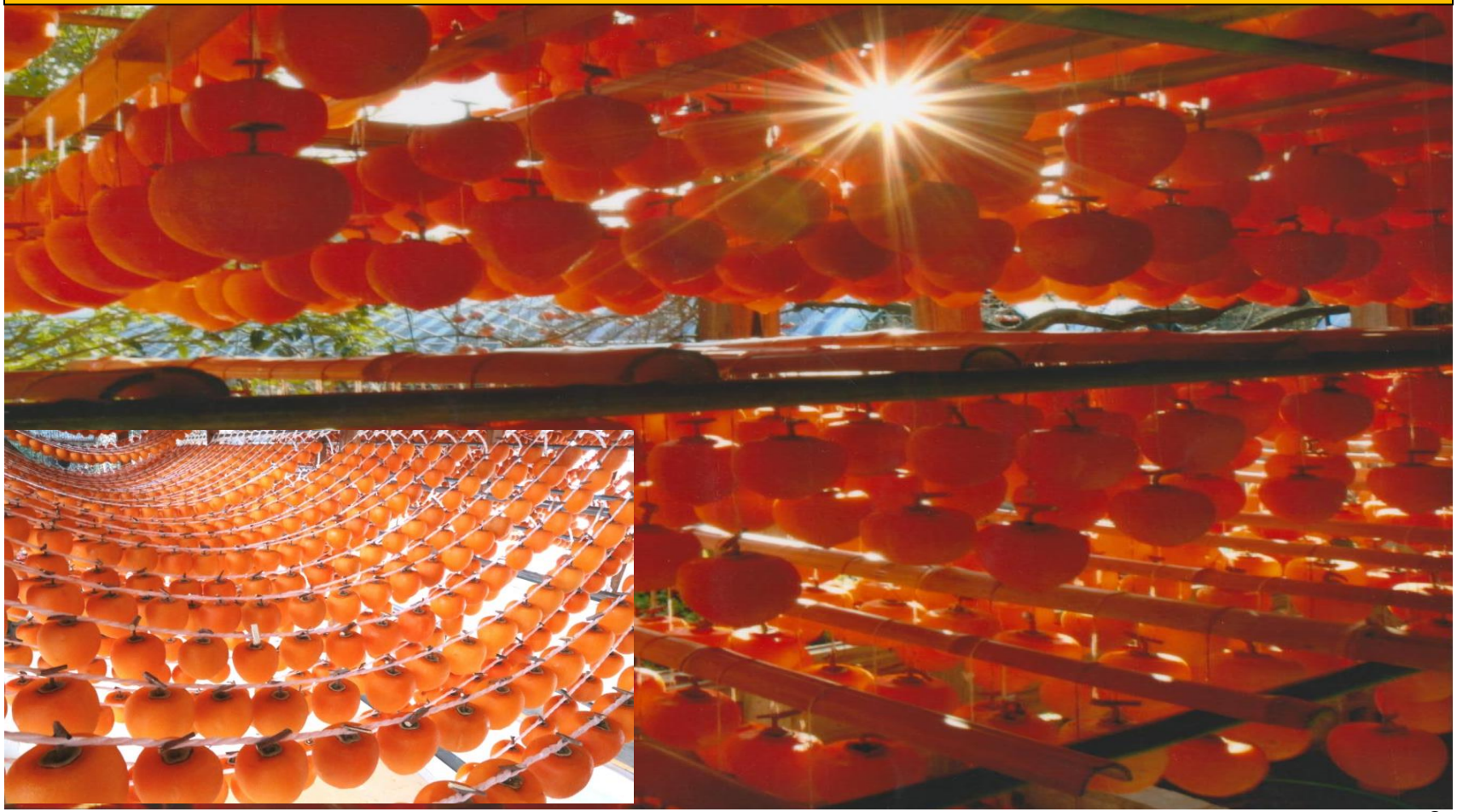
temporary translation

“Anpo-kaki (dried Japanese persimmon)” in actual practice in Fukushima prefecture

(Re-establishing the historical and traditional industry of “anpo-kaki” and resumption of the processing model district)

JA Fukushima Mirai, Standing Director Seiichi Kazumata



Birth of JA Fukushima Mirai

History of the merger

・***March 2016 Four JA districts in Fukushima, namely Fukushima city, Date, Adachi, and Souma, were merged*** (Former JA names: New Fukushima / Date Mirai / Michinoku Adachi / Souma)

Administration of the JA district 12 municipalities

(Fukushima city, Date city, Nihonmatsu city, Motomiya city, Souma city, Minami-souma city, Kawamata town, Koori town, Kunimi town, Shinchi town, Ootama village, Iitate village)

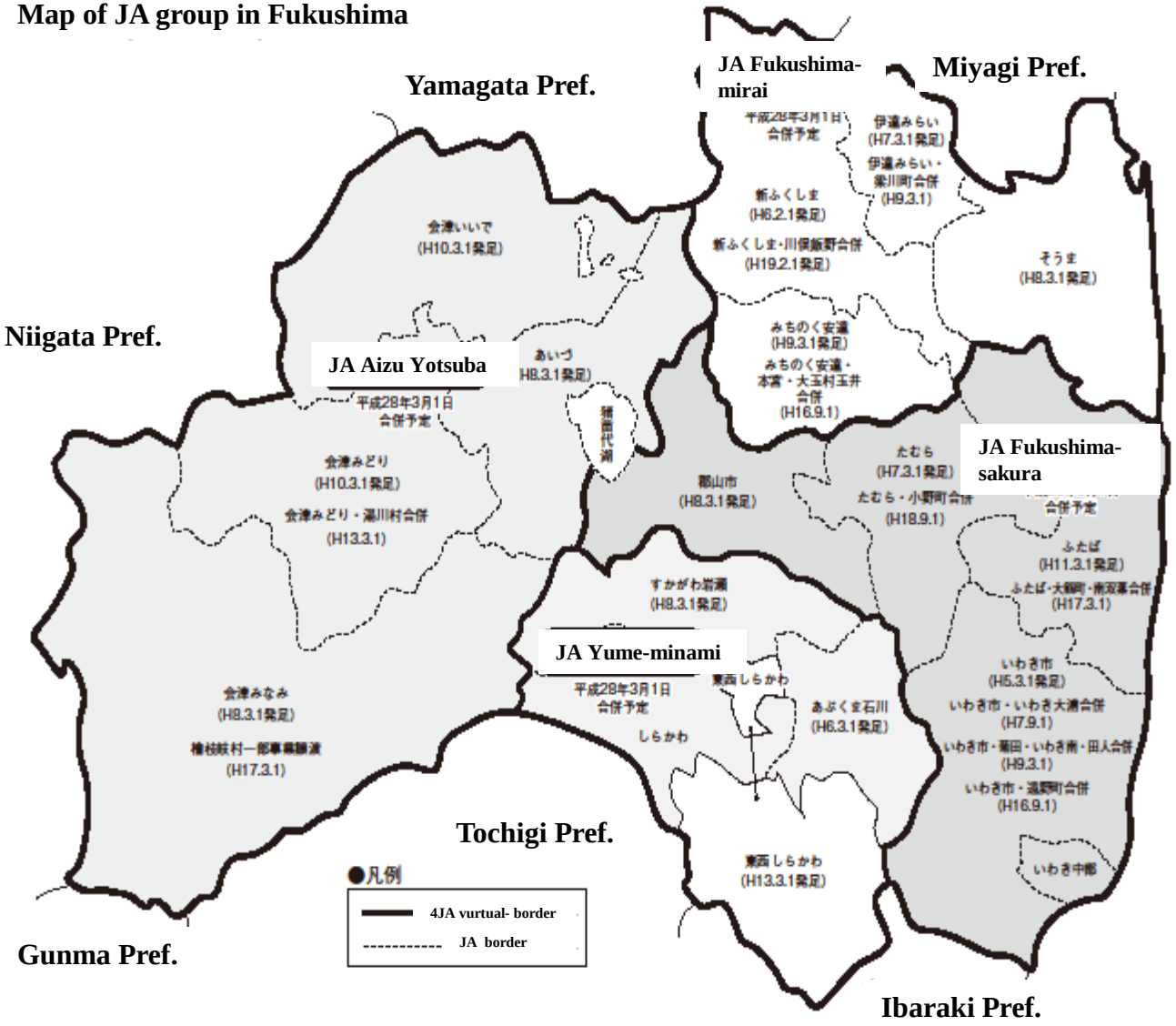
Profile at the time of the merger

	End of 2015
Union members (including Union associate members)	94,645
	(46,943)
Capital	14,230,000,000 yen
Executives (including standing directors)	55 directors, 8 auditors/secretaries
	18 persons
Number of regular employees	1,903
Associate employees	512 persons

Fiscal 2015 Operations

Business items	Amount
Account balance	715,100,000,000 yen
Balance of loan	147,400,000,000 yen
Long-term mutual aid reserves	280,120,000,000 yen
Commodity sales	2,730,000,000 yen
Procurement supply amount	1,760,000,000 yen

Map of JA group in Fukushima



Earnest desire to protect historical production land

Decontamination and cleaning of fruit trees in midwinter: countermeasure operations for absorption control in rice fields

"All work should be carried out as joint operations and with the same viewpoint"

Joint cleaning operations in midwinter using a high-pressure washing machines
1 city 2 towns* 390 team system / total 35,000 persons
(a health checkup was carried out for each member after operations were completed)
Preparation of a 500 mesh map of the district for soil survey

*Date city, Kunimi town, Koori town

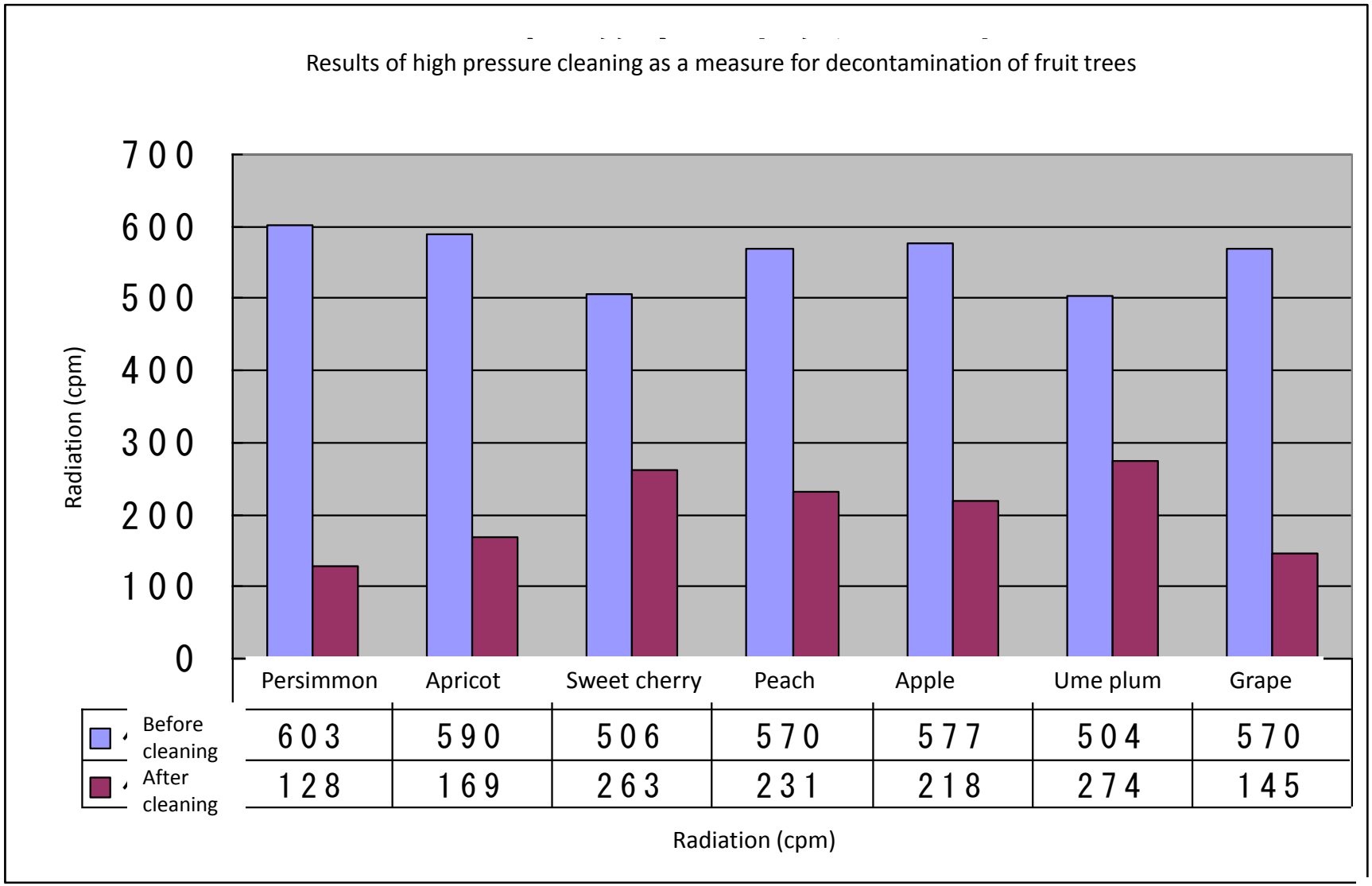
Absorption control material for rice fields was distributed
Joint operation by 90 trucks in the district
10a／zeolite 200kg, potassium silicide 200kg (2012, 2013)
(a health checkup was carried out for each member after operations were completed)
100 mesh map of the district, Approx. 3,000 locations (Cs. soil chemical property)
(Carried out before tilling and after harvest)

Achievement of decontamination of fruit trees aimed for as much ND as possible (March 2012)

(Achievement in the former Date Mirai district)

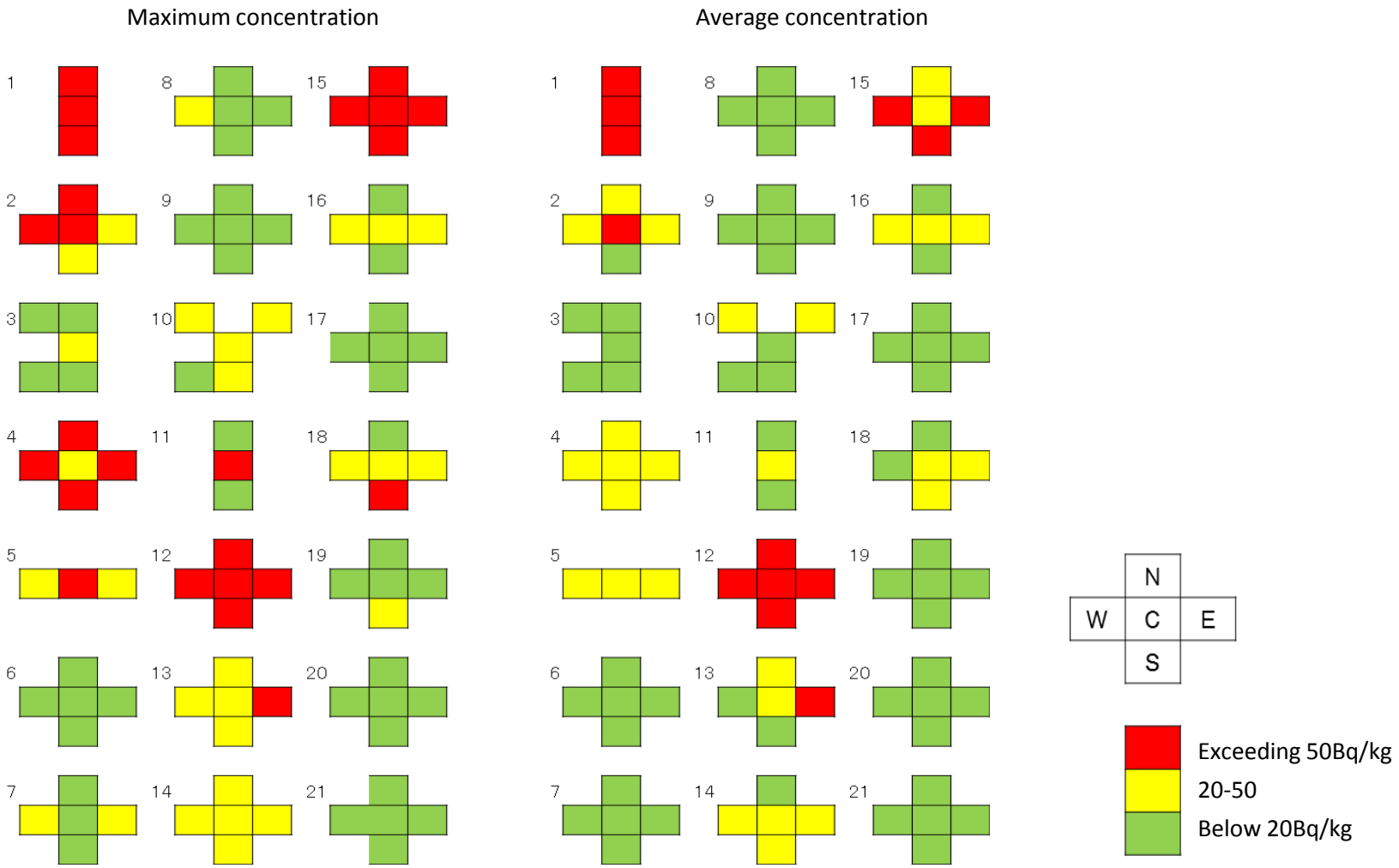
By tree species	Number of treated trees	Number of locations in the operations	By tree species	Number of treated trees	Number in the operations
Peach	**199,896**	**8,938**	**Grape**	**8,736**	**846**
Persimmon	**257,517**	**24,847**	**Yuzu Citrus**	**356**	**98**
Ume (plum)	**11,839**	**2,563**	**Chestnut**	**616**	**137**
Apple	**30,197**	**1,620**	**Prune**	**200**	**44**
Japanese pear	**794**	**230**	**Loquat**	**36**	**19**
Fig	**6,611**	**183**	**Chinese quince**	**51**	**29**
Plums	**11,951**	**1,169**	**Pomegranate**	**141**	**31**
Gingko	**649**	**50**	**Blueberry**	**243**	**4**
Western pear	**3,367**	**125**	**Apricot**	**878**	**93**
Yellow peach	**5,931**	**428**	**other**	**8,634**	**724**
Kiwi fruit	**873**	**139**			
Species of trees 22 types		**Number of treated trees 549,516**		**Number of locations of operations 42,317**	

A high decontamination cleaning effect of the fruit tree was achieved



Distribution of highly radioactive fruit producing trees in the land (results of surface survey) 2012 survey except

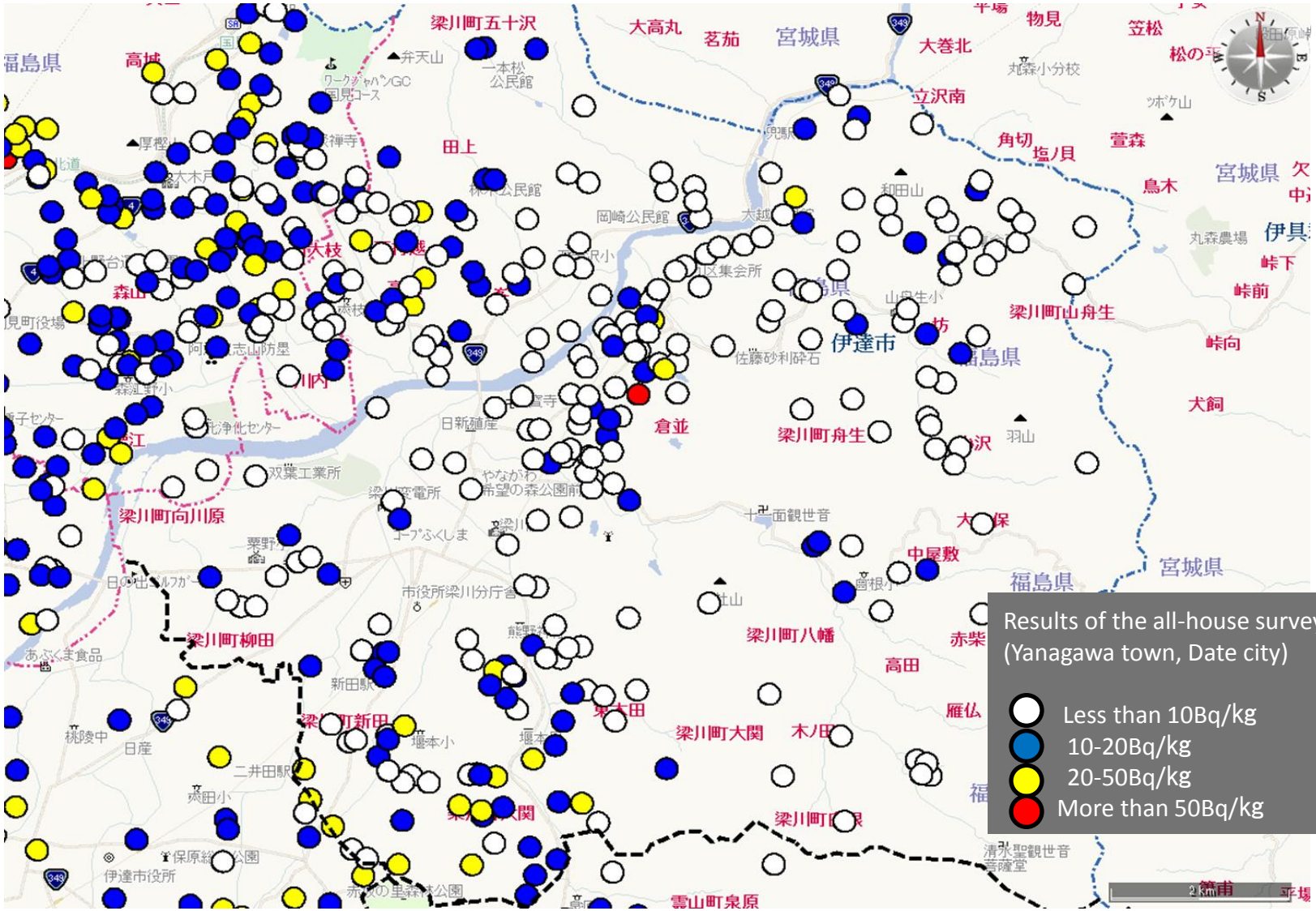
Distribution of highly radioactive fruit producing trees in the land (results of surface survey)



Radioactive cesium concentration (pattern diagram) by tree species at different planted locations in the same orchard (21 orchards)

* The three rows on the left are the maximum concentration of one tree, the three rows on the right are the average concentration of one tree

Cs survey on each raw material persimmon orchard in order to resume the model district



Results of the all-house survey
(Yanagawa town, Date city)

- Less than 10Bq/kg
- 10-20Bq/kg
- 20-50Bq/kg
- More than 50Bq/kg

Production status of Anpo-kaki

“Anpo-kaki (dried persimmons)” was developed approx. 90 years ago in the former Yanagawa town, Date city, Fukushima prefecture. Anpo-kaki is known in Japan as a special product representing Fukushima prefecture.

■Main production areas

Date District (Date city, Kunimi town, Koori town)

Kenchu District (Sukagawa city)

Aizu District (Aizu-wakamatsu city, Aizu-misato city)

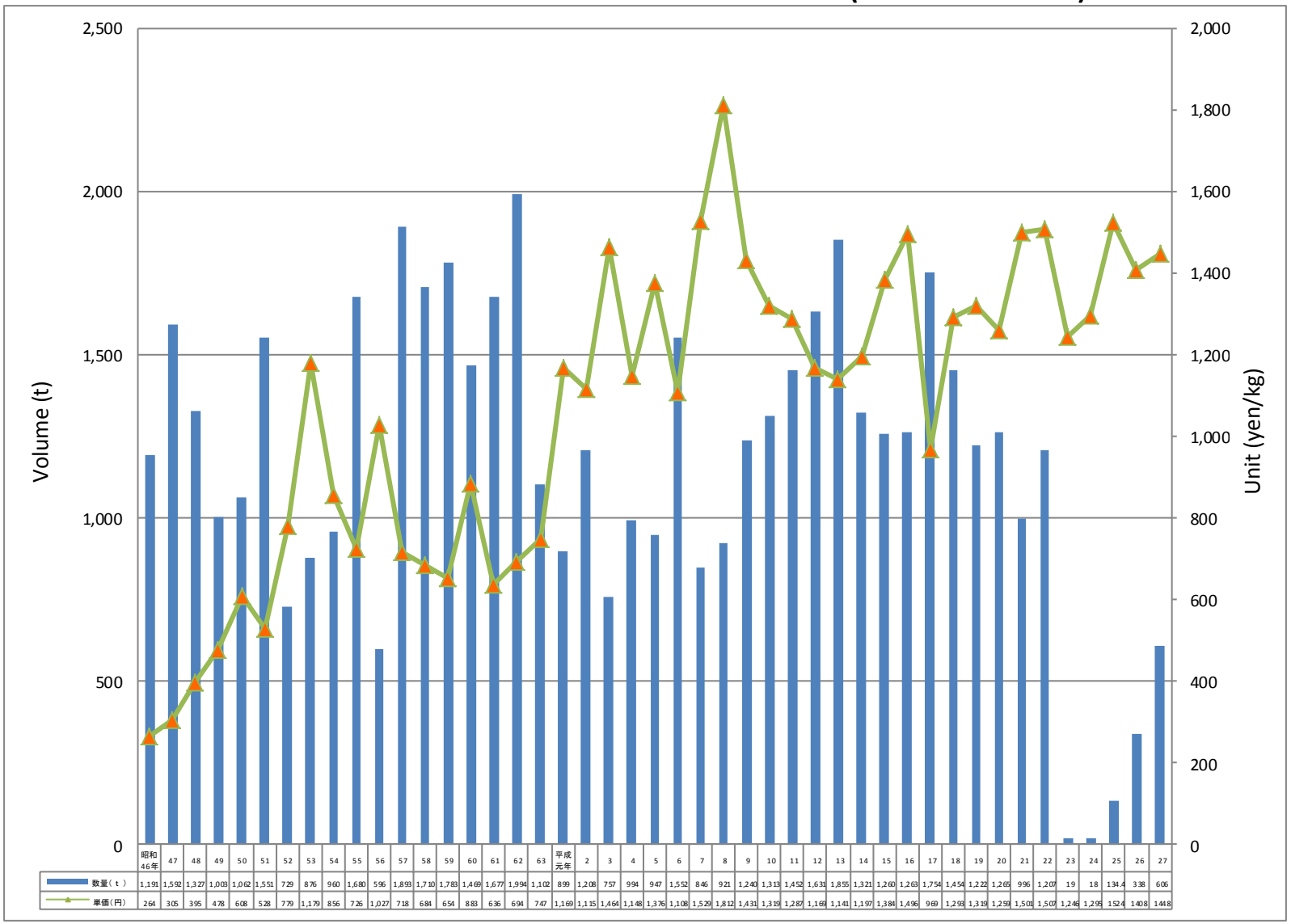
■Anpo-kaki production in Date District before and after the Earthquake

Shipped volume: 1,423t (2010) → 907t (2015)

Ranking in Japan: 2nd (2010) → 3rd (2014)

Change in shipping volume by JA

(results after 1971)



	昭和46年	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	平成元年	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
数量（t）	1,191	1,592	1,327	1,003	1,062	1,551	729	876	960	1,680	596	1,893	1,710	1,783	1,469	1,677	1,994	1,102	899	1,208	757	994	947	1,552	846	921	1,240	1,313	1,452	1,631	1,855	1,321	1,260	1,263	1,754	1,454	1,222	1,265	996	1,207	19	18	134.4	338	606
単価（円）	264	305	395	478	608	528	779	1,179	856	726	1,027	718	684	654	883	636	694	747	1,169	1,115	1,464	1,148	1,376	1,108	1,529	1,812	1,431	1,319	1,287	1,169	1,141	1,197	1,384	1,496	969	1,293	1,319	1,259	1,501	1,507	1,246	1,295	1524	1408	1448

*Results handled by JA Fukushima Federation of Economic Organizations (until 2002), results by JA Fukushima National Federation of Agricultural Cooperative Associations (after 2003)

•Anpo-kaki and the nuclear disaster

Due to the accident at TEPCO's Fukushima Daiichi Nuclear Power Plant, anpo-kaki production in Date district was voluntarily suspended in 2013. A system to produce and supply only safe anpo-kaki has been established, by installing a process to resume the model district based on tests on raw material persimmons, development and introduction of nondestructive inspection equipment, and introduction of the Good Agricultural Practice (GAP) since 2013.

In Anpo-kaki production, there is a large variation in radioactive concentrations in raw material persimmons, and the radioactive material is concentrated by the drying process. So to provide safe raw material persimmons, an overall quantity test by nondestructive inspection equipment and the proper management of each manufacturing process by GAP is considered to be conditions for processing and shipment.

Promotion system for the revitalization of anpo-kaki production areas in 2015

•Anpo-kaki Restoration Council

- Constituent member: Ministry of Agriculture, Forestry and Fisheries, prefecture, city, town, JA, etc.
- Approach details: Providing safe raw material persimmons, establishment of product test system

•Anpo-kaki Production Promotion Association, Fukushima Prefecture

•Constituent members: Fukushima city, Date city, Kunimi town, Koori townCentral Meeting JA Fukushima, JA Fukushima National Federation of Agricultural Cooperative Associations JA New Fukushima, JA Date Mirai, Date Fruit Agricltural Cooperative,
Date district Anpo-kaki Liaison Council, Fukushima prefecture Agriculture, Forestry and Fisheries Department

•Main project description: **① Introduction of nondestructive inspection equipment, ② Hold council meetings, ③ Guidance in the production area, ④ Hold workshops, ⑤ Introduction and implementation, etc. of GAP**

•Bureau: JA Fu[illegible]ma National Federation of Agricultu[illegible]operative Association, JA Date Mirai, [illegible]ima Agriculture, Forestry and Fishe[illegible]epartment

Fukushima City Regional Agricultural Revitalization Council	Date City Regional Agricultural Revitalization Council	Koori Town Regional Agricultural Revitalization Council	Kunimi Town Regional Agricultural Revitalization Council
Constituent member: Fukushima city, JA New Fukushima, Kenpoku Forestry Office, Agriculture Promotion Office, etc. Bureau: Fukushima city	Constituent member: Date city, JA Date Mirai, Date Fruit Agricultural Cooperative, Date District Anpo-kaki Liaison Council, Date Agriculture Promotion Office, etc. Bureau: Date city	Constituent member: Koori town, JA Date Mirai, Date Fruit Agricultural Cooperative, Date District Anpo-kaki Liaison Council, Date Agriculture Promotion Office, etc. Bureau: Koori town	Constituent member: Kunimi town, JA Date Mirai, Date Fruit Agricultural Cooperative, Date District Anpo-kaki Liaison Council, Date Agriculture Promotion Office, etc. Bureau: Kunimi town

•Main project description
•① Radioactive material test on the fruit (detailed tests and nondescructive tests such as testing during the early period)
•② Hold council meetings, ③ Hold workshops, ④ Technical guidance, survey and analysis ⑤ Introduction and implementation, etc. of GAP

Installation of nondestructive inspection equipment: JA Date Mirai Koori testing facility	Installation of nondestructive inspection equipment: JA Date Mirai Yanagawa / Hobara testing facility	Installation of nondestructive inspection equipment: JA Date Mirai Koori / Date testing facility	Installation of nondestructive inspection equipment: JA Date Mirai Kunimi testing facility

○ Cleaning of drying sites

and preparation for resumption is carried out by the team as joint operations

Everyone worked on cleaning the drying sites, and secondary pollution prevention countermeasures were carried out.

•Dust had collected in the roof and rafters and was removed with a long mop.

•The straight pipe for lateral hanging was wiped two times with a cloth to clean.

•Dirt and dust were removed by vacuum cleaner, and the floor was mopped. The dirt floor was swept with a broom, trying to avoid stirring up dust.

Course of resumption of the anpo-kaki processing model district after the nuclear accident

- **Countermeasures in 2011**
- Decontamination
- ① Shaving the bark and cleaning the trees
- ② Heavy pruning (Pruning tree height)

- **Countermeasures in 2012**
- 1 Identification of decontamination status of raw material persimmons
- ① Check the raw material persimmons of all houses
- ② Confirmation of transfer to the tree
- ③ Confirmation of the effect of heavy pruning
- ④ Consideration of decontamination methods of the drying site
- 2 Consideration of preparations for total inspection by nondestructive inspection equipment

- **Countermeasures after 2013**
- 1 Ensuring safe raw material persimmons
- (Determination of resumption of the processing model district)
- 2 Installation of total inspection by nondestructive inspection equipment
- (Development of inspection equipment (only 2013) additional introduction)
- 3. Introduction of Good Agricultural Practice (GAP)
- 4. Promotion of resumption of sales, and publicizing approaches used in the production land to clients
- 5 Implementation of replacing old tree orchards and pruning

- *Of the above countermeasures, 1-3 were carried out by Anpo-kaki Production Promotion Association, Fukushima Prefecture, as “Fukushima special products revitalization support project (Anpo-kaki production area revitalization project).”

Young fruit from all orchards are inspected

Approaches for the revitalization of anpo-kaki production areas

Resumption by determining model districts

since 2013 (full-voluntary suspension in 2011, 2012)

1. Ensuring safe raw material persimmons
(full Cs analysis of cultivated orchard/determination of resumption of processing model district)
Cs analysis during the young fruit period (July, determining the processing model district) Cs analysis before harvest (all orchards in the model district)
2. Product total inspection by nondestructive inspection equipment
(development / introduction of the equipment), three inspection sites
Shipping specifications: Inspection of each “Hiratanenashigaki” 200g tray, “Hachiyagaki” 230g tray (8 trays per 1c/s). Screening level 50Bq/kg (even if one tray exceeds the limit, the whole box is disposed)
3. Introduction of Good Agricultural Practice (GAP)
4. Promotion of resumption of sales, and publicizing to a focused business market
5. Implementation of heavy pruning

Anpo-kaki Restoration/Revitalization/Shipping Resumption ceremony (December 2, 2013)

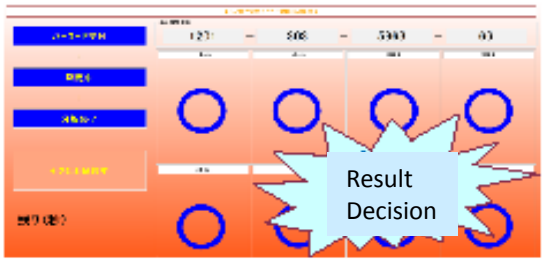
Anpo-kaki nondestructive inspection status (Yanagawa testing facility)

Course of Nondestructive Anpo-kaki Inspection

Producer

A case of Anpo-kaki (8 per tray) is brought to the inspection facility.

The case (8 per tray) is placed one the inspection equipment and measured.



Each tray is tested. Trays with a value below the screening level pass.

Below the screening level

Exceeds the screening level

Information provided on the website

Delicious Anpo-kaki (Image)

Products which pass are affixed with an inspected sticker for each tray and then shipped.

When values exceed the screening level, the whole case (8 per tray) is disposed.

○Affixing an Inspection Sticker

All anpo-kaki (trays) which have been checked by radioactive cesium **nondestructive inspection equipment** and showed values less than the standard value are **shipped with a sticker certifying inspection by the Anpo-kaki Production Promotion Association, Fukushima Prefecture**.

High-pressure washing to resume shipping

Joint high-pressure cleaning operations
(December 2011 - March 2012)

Surveying a tree

Joyful images of the resumption of processing

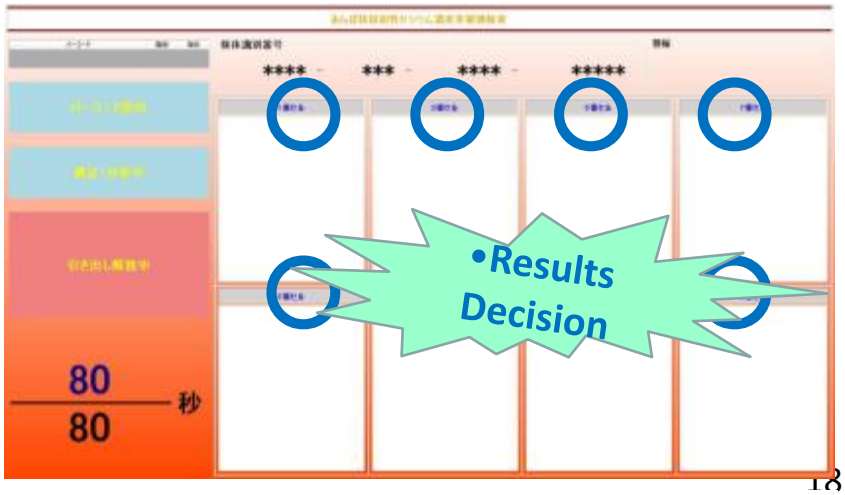
Sequential hanging operations at
the drying site

Ceremony for the resumption of the model district December 2, 2013

Installation of nondestructive inspection equipment

(33 pieces of equipment were installed in 5 location in the district)

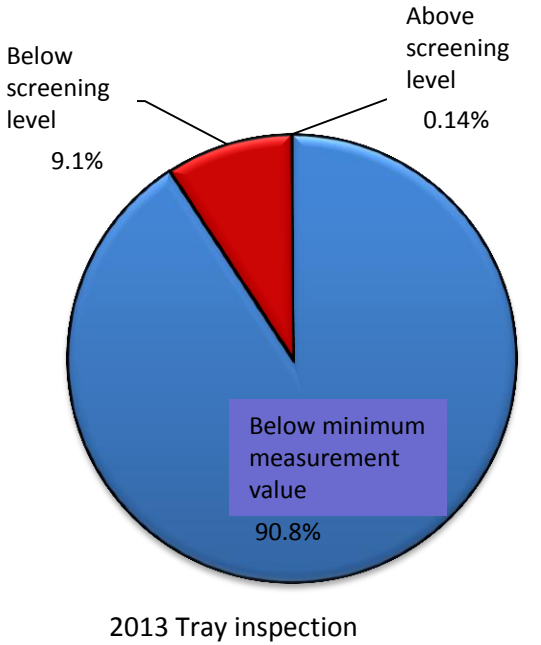
12 pieces of equipment in 2013, 14 in 2014, 7 in 2015



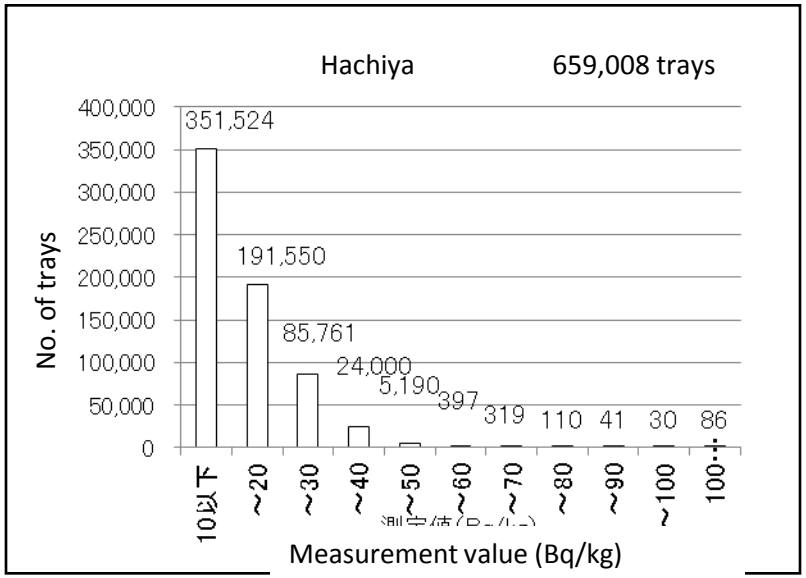
Nondestructive inspection display (even if one tray exceeds the standard limit, the whole box is disposed)

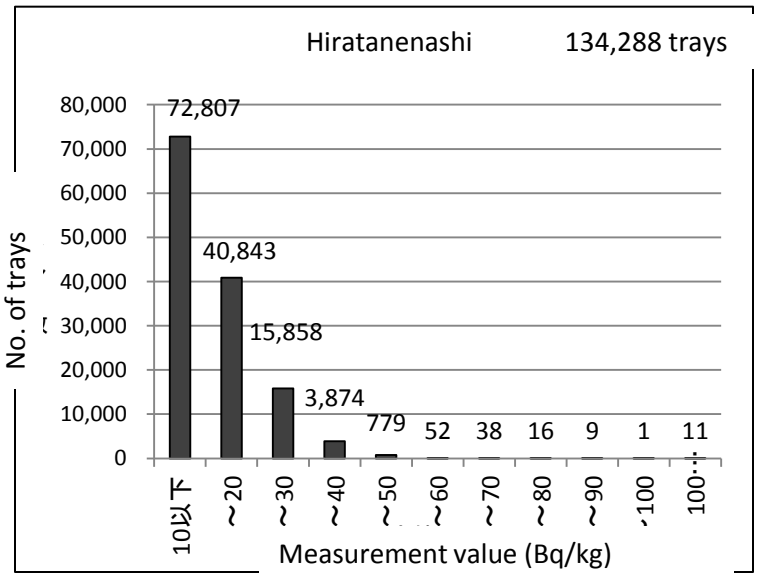
Total amount, total bags receiving nondestructive inspection in 2013

1) Number of inspected trays					
Cultivar	Classification	Number of inspected trays	Below the minimum measurement value	Screening Below the level	Screening Exceeding the level
Hachiya	Number of trays	659,008	596,534	61,491	983
	percentage (%)	100%	90.52%	9.33%	0.15%
Hiratanenashi	Number of trays	134,288	123,784	10,377	127
	percentage (%)	100%	92.18%	7.73%	0.09%
Total	Number of trays	793,296	720,318	71,868	1,110
	percentage (%)	100%	90.8%	9.06%	0.14%



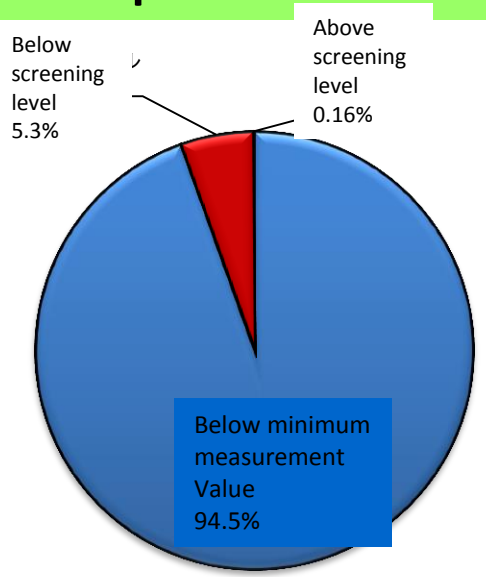
2013 Tray inspection



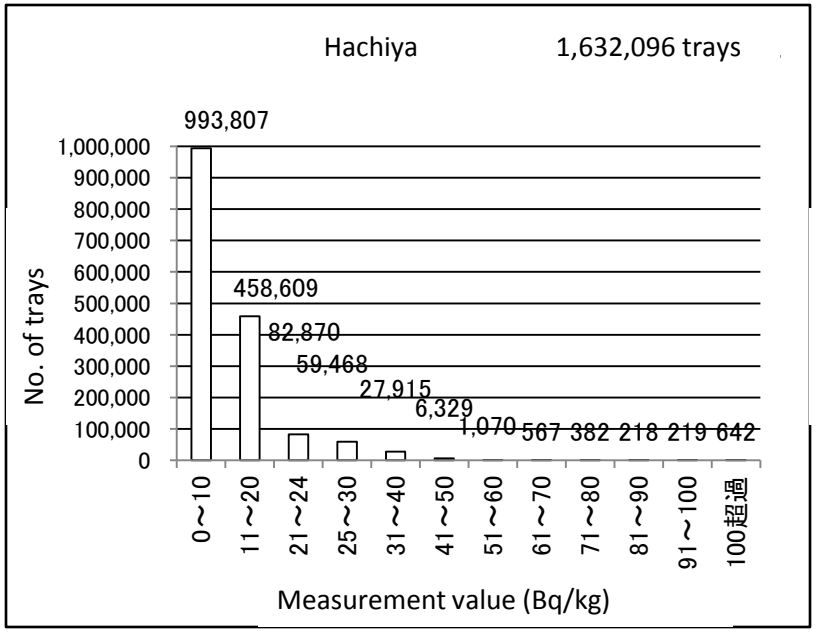


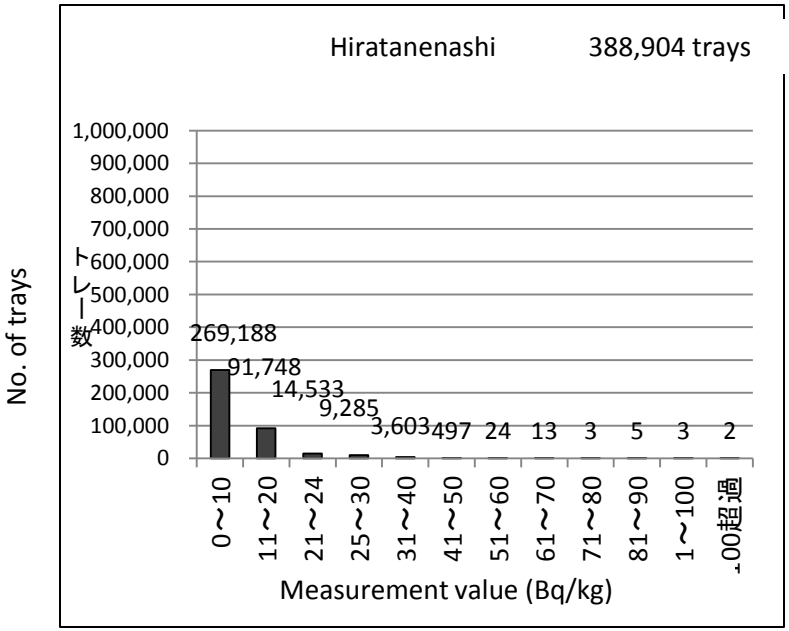
Total amount, total bags receiving nondestructive inspection in 2014

1) Number of inspected trays					
Cultivar	Classification	Number of inspected trays	Below the minimum measurement value	Screening Below the level	Screening Exceeding the level
Hachiya	Number of trays	1,632,096	1,535,286	93,712	3,098
	percentage (%)	80.8%	76.0%	4.6%	0.153%
Hiratanenashi	Number of trays	388,904	375,469	13,385	50
	percentage (%)	19.2%	18.6%	0.7%	0.002%
Total	Number of trays	2,021,000	1,910,755	107,097	3,148
	percentage (%)	100%	94.5%	5.3%	0.156%



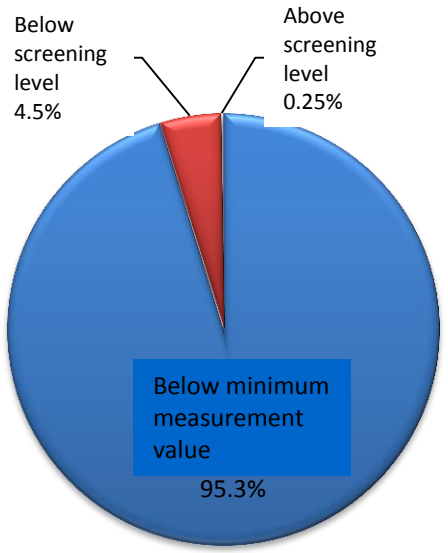
2014 Tray inspection



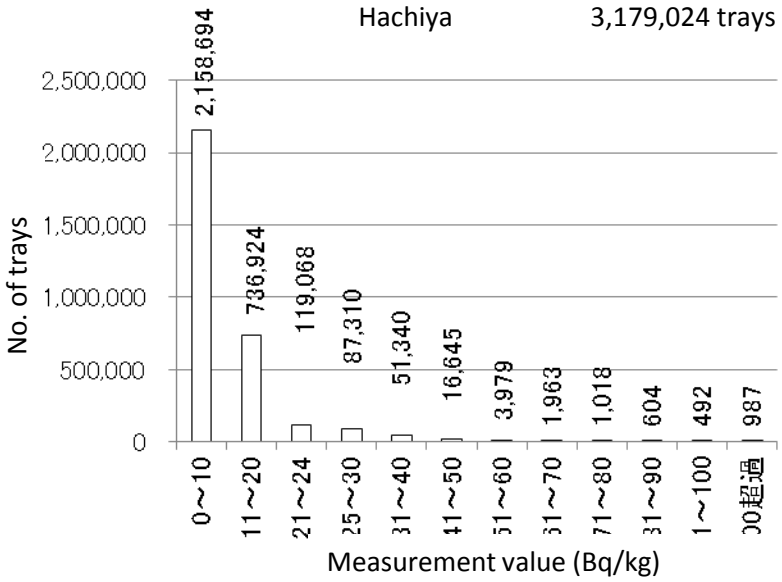


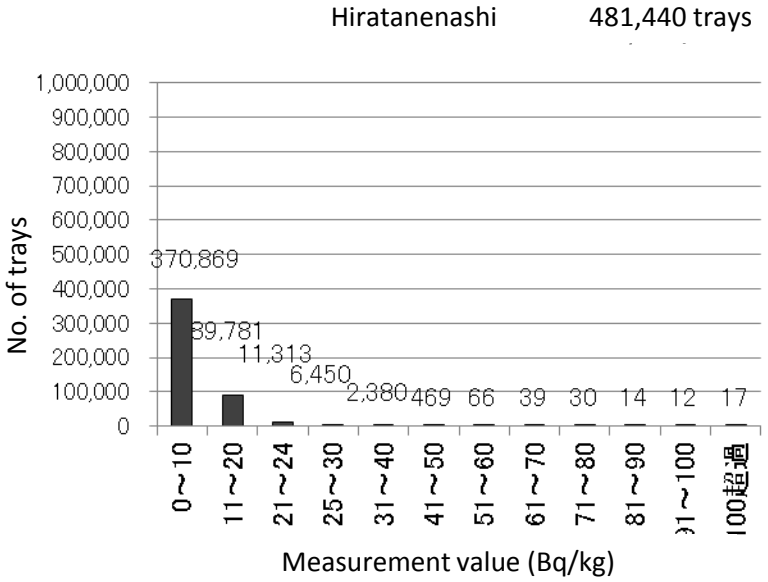
Total amount, total bags receiving nondestructive inspection in 2015

1) Number of inspected trays					
Cultivar	Classification	Number of inspected trays	Below the minimum measurement value	Screening Below the level	Screening Exceeding the level
Hachiya	Number of trays	3,179,024	3,014,686	155,295	9,043
	percentage (%)	100%	94.8%	4.9%	0.284%
Hiratanenashi	Number of trays	481,440	471,963	9,299	178
	percentage (%)	100%	98.0%	1.9%	0.037%
Total	Number of trays	3,660,464	3,486,649	164,594	9,221
	percentage (%)	100%	95.3%	4.5%	0.25%



2015 Tray inspection

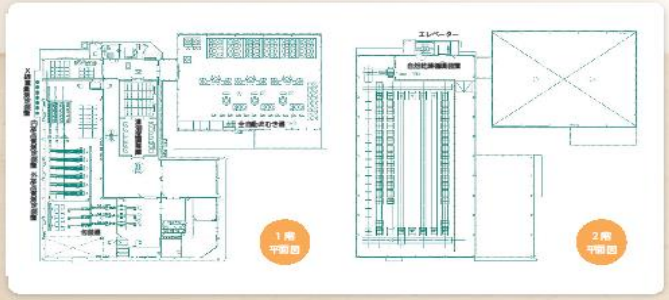




Challenging the revitalization of new production areas / New establishment of Anpo Koubou Mirai

施設概要

補助事業名／攻めの農業実践緊急対策事業（集出荷・加工処理体制合理化推進事業）
伊達市農業振興事業（あんぽ柿加工処理体制合理化推進事業）
桑折町農林業振興事業（あんぽ柿近代施設整備事業）
国見町農林業振興事業（あんぽ柿加工選別包装施設整備事業）
事業実施主体／ふくしま未来農業協同組合
所　在　地／福島県伊達市梁川町字西土橋５－１
施設概要／鉄骨造２階建　敷地面積：5, 020㎡
延床面積：5, 218. 87㎡
事　業　費／１．製造請負工事（設備プラント）　695, 000, 000円
２．建物新築工事　530, 325, 380円
３．開発、市道拡幅工事費　21, 100, 000円
４．開発行為関係費用　3, 474, 620円
５．設計管理料　39, 300, 000円
総事業費　1, 289, 200, 000円
国　費　339, 000, 000円
伊達市補助　136, 617, 000円
桑折町補助　3, 000, 000円
国見町補助　7, 548, 000円
自己資金　803, 035, 000円
工　期／着工　平成27年11月２日　竣工　平成28年３月31日



JAふくしま未来 あんぽ柿加工選別包装施設
「あんぽ工房みらい」完成披露式次第

平成28年6月23日

JAふくしま未来


Thank you for listening.