              | — Bq/kg raw   | ± — Bq/kg raw   | Under Minimum Limit of Detection | Cs137                      | 4.3 Bq/kg raw |
|                                  |   |                | Cs134              | — Bq/kg raw   | ± — Bq/kg raw   |                                  | Cs134                      | 3.2 Bq/kg raw |
| Butterbur(boiled)                | Iwaki city                              | Sep-20         | 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 |
| Olive<br>(preserved in<br>salt)  | Spain<br>(production)                   | Jan-19         | 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                      | 1.5 Bq/kg raw |
| Plum<br>(preserved in<br>shochu) | Yonezawa, Yamagata                      | Aug-20         | Cs137              | 2.9 Bq/kg raw | ± 2.3 Bq/kg raw | 2.9                              | Cs137                      | 2.3 Bq/kg raw |
|                                  |   |                | Cs134              | — Bq/kg raw   | ± — Bq/kg raw   |                                  | Cs134                      | 1.7 Bq/kg raw |
| Chestnut(fruit)                  | Ibaraki Pref.                           | Sep-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                      | 1.4 Bq/kg raw |
| Chestnut(peel)                   | Ibaraki Pref.                           | Sep-20         | Cs137              | — Bq/kg raw   | ± — Bq/kg raw   | Under Minimum Limit of Detection | Cs137                      | 3.3 Bq/kg raw |
|                                  |   |                | Cs134              | — Bq/kg raw   | ± — Bq/kg raw   |                                  | Cs134                      | 3.0 Bq/kg raw |
| Chestnut(peel)                   | Kashima-ku,<br>Minamisoma,<br>Fukushima | Sep-20         | Cs137              | 5.7 Bq/kg raw | ± 2.1 Bq/kg raw | 5.7                              | Cs137                      | 2.9 Bq/kg raw |
|                                  |   |                | Cs134              | — Bq/kg raw   | ± — Bq/kg raw   |                                  | Cs134                      | 2.7 Bq/kg raw |
| Dried sweet potato               | Hitachinaka,<br>Ibaraki                 | Aug-20         | 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 |
| Apple                            | Fukushima<br>Pref.                      | Sep-20         | 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                      | 1.7 Bq/kg raw |
| Pear                             | Fukushima<br>Pref.                      | Sep-20         | Cs137              | — Bq/kg raw   | ± — Bq/kg raw   | Under Minimum Limit of Detection | Cs137                      | 1.2 Bq/kg raw |
|                                  |   |                | Cs134              | — Bq/kg raw   | ± — Bq/kg raw   |                                  | Cs134                      | 1.1 Bq/kg raw |
| Pear                             | Iwaki city                              | Sep-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                      | 1.5 Bq/kg raw |
| Persimmon(pulp)                  | Wakayama Pref.                          | Sep-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 |
| Water melon                      | Onahamakamikaziro,<br>Iwaki             | Sep-20         | 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 |
| Fig                              | Kashima-ku,<br>Minamisoma,<br>Fukushima | Sep-20         | Cs137              | 3.7 Bq/kg raw | ± 1.3 Bq/kg raw | 3.7                              | Cs137                      | 1.8 Bq/kg raw |
|                                  |   |                | Cs134              | — Bq/kg raw   | ± — Bq/kg raw   |                                  | Cs134                      | 1.7 Bq/kg raw |
| Fig                              | Iwaki city                              | Sep-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                      | 1.6 Bq/kg raw |
| Sudachi                          | Tairashimokabeya,<br>Iwaki              | Aug-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 |

※"—" 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 |                |
|-------------------------|---------------------------------------|----------------|--------------------|------------------|-------------------|----------------------------------|----------------------------|----------------|
| Kabosu                  | Oita Pref.                            | Sep-20         | 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                      | 1.5 Bq/kg raw  |
| Saury(whole)            | Fukushima Pref.                       | Sep-20         | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 1.2 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 1.1 Bq/kg raw  |
| Dark sleeper (whole)    | Aomori Pref.                          | Sep-20         | 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                      | 1.8 Bq/kg raw  |
| Horse mackerel(whole)   | Toyama Pref.                          | Sep-20         | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 1.3 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 1.1 Bq/kg raw  |
| Yellowtail (bony parts) | Chiba Pref.                           | Sep-20         | 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  |
| Seabream (bony parts)   | Ehime Pref.                           | Aug-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                      | 1.6 Bq/kg raw  |
| Dried small sardines    | Sanuki,Kagawa                         | 2020           | 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                      | 2.5 Bq/kg raw  |
| Seaweed (with sand)     | Matsushita Beach/Iwaki city           | Sep-20         | Cs137              | 9.7 Bq/kg raw    | ± 3.5 Bq/kg raw   | 9.7                              | Cs137                      | 4.1 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 3.1 Bq/kg raw  |
| Mulberry tea            | Nihonmatsu, Fukushima                 | 2020           | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 3.9 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 3.7 Bq/kg raw  |
| Wild grass mulberry tea | Nihonmatsu, Fukushima                 | 2020           | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 5.0 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 4.8 Bq/kg raw  |
| Wild sesame (powder)    | Samegawa, Higashishirakawa, Fukushima | 2020           | 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                      | 1.5 Bq/kg raw  |
| Soy sauce               | Towada,Aomori                         | Sep-20         | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 1.0 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 0.9 Bq/kg raw  |
| Miso                    | Taira shimokabeaya, Iwaki             | Sep-20         | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 1.3 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 1.3 Bq/kg raw  |
| Tama Konjac             | Japan (production)                    | Sep-20         | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 1.3 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 1.2 Bq/kg raw  |
| Boiled fish paste       | Iwaki city                            | Sep-20         | 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  |
| Soy milk                | Japan (production)                    | Sep-20         | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 1.3 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 1.2 Bq/kg raw  |
| Yogurt                  | Japan (production)                    | Sep-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                      | 1.1 Bq/kg raw  |
| Orange jelly            | Toyoda,Aichi                          | Aug-20         | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 1.3 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 1.3 Bq/kg raw  |
| Chinese cabbage pickles | Japan (production)                    | Aug-20         | 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  |
| Pancake mix             | Kyusyu (production)                   | 2020           | 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                      | 1.5 Bq/kg raw  |
| Pickles Powder          | Iwaki city                            | Aug-20         | Cs137              | — Bq/kg raw      | ± — Bq/kg raw     | Under Minimum Limit of Detection | Cs137                      | 1.2 Bq/kg raw  |
|                         |                                       |                | Cs134              | — Bq/kg raw      | ± — Bq/kg raw     |                                  | Cs134                      | 1.1 Bq/kg raw  |
| Soil                    | Fukushima, Fukushima Pref.            | Aug-20         | Cs137              | 3440.0 Bq/kg dry | ± 368.0 Bq/kg dry | 3633.0                           | Cs137                      | 16.0 Bq/kg dry |
|                         |                                       |                | Cs134              | 193.0 Bq/kg dry  | ± 26.0 Bq/kg dry  |                                  | Cs134                      | 15.7 Bq/kg dry |
| Soil                    | Shinti,Soma, Fukushima                | Sep-20         | Cs137              | 914.0 Bq/kg dry  | ± 183.0 Bq/kg dry | 982.3                            | Cs137                      | 4.1 Bq/kg dry  |
|                         |                                       |                | Cs134              | 68.3 Bq/kg dry   | ± 13.7 Bq/kg dry  |                                  | Cs134                      | 3.8 Bq/kg dry  |
| Soil                    | Yagawase, Taira,Iwaki                 | Aug-20         | Cs137              | 23.2 Bq/kg dry   | ± 3.3 Bq/kg dry   | 23.2                             | Cs137                      | 3.4 Bq/kg dry  |
|                         |                                       |                | Cs134              | — Bq/kg dry      | ± — Bq/kg dry     |                                  | Cs134                      | 3.6 Bq/kg dry  |

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

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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 |
|---|--------------------------|----------------|--------------------|-------|-----------|------------------|----------------------------------|----------------------------|
| Soil<br>(in the park)                               | Momiji, Iwaki            | Sep-20         | Cs137              | 60.9  | Bq/kg dry | ± 7.9 Bq/kg dry  | 60.9                             | Cs137 5.7 Bq/kg dry        |
|   |                          |                | Cs134              | —     | Bq/kg dry | ± — Bq/kg dry    |                                  | Cs134 5.1 Bq/kg dry        |
| Soil(in the park)<br>Sand Box                       | Momiji, Iwaki            | Sep-20         | Cs137              | 12.2  | Bq/kg dry | ± 1.7 Bq/kg dry  | 12.2                             | Cs137 1.8 Bq/kg dry        |
|   |                          |                | Cs134              | —     | Bq/kg dry | ± — Bq/kg dry    |                                  | Cs134 2.5 Bq/kg dry        |
| Soil(in the park)<br>under the Playground equipment | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | 691.0 | Bq/kg dry | ± 73.7 Bq/kg dry | 731.4                            | Cs137 2.8 Bq/kg dry        |
|   |                          |                | Cs134              | 40.4  | Bq/kg dry | ± 5.6 Bq/kg dry  |                                  | Cs134 3.5 Bq/kg dry        |
| Soil<br>(in the park)                               | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | 669.0 | Bq/kg dry | ± 73.2 Bq/kg dry | 707.1                            | Cs137 5.7 Bq/kg dry        |
|   |                          |                | Cs134              | 38.1  | Bq/kg dry | ± 6.4 Bq/kg dry  |                                  | Cs134 7.8 Bq/kg dry        |
| Soil<br>(in the park)                               | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | 590.0 | Bq/kg dry | ± 63.5 Bq/kg dry | 624.3                            | Cs137 2.5 Bq/kg dry        |
|   |                          |                | Cs134              | 34.3  | Bq/kg dry | ± 5.4 Bq/kg dry  |                                  | Cs134 2.9 Bq/kg dry        |
| Soil<br>(in the park)                               | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | 586.0 | Bq/kg dry | ± 64.8 Bq/kg dry | 615.1                            | Cs137 3.2 Bq/kg dry        |
|   |                          |                | Cs134              | 29.1  | Bq/kg dry | ± 6.1 Bq/kg dry  |                                  | Cs134 3.8 Bq/kg dry        |
| Soil<br>(in the park)                               | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | 529.0 | Bq/kg dry | ± 59.5 Bq/kg dry | 565.5                            | Cs137 5.7 Bq/kg dry        |
|   |                          |                | Cs134              | 36.5  | Bq/kg dry | ± 6.0 Bq/kg dry  |                                  | Cs134 6.6 Bq/kg dry        |
| Soil(in the park)<br>under the Monkey bar           | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | 390.0 | Bq/kg dry | ± 44.5 Bq/kg dry | 412.2                            | Cs137 5.2 Bq/kg dry        |
|   |                          |                | Cs134              | 22.2  | Bq/kg dry | ± 5.1 Bq/kg dry  |                                  | Cs134 6.2 Bq/kg dry        |
| Soil (in the park)<br>under the Horizontal bar      | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | 182.0 | Bq/kg dry | ± 19.7 Bq/kg dry | 192.2                            | Cs137 2.1 Bq/kg dry        |
|   |                          |                | Cs134              | 10.2  | Bq/kg dry | ± 1.9 Bq/kg dry  |                                  | Cs134 3.2 Bq/kg dry        |
| Soil<br>(in the park)                               | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | 4.1   | Bq/kg dry | ± 1.1 Bq/kg dry  | 4.1                              | Cs137 3.7 Bq/kg dry        |
|   |                          |                | Cs134              | —     | Bq/kg dry | ± — Bq/kg dry    |                                  | Cs134 3.6 Bq/kg dry        |
| Soil<br>(in the park)<br>under the slide            | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | —     | Bq/kg dry | ± — Bq/kg dry    | Under Minimum Limit of Detection | Cs137 1.7 Bq/kg dry        |
|   |                          |                | Cs134              | —     | Bq/kg dry | ± — Bq/kg dry    |                                  | Cs134 1.8 Bq/kg dry        |
| Soil<br>(in the park)                               | Tsukuda, Taira,<br>Iwaki | Aug-20         | Cs137              | —     | Bq/kg dry | ± — Bq/kg dry    | Under Minimum Limit of Detection | Cs137 1.3 Bq/kg dry        |
|   |                          |                | Cs134              | —     | Bq/kg dry | ± — Bq/kg dry    |                                  | Cs134 1.2 Bq/kg dry        |
| Soil<br>(in the park)                               | Kubo3, Kashima,<br>Iwaki | Aug-20         | Cs137              | 906.0 | Bq/kg dry | ± 98.3 Bq/kg dry | 954.7                            | Cs137 6.1 Bq/kg dry        |
|   |                          |                | Cs134              | 48.7  | Bq/kg dry | ± 7.8 Bq/kg dry  |                                  | Cs134 7.9 Bq/kg dry        |
| Soil (in the park)<br>under the Horizontal bar      | Kubo3, Kashima,<br>Iwaki | Aug-20         | Cs137              | 889.0 | Bq/kg dry | ± 96.6 Bq/kg dry | 933.3                            | Cs137 3.6 Bq/kg dry        |
|   |                          |                | Cs134              | 44.3  | Bq/kg dry | ± 7.4 Bq/kg dry  |                                  | Cs134 4.6 Bq/kg dry        |
| Soil(in the park)<br>under the Playground equipment | Kubo3, Kashima,<br>Iwaki | Aug-20         | Cs137              | 692.0 | Bq/kg dry | ± 78.2 Bq/kg dry | 725.7                            | Cs137 8.7 Bq/kg dry        |
|   |                          |                | Cs134              | 33.7  | Bq/kg dry | ± 8.4 Bq/kg dry  |                                  | Cs134 10.4 Bq/kg dry       |
| Soil<br>(in the park)                               | Kubo3, Kashima,<br>Iwaki | Aug-20         | Cs137              | 674.0 | Bq/kg dry | ± 73.7 Bq/kg dry | 707.0                            | Cs137 2.7 Bq/kg dry        |
|   |                          |                | Cs134              | 33.0  | Bq/kg dry | ± 5.8 Bq/kg dry  |                                  | Cs134 3.3 Bq/kg dry        |
| Soil<br>(in the park)                               | Kubo3, Kashima,<br>Iwaki | Aug-20         | Cs137              | 624.0 | Bq/kg dry | ± 68.2 Bq/kg dry | 657.9                            | Cs137 3.4 Bq/kg dry        |
|   |                          |                | Cs134              | 33.9  | Bq/kg dry | ± 5.7 Bq/kg dry  |                                  | Cs134 4.7 Bq/kg dry        |
| Soil<br>(in the park)<br>under the slide            | Kubo3, Kashima,<br>Iwaki | Aug-20         | Cs137              | 509.0 | Bq/kg dry | ± 56.2 Bq/kg dry | 537.5                            | Cs137 2.9 Bq/kg dry        |
|   |                          |                | Cs134              | 28.5  | Bq/kg dry | ± 5.6 Bq/kg dry  |                                  | Cs134 4.1 Bq/kg dry        |
| Soil<br>(in the park)                               | Kubo3, Kashima,<br>Iwaki | Aug-20         | Cs137              | 432.0 | Bq/kg dry | ± 47.2 Bq/kg dry | 456.3                            | Cs137 5.3 Bq/kg dry        |
|   |                          |                | Cs134              | 24.3  | Bq/kg dry | ± 4.4 Bq/kg dry  |                                  | Cs134 6.4 Bq/kg dry        |
| Soil<br>(in the park)                               | Kubo3, Kashima,<br>Iwaki | Aug-20         | Cs137              | 425.0 | Bq/kg dry | ± 46.1 Bq/kg dry | 449.5                            | Cs137 6.3 Bq/kg dry        |
|   |                          |                | Cs134              | 24.5  | Bq/kg dry | ± 4.2 Bq/kg dry  |                                  | Cs134 7.5 Bq/kg dry        |
| Soil<br>(in the park)                               | Kubo3, Kashima,<br>Iwaki | Aug-20         | Cs137              | 339.0 | Bq/kg dry | ± 37.4 Bq/kg dry | 356.0                            | Cs137 2.9 Bq/kg dry        |
|   |                          |                | Cs134              | 17.0  | Bq/kg dry | ± 3.5 Bq/kg dry  |                                  | Cs134 3.5 Bq/kg dry        |
| Soil<br>(in the park)                               | Miyo, Kashima,<br>Iwaki  | Aug-20         | Cs137              | 789.0 | Bq/kg dry | ± 84.9 Bq/kg dry | 835.7                            | Cs137 9.4 Bq/kg dry        |
|   |                          |                | Cs134              | 46.7  | Bq/kg dry | ± 7.0 Bq/kg dry  |                                  | Cs134 11.3 Bq/kg dry       |
| Soil<br>(in the park)                               | Miyo, Kashima,<br>Iwaki  | Aug-20         | Cs137              | 757.0 | Bq/kg dry | ± 81.2 Bq/kg dry | 799.7                            | Cs137 4.2 Bq/kg dry        |
|   |                          |                | Cs134              | 42.7  | Bq/kg dry | ± 6.2 Bq/kg dry  |                                  | Cs134 5.0 Bq/kg dry        |
| Soil<br>(in the park)                               | Miyo, Kashima,<br>Iwaki  | Aug-20         | Cs137              | 702.0 | Bq/kg dry | ± 77.6 Bq/kg dry | 737.5                            | Cs137 6.9 Bq/kg dry        |
|   |                          |                | Cs134              | 35.5  | Bq/kg dry | ± 6.6 Bq/kg dry  |                                  | Cs134 8.1 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<br>(in the park)                                  | Miyo,Kashima,<br>Iwaki          | Aug-20         | Cs137              | 320.0  | Bq/kg dry | ± 37.1      | Bq/kg dry              | 336.9                                  |
|  |                                 |                | Cs134              | 16.9   | Bq/kg dry | ± 4.9       | Bq/kg dry              |  |
| Soil<br>(in the park)<br>under the slide               | Miyo,Kashima,<br>Iwaki          | Aug-20         | Cs137              | 362.0  | Bq/kg dry | ± 40.6      | Bq/kg dry              | 382.1                                  |
|  |                                 |                | Cs134              | 20.1   | Bq/kg dry | ± 4.5       | Bq/kg dry              |  |
| Soil<br>(in the park)                                  | Miyo,Kashima,<br>Iwaki          | Aug-20         | Cs137              | 307.0  | Bq/kg dry | ± 33.9      | Bq/kg dry              | 323.7                                  |
|  |                                 |                | Cs134              | 16.7   | Bq/kg dry | ± 3.7       | Bq/kg dry              |  |
| Soil<br>(in the park)                                  | Onahama-<br>tamagawakita,Iwaki  | Aug-20         | Cs137              | 1010.0 | Bq/kg dry | ± 108.0     | Bq/kg dry              | 1067.2                                 |
|  |                                 |                | Cs134              | 57.2   | Bq/kg dry | ± 8.0       | Bq/kg dry              |  |
| Soil<br>(in the park)                                  | Onahama-<br>tamagawakita,Iwaki  | Aug-20         | Cs137              | 899.0  | Bq/kg dry | ± 97.6      | Bq/kg dry              | 943.2                                  |
|  |                                 |                | Cs134              | 44.2   | Bq/kg dry | ± 7.1       | Bq/kg dry              |  |
| Soil<br>(in the park)                                  | Onahama-<br>tamagawakita,Iwaki  | Aug-20         | Cs137              | 672.0  | Bq/kg dry | ± 72.4      | Bq/kg dry              | 708.8                                  |
|  |                                 |                | Cs134              | 36.8   | Bq/kg dry | ± 6.1       | Bq/kg dry              |  |
| Soil<br>(in the park)                                  | Onahama-<br>tamagawakita,Iwaki  | Aug-20         | Cs137              | 543.0  | Bq/kg dry | ± 59.3      | Bq/kg dry              | 567.7                                  |
|  |                                 |                | Cs134              | 24.7   | Bq/kg dry | ± 4.3       | Bq/kg dry              |  |
| Soil<br>(in the park)                                  | Onahama-<br>tamagawakita,Iwaki  | Aug-20         | Cs137              | 212.0  | Bq/kg dry | ± 23.3      | Bq/kg dry              | 224.1                                  |
|  |                                 |                | Cs134              | 12.1   | Bq/kg dry | ± 2.2       | Bq/kg dry              |  |
| Soil<br>(in the park)                                  | Onahama-<br>tamagawakita,Iwaki  | Aug-20         | Cs137              | 78.8   | Bq/kg dry | ± 8.7       | Bq/kg dry              | 83.6                                   |
|  |                                 |                | Cs134              | 4.8    | Bq/kg dry | ± 1.0       | Bq/kg dry              |  |
| Soil<br>(in the park)                                  | Onahama-<br>tamagawakita,Iwaki  | Aug-20         | Cs137              | 37.4   | Bq/kg dry | ± 5.9       | Bq/kg dry              | 37.4                                   |
|  |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Soil<br>(in the park)<br>under the slide               | Onahama-<br>shimokajiro,Iwaki   | Jul-20         | Cs137              | 110.0  | Bq/kg dry | ± 12.8      | Bq/kg dry              | 110.0                                  |
|  |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Soil(in the park)<br>under the Playground<br>equipment | Onahama-<br>shimokajiro,Iwaki   | Jul-20         | Cs137              | 29.1   | Bq/kg dry | ± 3.7       | Bq/kg dry              | 29.1                                   |
|  |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Soil(in the park)<br>under the Playground<br>equipment | Onahama-<br>shimokajiro,Iwaki   | Jul-20         | Cs137              | 16.7   | Bq/kg dry | ± 2.4       | Bq/kg dry              | 16.7                                   |
|  |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Soil<br>(in the park)<br>under the Athletic equipment  | Onahama-<br>shimokajiro,Iwaki   | Jul-20         | Cs137              | 10.3   | Bq/kg dry | ± 1.5       | Bq/kg dry              | 10.3                                   |
|  |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Soil<br>(in the park)<br>under the Monkey bar          | Onahama-<br>shimokajiro,Iwaki   | Jul-20         | Cs137              | —      | Bq/kg dry | ± —         | Bq/kg dry              | Under Minimum<br>Limit of<br>Detection |
|  |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Sea sand<br>(surface)                                  | Matsushita Beach①,<br>Fukushima | Sep-20         | Cs137              | 13.7   | Bq/kg dry | ± 2.4       | Bq/kg dry              | 13.7                                   |
| Sea sand<br>(10cm deep)                                |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Sea sand<br>(30cm deep)                                |                                 |                | Cs137              | 13.0   | Bq/kg dry | ± 2.6       | Bq/kg dry              | 13.0                                   |
|  |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Sea sand<br>(surface)                                  |                                 |                | Cs137              | 11.3   | Bq/kg dry | ± 1.9       | Bq/kg dry              | 11.3                                   |
| Sea sand<br>(30cm deep)                                |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Sea sand<br>(surface)                                  | Matsushita Beach②,<br>Fukushima | Sep-20         | Cs137              | 9.3    | Bq/kg dry | ± 1.3       | Bq/kg dry              | 9.3                                    |
| Sea sand<br>(10cm deep)                                |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Sea sand<br>(30cm deep)                                |                                 |                | Cs137              | 30.7   | Bq/kg dry | ± 4.1       | Bq/kg dry              | 30.7                                   |
|  |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Sea sand<br>(surface)                                  |                                 |                | Cs137              | 33.0   | Bq/kg dry | ± 4.5       | Bq/kg dry              | 33.0                                   |
| Sea sand<br>(30cm deep)                                |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Sea sand<br>(surface)                                  | Matsushita Beach③,<br>Fukushima | Sep-20         | Cs137              | 30.2   | Bq/kg dry | ± 3.7       | Bq/kg dry              | 30.2                                   |
| Sea sand<br>(10cm deep)                                |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Sea sand<br>(30cm deep)                                |                                 |                | Cs137              | 19.4   | Bq/kg dry | ± 2.8       | Bq/kg dry              | 19.4                                   |
|  |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | Bq/kg dry              |  |
| Sea sand<br>(surface)                                  |                                 |                | Cs137              | 14.7   | Bq/kg dry | ± 2.4       | Bq/kg dry              | 14.7                                   |
| Sea sand<br>(30cm deep)                                |                                 |                | Cs134              | —      | Bq/kg dry | ± —         | 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 |                     |
|-------------------------|---------------------------------|----------------|--------------------|------|-----------|-------------|------------------------|----------------------------|---------------------|
| Sea sand<br>(surface)   | Matsushita Beach④,<br>Fukushima | Sep-20         | Cs137              | 10.0 | Bq/kg dry | ± 1.6       | Bq/kg dry              | 10.0                       | Cs137 1.9 Bq/kg dry |
| Sea sand<br>(10cm deep) |                                 |                | Cs134              | —    | Bq/kg dry | ± —         | Bq/kg dry              |                            | Cs134 1.9 Bq/kg dry |
| Sea sand<br>(30cm deep) |                                 |                | Cs137              | 25.9 | Bq/kg dry | ± 3.2       | Bq/kg dry              | 25.9                       | Cs137 1.9 Bq/kg dry |
|                         |                                 |                | Cs134              | —    | Bq/kg dry | ± —         | Bq/kg dry              |                            | Cs134 2.9 Bq/kg dry |
|                         |                                 |                | Cs137              | 15.8 | Bq/kg dry | ± 2.1       | Bq/kg dry              | 15.8                       | Cs137 1.7 Bq/kg dry |
|                         |                                 |                | Cs134              | —    | Bq/kg dry | ± —         | Bq/kg dry              |                            | Cs134 1.6 Bq/kg dry |
| Pine leaf               | Shinti, Soma,<br>Fukushima      | Sep-20         | Cs137              | 16.8 | Bq/kg raw | ± 5.4       | Bq/kg raw              | 16.8                       | Cs137 6.9 Bq/kg raw |
|                         |                                 |                | Cs134              | —    | Bq/kg raw | ± —         | Bq/kg raw              |                            | Cs134 6.7 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

| 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<br>Soil (Sample 1kg) Lower limit 2.5Bq/Kg<br>Material (Sample 1kg) Lower limit 1.0Bq/Kg<br>Water (Sample 20L) Lower limit 0.02Bq/L     |
| Germanium Semiconductor detector |                            |  |   |
| ORTEC GEM30-70                   |                            | • Radioactivity measurement series.<br>Quantitative analysis based on "Gamma-ray spectrometry with germanium semiconductor detector."<br>• Relative efficiency 35% | Food (Sample 2kg) Lower limit 0.04Bq/Kg<br>Soil (Sample 1kg) Lower limit 0.06Bq/Kg<br>Material (Sample 1kg) Lower limit 0.06Bq/Kg<br>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 |
|--------------------|----------------------------|----------------|----------------------|------------------|----------------------------------|----------------------------|
| Brown rice         | Fukushima Pref.            | Oct-19         | Cs137 0.63 Bq/kg raw | ± 0.03 Bq/kg raw | <b>0.63</b>                      | Cs137 0.07 Bq/kg raw       |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.08 Bq/kg raw       |
| Brown rice         | Niigata Pref.              | Oct-19         | Cs137 — Bq/kg raw    | — Bq/kg raw      | Under Minimum Limit of Detection | Cs137 0.05 Bq/kg raw       |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.05 Bq/kg raw       |
| Rice               | Akita Pref.                | Oct-19         | 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 0.06 Bq/kg raw       |
| Rice               | Mie Pref.                  | Jun-02         | 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       |
| Rice               | Yotsukura, Iwaki           | Oct-19         | Cs137 0.10 Bq/kg raw | ± 0.03 Bq/kg raw | <b>0.10</b>                      | Cs137 0.06 Bq/kg raw       |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.08 Bq/kg raw       |
| Glutinous rice     | Yotsukura, Iwaki           | Oct-19         | Cs137 0.14 Bq/kg raw | ± 0.03 Bq/kg raw | <b>0.14</b>                      | Cs137 0.06 Bq/kg raw       |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.09 Bq/kg raw       |
| Onion              | Yotsukura, Iwaki           | Aug-20         | Cs137 — Bq/kg raw    | — Bq/kg raw      | Under Minimum Limit of Detection | Cs137 0.06 Bq/kg raw       |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.07 Bq/kg raw       |
| Blueberry          | Fushiguro, Date, Fukushima | Sep-20         | Cs137 — Bq/kg raw    | — Bq/kg raw      | Under Minimum Limit of Detection | Cs137 0.1 Bq/kg raw        |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.1 Bq/kg raw        |
| Mackerel(flesh)    | OnahamaPort/Iwaki          | Jun-20         | Cs137 0.75 Bq/kg raw | ± 0.08 Bq/kg raw | <b>0.75</b>                      | Cs137 0.14 Bq/kg raw       |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.15 Bq/kg raw       |
| Yellowtail (flesh) | OnahamaPort/Iwaki          | Aug-20         | Cs137 0.66 Bq/kg raw | ± 0.09 Bq/kg raw | <b>0.66</b>                      | Cs137 0.18 Bq/kg raw       |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.19 Bq/kg raw       |
| Blackbass(flesh)   | Iwaki, Fukushima           | May-20         | Cs137 2.0 Bq/kg raw  | ± 0.3 Bq/kg raw  | <b>2.0</b>                       | Cs137 0.6 Bq/kg raw        |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.7 Bq/kg raw        |
| Honey (Buckwheat)  | Izumizaki,Taira, Iwaki     | Sep-20         | Cs137 4.6 Bq/kg raw  | ± 0.2 Bq/kg raw  | <b>4.6</b>                       | Cs137 0.3 Bq/kg raw        |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.3 Bq/kg raw        |
| Honey              | Fushiguro, Date, Fukushima | Sep-20         | Cs137 0.6 Bq/kg raw  | ± 0.1 Bq/kg raw  | <b>0.6</b>                       | Cs137 0.3 Bq/kg raw        |
|                    |                            |                | Cs134 — Bq/kg raw    | — Bq/kg raw      |                                  | Cs134 0.4 Bq/kg raw        |
| Peach(Jam)         | Fushiguro, Date, Fukushima | Aug-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        |
| Milk               | Kumamoto Pref.             | Jul-20         | Cs137 — Bq/L         | — Bq/L           | Under Minimum Limit of Detection | Cs137 0.04 Bq/L            |
|                    |                            |                | Cs134 — Bq/L         | — Bq/L           |                                  | Cs134 0.04 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.



## ★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 |        |      |
|---------------------|-------------------------|----------------|--------------------|------------|---------------|----------------------------------|----------------------------|--------|------|
| Milk                | Kumamoto Pref.          | Jul-20         | Cs137              | — Bq/L     | ± — Bq/L      | Under Minimum Limit of Detection | Cs137                      | 0.3    | Bq/L |
|                     |                         |                | Cs134              | — Bq/L     | ± — Bq/L      |                                  | Cs134                      | 0.3    | Bq/L |
| Sea water (surface) | OnahamaPort, Iwaki      | Jul-20         | Cs137              | 0.005 Bq/L | ± 0.0005 Bq/L | 0.005                            | Cs137                      | 0.0009 | Bq/L |
|                     |                         |                | Cs134              | — Bq/L     | ± — Bq/L      |                                  | Cs134                      | 0.001  | Bq/L |
| Sea water (surface) | Tomioko Port/ Fukushima | Aug-20         | Cs137              | 0.018 Bq/L | ± 0.0007 Bq/L | 0.018                            | Cs137                      | 0.0009 | Bq/L |
|                     |                         |                | Cs134              | — Bq/L     | ± — Bq/L      |                                  | Cs134                      | 0.001  | Bq/L |
| Sea water (lower)   | Tomioko Port/ Fukushima | Aug-20         | Cs137              | 0.173 Bq/L | ± 0.0018 Bq/L | 0.183                            | Cs137                      | 0.001  | Bq/L |
|                     |                         |                | Cs134              | 0.010 Bq/L | ± 0.0007 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.



## ★Beta-ray

| Measuring instrument  |   | Feature  |
|---|---|--|
| Liquid Scintillation Counter  |   |  |
| Product of Hidex<br>HIDEX 300SLL  | Product of PerkinElmer Japan<br>Quantulus GCT 622                                 | Equipment for measuring low-energy beta-ray emission nuclides  |
|  |  | <p>Measuring nuclide<br/>         Strontium90      Half-life 30 years<br/>         Organically bound 3H    Half-life 12.3 years<br/>         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      |
|----------------------------|---|----------------|--------------------|--|---------------------------------|
| White rockfish (flesh)     | Off the coast of Fukushima Nuclear Power Plant1 | Jun-20         | T (Organic)        | Under Minimum Limit of Detection Bq/kg dry | ± — Bq/kg dry 1.23 Bq/kg dry    |
| White rockfish (flesh)     | Off the coast of Fukushima Nuclear Power Plant1 | Jun-20         | T (Organic)        | Under Minimum Limit of Detection Bq/kg dry | ± — Bq/kg dry 1.37 Bq/kg dry    |
| Shingled hedgehog mushroom | Tabito, Iwaki                                   | Oct-18         | Sr90               | 0.71 Bq/kg dry                             | ± 0.44 Bq/kg dry 0.67 Bq/kg dry |
| Nuts                       | Turkey (production)                             | May-18         | Sr90               | 1.51 Bq/kg dry                             | ± 0.09 Bq/kg dry 0.12 Bq/kg dry |
| Pine leaf                  | Oarai, Higashiibaraki, Ibaraki                  | Jul-20         | Sr90               | 4.13 Bq/kg dry                             | ± 0.37 Bq/kg dry 0.28 Bq/kg dry |
| Pine leaf                  | Tokaimura, Naka, Ibaraki                        | Jul-20         | Sr90               | 1.10 Bq/kg dry                             | ± 0.24 Bq/kg dry 0.29 Bq/kg dry |
| Soil①                      | Okawara, Okuma, Futaba, Fukushima               | Jan-19         | Sr90               | 6.45 Bq/kg dry                             | ± 0.94 Bq/kg dry 1.36 Bq/kg dry |
| Soil②                      | Okawara, Okuma, Futaba, Fukushima               | Jan-19         | Sr90               | 2.89 Bq/kg dry                             | ± 0.87 Bq/kg dry 1.30 Bq/kg dry |
| Soil                       | Iitate, Soma, Fukushima                         | Nov-18         | Sr90               | 5.06 Bq/kg dry                             | ± 1.36 Bq/kg dry 2.02 Bq/kg dry |
| Soil (farm)                | Kashima-ku, Minamisoma, Fukushima               | Nov-18         | Sr90               | Under Minimum Limit of Detection Bq/kg dry | ± — Bq/kg dry 1.51 Bq/kg dry    |
| Soil(garden)               | Kashima-ku, Minamisoma, Fukushima               | Jan-19         | Sr90               | Under Minimum Limit of Detection Bq/kg dry | ± — Bq/kg dry 1.56 Bq/kg dry    |
| Soil                       | Taira, Iwaki                                    | Jul-20         | Sr90               | Under Minimum Limit of Detection Bq/kg dry | ± — Bq/kg dry 1.41 Bq/kg dry    |
| Soil (Including Moss)      | Joban, Iwaki                                    | Aug-18         | Sr90               | Under Minimum Limit of Detection Bq/kg dry | ± — Bq/kg dry 1.51 Bq/kg dry    |
| Sea water (surface)        | Tomioka port/ Fukushima                         | Aug-20         | Sr90               | 0.0012 Bq/L                                | ± 0.0004 Bq/L 0.0006 Bq/L       |
| Sea water (lower)          | Tomioka port/ Fukushima                         | Aug-20         | Sr90               | 0.0028 Bq/L                                | ± 0.0012 Bq/L 0.0016 Bq/L       |

# Measurement results of 15 items by germanium semiconductor detector

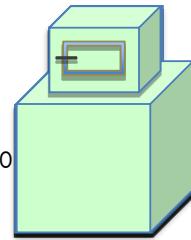
Dr.Tetsuji Imanaka, Institute of Multiple Nuclear Science, Kyoto University

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 |
|---|---------------------------------------|----------------|----------------------|---------------------|------------------|----------------------------------|----------------------------|
| Japanese ice fish                             | Fukushima                             | Apr-20         | CA                   | Cs137 0.7 Bq/kg raw | ± 0.06 Bq/kg raw | 0.7                              | Cs137 — Bq/kg raw          |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Chicken breast                                | Yonezawa, Yamagata                    | May-20         | CA                   | Cs137 — Bq/kg raw   | ± — Bq/kg raw    | Under Minimum Limit of Detection | Cs137 0.07 Bq/kg raw       |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Bracken                                       | Tono, Iwaki                           | May-20         | CA                   | Cs137 0.5 Bq/kg raw | ± 0.08 Bq/kg raw | 0.5                              | Cs137 — Bq/kg raw          |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Garlic  | Aomori Pref.                          | May-20         | OR                   | Cs137 — Bq/kg raw   | ± — Bq/kg raw    | Under Minimum Limit of Detection | Cs137 0.3 Bq/kg raw        |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Dried udon (Rice flour)                       | Sato, Iwaki                           | Sep-17         | OR                   | Cs137 — Bq/kg raw   | ± — Bq/kg raw    | Under Minimum Limit of Detection | Cs137 0.4 Bq/kg raw        |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Dried radish                                  | Haramachi-ku, Minamisoma, Fukushima   | Jan-20         | CA                   | Cs137 1.3 Bq/kg raw | ± 0.3 Bq/kg raw  | 1.3                              | Cs137 — Bq/kg raw          |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Shitake mushroom grown in bacteria-bed(dried) | Unknown                               | Unknown        | OR                   | Cs137 — Bq/kg raw   | ± — Bq/kg raw    | Under Minimum Limit of Detection | Cs137 1.3 Bq/kg raw        |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Shitake mushroom grown in log (dried)         | Mizukami, Kuma, Kumamoto              | May-20         | OR                   | Cs137 0.9 Bq/kg raw | ± 0.4 Bq/kg raw  | 0.9                              | Cs137 — Bq/kg raw          |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Seasoning (Kelp flavor)                       | Japan (production)                    | Jan-20         | 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          |
| Yellow pickled radish                         | Japan (production)                    | Mar-20         | OR                   | Cs137 — Bq/kg raw   | ± — Bq/kg raw    | Under Minimum Limit of Detection | Cs137 0.09 Bq/kg raw       |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Dried persimmon                               | Iwaki city                            | 2018           | OR                   | Cs137 1 Bq/kg raw   | ± 0.2 Bq/kg raw  | 1                                | Cs137 — Bq/kg raw          |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Wild sesame (powder)                          | Samegawa, Higashishirakawa, Fukushima | May-20         | CA                   | Cs137 0.4 Bq/kg raw | ± 0.1 Bq/kg raw  | 0.4                              | Cs137 — Bq/kg raw          |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Tea   | Fukuoka Pref.                         | 2020           | 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          |
| Yogurt  | Tochigi Pref.                         | Jun-20         | CA                   | Cs137 — Bq/kg raw   | ± — Bq/kg raw    | Under Minimum Limit of Detection | Cs137 0.06 Bq/kg raw       |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |
| Salted plum                                   | Wakayama Pref.                        | 2020           | OR                   | Cs137 — Bq/kg raw   | ± — Bq/kg raw    | Under Minimum Limit of Detection | Cs137 0.09 Bq/kg raw       |
|   |                                       |                |                      | Cs134 — Bq/kg raw   | ± — Bq/kg raw    |                                  | Cs134 — Bq/kg raw          |