

Katsushige Murayama 1
Organically Certified Fruits and Vegetables in the Japanese Market

By Katsushige Murayama

Introduction:

I have modified the content of this presentation according to the feedback that I received for the originally submitted abstract, which noted that it emphasized too heavily on non-organic issues.

In this presentation, I will examine why the organic market is in the state that it is in now and where it may go from here. Please note that one of my colleagues will present on related topics at the IFOAM Trade Conference. He will discuss the development of markets for eco-agricultural products, including those of environmentally preservative farming, as well as for processed foods, and another will talk about the JAS law's regulations at this conference.

1. Published Data on Organic Agricultural Products

Data that has been published by the Ministry of Agriculture, Forestry and Fisheries, which is the authority in charge, is as follows:

Table 1: Certified Organic Operators (as of 30.09.2003) (see attached on a separate page)

Table 2: (see attached on a separate page)

(a) Organic Agricultural Products (F.Y. 2001)

(b) Processed Foods with Organic Agricultural Products (F.Y. 2001)

(Reference) Gross Production and Graded Quantity in Japan (F.Y.2001)

Table 3: Ratio of Shipment of JAS Graded Organic Products by Destination
(see attached on a separate page)

For those who hold an assumption that Japan is the third largest market after those of EU and the United States, the small number of organically certified producers as presented in Table 1 may come as a surprise. As indicated in Table 2-a, the total number of organically certified vegetables and fruits is very low, and the ratio of domestic versus imported products is quite astonishing. Table 2-b presents data on processed foods. Just by looking at the numbers, domestic and imported processed products are close to being even. However, the reality is quite different. While the processing of iconic Japanese foods, such as tofu, natto, and soy sauce, is done in Japan, their ingredients are almost all imported. Frozen vegetables and cut vegetables for restaurants and pre-made foods are also mostly imported. In Table 2-reference, the production levels of vegetables and fruits, grains, and tea, as well as the percentages of certified products in these categories are presented. We are looking at a very small world.

Table 3 shows who handles vegetables and fruits. In all of the categories, agricultural cooperatives and consumer cooperatives play a significant role. The number of wholesale markets in this table is extremely small because organic handlers have always preferred mutual agreements to wholesale auctions. In general, however, vegetables and fruits have traditionally been dealt with in central and regional wholesale markets, as they are produced by a large number of producers in a variety of places and they are perishable. Only recently, ever since the law on wholesale marketing was revised, auctions at wholesale markets are being rapidly replaced by mutual agreements.

2. The case of Polan

Polan is a nation-wide grass-root organization that consists of more than 60 retail shops and home-delivery services that handle organic agricultural products. It was founded 20 years ago. At present, it also serves as the secretariat of IFOAM Japan.

Polan's mission is "to expand organic agricultural farms in Japan." Their annual sale is 12 billion Japanese Yen. All of their products are certified organic. Table 4 presents the quantity of vegetables and fruits that Polan handles annually. Please note that the data dates back only to 2001, since their previous records are no longer available.

Table 4: Vegetables and Fruits handled by Polan

	Onions (t)	Carrots (t)	Potatoes (t)	Sweet potatoes (t)	Welsh onions (t)	Japanese radishes	Cabbages
2001	400	400	500	7	6	500,000	530,000
2002	500	400	360	9	7	450,000	420,000

	Lettuce	Broccoli	Asparagus (bunches)	Spinach (bunches)	Chinese chives (bunches)	Potherb mustard (bunches)	Cucumber (t)
2001	320,000	200,000	40,000	330,000	200,000	50,000	80
2002	280,000	200,000	50,000	350,000	300,000	300,000	90

	Pumpkins (t)	Tomatoes (t)	Eggplants (t)	Kidney beans (t)	Oranges (t)	Rice (t)
2001	70	120	60	13	13	230
2002	60	100	70	13	11	270

Note: The quantity of vegetables listed above is a rough estimate of organic vegetables handled by Polan.

Since the introduction of the JAS law, the quantity of certified onions and carrots purchased by restaurants, bar chains, and supermarkets has risen. However, these new customers do not share Polan's perspective that organic products ensure food safety and a clean environment for the future generations. Rather, they are simply driven by the law of marketing; they are interested in these products merely because they are new and attractive commodities. Due to these fundamental differences between them, Polan is struggling to make these customers understand that their supplies, which consist of domestic organic production, can fluctuate with abnormal weather conditions, insects, diseases, and so on.

a) Price gaps

Both the quantity and the price are agreed upon and fixed before products are produced and shipped. To give you a rough idea, let's hold the prices of organic products at a constant and compare them with those of conventional products. When conventional agricultural products are produced in abundance and their prices go down, the prices of organic products become rather expensive in comparison; when conventional ones experience poor harvest, on the other hand, organic products would become cheaper in relativity. Please note that, even though this comparison is based on the prices of organic products being fixed, there are a few organic producer groups that are considering adjusting their product prices relative to market fluctuations. Although some school nutritionists have reported that their annual average costs of conventional and organic products came out to be virtually the same, supermarkets generally price organic products at 1.3 to 1.5 times as high as conventional ones.

b) Food Products with a Growth Potential

A number of food-related incidents, such as BSE and false labeling, have occurred in the past couple of years, and the public awareness has risen as a result. Despite it, we have yet to experience any organic boom since the introduction of the JAS law. This may be partly due to the attitude of the agricultural policy makers, but also it owes to the facts that organic agricultural products are not yet well understood and that Japan has been experiencing deflation. At present, consumers tend to prefer safe but cheap foods, rather than demanding products that are strictly organic per se. This tendency makes me believe that processed organic foods that are safe and convenient, such as cut vegetables and pre-made meals, may be the ones that have the most potential to grow in the near future.

c) What the president of Polan hopes for from Exporters to Japan (The following is a statement from Mr.Imai, the president of the Kanto Division of Polan, and the general secretary of IFOAM Japan)

The presence of organic agriculture and its principles are essential in order to protect Japan's environment, and they shall not ever be threatened.

I would like exporters to prioritize agricultural products that are not being produced in Japan (e.g. spices, black tea, fruits, etc.) in their handling. Despite my wishes, I have little doubt that other products will also be exported to Japan, for the Japanese food industry is waiting anxiously to buy imported organic products as processing ingredients. I only hope that such products will be produced and transported in ways that are legitimately organic. Specifically, I hope that potentially problematic issues with these imported organic products, such as residual pesticides, will be handled with much care in order to ensure that the image of organic products will not be damaged by their activities.

3. BIO FACH Japan

BIO FACH Japan 2003 ended on October 14. Although the NIKKEI, Japan's representative media enterprise, collaborated with the Nurnberg Global Fairs for the first two BIO FACH Japan events, they withdrew from this past event claiming that their financial burden had been too much in the past. IFOAM Japan has been involved as a special collaborator from the first event, assisting in finding exhibitors, creating and implementing regulations on exhibition items, and so on.

Table 5: BIO FACH Japan

	Countries	Companies			Booths	Registered Visitors
		Domestic	Foreign	Total		
2001	22	77	107	184	177	13,769
2002	17	51	121	172	136	14,001
2003	15	59	67	126	167	13,956

According to the Nurnberg Global Fairs, the decrease in the number of foreign exhibitors in 2003 was due to the scheduling conflict with some other food fairs abroad that were held around the same time as the 3rd BIO FACH Japan.

When IFOAM informed IFOAM Japan that the Nurnberg Global Fairs, of whom IFOAM is a special collaborator, was interested in sponsoring a fair in Japan, we could not help but hesitate to accept the request for help. We knew that we would not be able to find any organic producers that would be interested in establishing businesses at such a fair in Japan. Nevertheless, we accepted it with a condition that the fair would be organized as "a place to make the organic sector known to the general public in Japan."

After only having hosted three of such fairs, it may still be too early to determine its success or failure. However, it is very clear that the scale has been very small. Compared to Foodex, one of the most reputable food fairs in Japan, exhibitors and visitors of the Bio Fach Japan have been approximately ten times fewer.

At Foodex, not only are most of the products non-organic, but also the exhibitions are full of propagandas of exhibitors' own products that are supposedly 'safe' and 'healthy.' Sadly, this phenomenon reflects rather accurately the level of interest in food safety that exists in Japan at the moment.

4. Surveys

As I have said earlier, organic-related data that is available is very little. In our attempt to supplement for what is lacking, IFOAM Japan has begun a variety of investigations in collaboration with the Sogo Shijo Kenkyusho, Inc., an institute with expertise in the field of market research. We are conducting surveys by category: producers, retail shops, distributors (subdivided: supermarkets, etc.), and consumers (subdivided: members of organic-only organizations, consumer cooperative members, general, etc.). Although this year's data will not be completed until after this conference, I can inform you that we have not found any indication that the organic mark is recognized highly. The interim report of these surveys that I have read showed certain tendencies by which the market perceives organic products. Please contact IFOAM Japan if you are interested in more detailed reports.

5. What it means to be certified

While the topic of this presentation contains the word "certified" as it was requested by the conference organizer, I question the necessity to limit the discussion only to what is certified. Unlike in other countries, Japan's organic agriculture began with *Teikei* and its variations. Although many different types of distribution methods, such as home-delivery services that connect producers and consumers who are both members of the same distribution organization (IFOAM Japan's members are engaged in this type of distribution method) and collective purchasing that has evolved from the combination of *Teikei* and the consumer cooperative movement, have come to exist, the basic concept or mission remains unchanged, which is to build "face-to-face" relationships. Such relationships promote local production-and-consumption, as well as the utilization of local resources (e.g. collecting consumers' leftovers or garbage to make manure and feed for animals), and thus do not need any certification system, private or public. Therefore, when the government tried to legislate certification and its guidelines, they encountered a lot of opposition. Despite it, however, the government continued to ignore the expertise and the long history of organic producers in the process of creating production standards, and instead only took into consideration those principles supported by CODEX and WTO. Among those involved in *Teikei* or its variations, only a few have become certified, while most are choosing not to accept it. Therefore, I would like to note here that the numbers that I have presented above relate only to those few that are within the framework of certification, implying that they do not include the majority of organic producers that exist in Japan.

6. Japan's Agriculture – An Overview of Vegetables and Fruits in Numbers

Table 6: Price at Various Stages of Distribution Process and the Ratio of Those Prices on Major Vegetables and Fruits (see attached on a separate page)

I have not yet described the whole picture of the markets of vegetables and fruits. Table 6 presents how the prices of non-organic vegetables change from when they leave the hands of producers to when they reach consumers. Please note that prices of organic products are somewhere between 1.3 to 1.5 times higher than those of non-organic products. In general, sales earned by producers are said to be 20 to 30 % of retail prices. This low percentage is in a stark contrast with the 70 to 80 % that is earned by producers in the case of alternative distribution methods, such as *Teikei*. This comparison serves as a good criterion when considering how to producer's sustainability could be reinforced.

Attached at the end of this paper is more data on vegetables and fruits that was published by the Ministry of Agriculture, Forestry, and Fisheries in September of this year (2003). I hope that the numbers, prices, and tendencies shown in the data will be useful, even for those involved in organic agriculture. With regard to

more detailed data on Japan's agriculture in general, please refer to my paper that will be presented at the IFOAM Trade Conference. Tables 7, 8, 9, 10, and 11, as well as Figures 1, 2, 3, 4, and 5 are all from the Statistics of Agriculture, Forestry, and Fisheries.

7. The Agricultural Sector is Paying the Price

Restaurants, pre-made food makers, and supermarkets have been trying, by trial and error, to respond to consumer interests in food safety and security. Although still continuing to deal with some domestic producers by ways of mutual agreements, they have come to rely more on imported products of which they can be certain to obtain the quantity that they require. In fact, many of the Japanese companies and the supermarkets have already moved their investments, technology, and seeds overseas, and they are importing back products from their contracted productions. This tactic is exactly the same as that with industrial products. One of my colleagues with whom I had a discussion in preparation for this presentation stated that:

It seems that the agricultural sector in Japan is paying the price for the global success that has been accomplished by the country's industrial sector. One could say that there is nothing unfortunate about this phenomenon, because it is only perfectly in accord with what 'developments' mean today.

He is right, but neither he nor I agree with such a phenomenon. Since 1999, sixteen new legislations have been implemented under the New Basic Law on Agriculture. Their key intention is to implement the marketing principles and to establish sustainable agriculture. In addition to these concepts that are being globally promoted today, the government has also cleverly incorporated some very uniquely Japanese strategies among them.

Japan has maintained very firm trade barriers against the importation of conventional agricultural products. However, under the name of WTO, such barriers are now subjected to deregulation. At the same time, CODEX's organic guidelines, which are based on the European and the North American concepts, are requiring certain conditions that are not possible now for Japan to fulfill with its current population and its geographical and climatic conditions. As a result, so-called "specially grown products," that are only vaguely defined in the ministry's guidelines, have become known, causing confusion among consumers as to what is 'organic' and what is 'specially grown.' The government has done nothing to clarify this situation. Unless the government stops flattering the industrial sector and reorganizes the legal system in ways to place organic agriculture as the core of the agricultural laws, such ambivalence and confusion will continue, and those who know what 'organic' really means will move farther away in pursuit of alternative directions.

IFOAM Japan will host an organic forum in Tokyo on November 14. During this forum, a few of the former agricultural policy makers from China, Korea, and Japan, as well as some representative figures in the sector of organic agriculture will be invited to exchange information and ideas about agricultural policies on organic and specially grown products, as well as their marketing and trade. We hope that this forum will be an opportunity to formulate a common agenda toward the development of organic agriculture in the East Asia.

8. Conclusion

Those who are involved in organic production and/or consumption because of their ideology or as a movement tend to operate in small-scales. They can be collectively called 'little organics.' When the revised JAS law was introduced, those of us who had been engaged in organic agriculture for a long time became very concerned that such a law would sacrifice 'little organics,' leaving only 'big organics' to survive. We therefore attempted to approach our government with our concerns in a variety of ways. Unfortunately as we had feared, the government has not responded to our 'little' voices. As that in any other countries, organic agriculture in Japan is steadily becoming 'industrialized.' Because IFOAM Japan is not

monolithic, we are taking advantage of this diversity in its membership to penetrate into all of these ‘little,’ ‘big,’ and ‘industrialized’ organic sectors from a variety of positions in order to save “organic” as a whole.

As integrated as we want to be, however, it is inevitable that each individual or organization responds differently according to its particular needs. Little organics will probably try to take a leading role in the regional revitalization movement by strengthening their connections with the distribution and the consumption segments through joining the secondary and the tertiary processing. Big organics, on the other hand, will continue to receive support from the government, while also having to face the challenge of competing against foreign providers. Industrialized organics are expected to establish themselves firmly in the Japanese market, backed up by WTO and the government’s agricultural policies. What these developments imply seems different in nature from the question of ‘authenticity’ that IFOAM pursues in organic agriculture. Regardless, I would like to request all of you for your support and encouragement as we work hard to save Japan’s organic agriculture and its markets.

Table 1: Certified Organic Operators (as of 30.09.2003)

	Production Directors	Processors	Sub-dividers	Importers	Total
Japan (farmers)	1817 (4306)	819	541	102	3279
Foreign countries (farmers)	281 (4009)	289	59	0	629
Total (farmers)	2098 (8405)	1108	600	102	3908

Source: General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries

Table 2: Grading by Authorized Venders (F.Y.2001)**(a) Organic Agricultural Products**

Unit: t

Item	Graded in Japan	Graded in foreign countries
Total	33 734	154 642
Vegetables	19 675	26 221
Fruits and nuts	1 391	4 085
Rice	7 777	2 672
Wheat and barley	722	2 058
Soybeans	1 162	61 019
Green tea (Crude tea)	927	93
Others	2 081	1) 58 493

1) Includes buckwheat, almonds, green beans, and black tea (crude tea).

Source: General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries

(cont.) Table 2: Grading by Authorized Venders (F.Y.2001)**(b) Processed Foods with Organic Agricultural Products**

Unit: t

Item	Graded in Japan	Graded in foreign countries
Total	93 638	98 342
Frozen vegetable	1 128	11 826
Canned vegetable	13	532
Other vegetable processed	802	1 243
Beverages	4 739	1) 64 664
“Tofu”, Bean curd	44 034	0
“Natto”, Fermented soybeans	10 154	0
“Miso”, Bean paste	1 887	273
Soy sauce	19 975	0
Dried noodles	103	823
Green tea (fined tea)	1 270	0
Other processed farm products	9 532	2) 18 980

1) Includes fruit juices, bottled coffee and tea.

2) Includes black tea, dried fruits, and vinegar.

Source: General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries

(Reference) Gross Production and Graded Quantity in Japan (F.Y.2001)

Unit: t

Item	Gross production volume	Graded quantity (Domestic)	Ratio of organic products (%)
Vegetables	15 548 000	19 675	0.13
Fruits and nuts	3 907 000	1 391	0.04
Rice	9 057 000	7 777	0.09
Wheat and barley	906 300	722	0.08
Soybeans	270 600	1 162	0.43
Green tea (crude tea)	84 500	927	1.10

Note: Gross production is the data officially announced by the Statistics and Information Department, Ministry of Agriculture, Forestry and Fisheries.

Source: General Food Policy Bureau, Ministry of Agriculture, Forestry and Fisheries

Table 3: Ratio of Shipment of JAS Graded Organic Products by Destination

Unit: %

Main sector of JAS graded organic products	Total	Agricultural Cooperatives, collectors and shippers	CO-OPs and consumer groups	Direct sales to consumers	Retailers and restaurants	Food processors	Wholesale markets	Others (Includes personal use and gift)
Total	100.0	33.8	14.8	9.4	23.6	13.5	2.7	2.3
Rice	100.0	50.7	8.4	26.4	10.1	2.9	-	1.5
Wheat and barley	100.0	x	x	x	x	x	x	x
Pulses	100.0	7.0	9.1	19.4	8.7	55.9	-	-
Potatoes	100.0	4.4	11.8	1.1	31.1	38.0	-	13.6
Open field vegetables	100.0	34.1	18.4	3.7	29.1	10.3	3.0	1.4
Protected vegetables	100.0	15.7	17.2	1.2	54.5	1.2	9.9	0.2
Open field fruits and nuts	100.0	34.9	11.8	21.7	18.8	2.7	7.0	3.1
Protected fruits and nuts	100.0	x	x	x	x	x	x	x
Industrial crops	100.0	20.9	13.0	11.0	4.3	49.6	1.1	0.1
Other crops	100.0	25.6	-	-	-	6.0	-	68.4

Note: Figures here are the ratios to the total shipment of JAS graded agricultural products (=100).

Source: F.Y.2001 Status Survey on Sustainable Production Environments: Outline of the Survey on Production and Shipment of Agricultural Products by Eco-Friendly Farming, Statistics and Information Department, Ministry of Agriculture, Forestry and Fisheries.

Table 6: Price at Various Stages of Distribution Process and the Ratio of Those Prices on Major Vegetables and Fruits

Unit: yen per 10kg

Item	Prices at various stages of distribution process						Ratio of those prices	
	Producers selling prices	Price received by farmer or import	Sales price by importers	Wholesale price	Middleman price	Retail price	Retail price / Price received by farmer	Retail price / Wholesale price
Tokyo Nov. 2001								
Vegetables								
Domestic								
Japanese radishes	164	343	-	570	773	1 401	4.08	2.46
Carrots	573	801	-	1 076	1 444	2 588	3.23	2.41
Chinese Cabbages	95	172	-	333	654	1 260	7.33	3.78
Cabbages	87	234	-	459	560	1 054	4.50	2.30
Spinaches	2 710	3 171	-	4 200	4 988	7 875	2.48	1.88
Welsh onions	2 074	3 093	-	3 850	4 760	6 003	1.94	1.56
Broccoli	1 296	2 021	-	2 700	3 313	4 371	2.16	1.62
Lettuces	474	657	-	1 050	1 301	2 106	3.21	2.01
Cucumbers	1 547	2 089	-	2 567	2 835	4 357	2.09	1.70
Pumpkins	1 650	1 792	-	2 100	-	3 307	1.85	1.57
Eggplants	2 265	2 304	-	3 556	4 220	5 750	2.50	1.62
Tomatoes	2 705	2 819	-	3 772	4 296	5 625	2.00	1.49
Sweet peppers	1 988	2 142	-	2 826	3 092	5 075	2.37	1.80
Onions	290	290	-	631	735	1 409	4.86	2.23
Imported								
Broccoli	-	1 782	1 943	1 943	2 048	3 725	2.09	1.92
Pumpkins	-	630	-	2 153	-	2 888	4.58	1.34
Fruits								
Domestic								
“unshu” mandarin	1 241	1 270	-	1 978	2 328	3 534	2.78	1.79
Apples”Fuji”	2 191	2 223	-	3 109	3 808	5 503	2.48	1.77
Japanese persimmons	1 254	1 371	-	2 181	2 778	4 051	2.95	1.86
Imported								
Valencia oranges	-	1 450	2 128	2 128	2 468	3 637	2.51	1.71

Source: Follow-up Reports of Prices on Vegetables and Fruits: Report of Survey on Tracing Food Prices at Various Stages of Distribution (Surveys on Vegetables and Fruits in Nov. 2000 & 2001), Statistics and Information Dep., Ministry of Agriculture, Forestry and Fisheries.

Table 7: Wholesale Volume, Value and Price of Vegetables and Fruits.

Item	Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)	Changes from previous year 1)		
				Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)
Vegetables	1266	22779	180	99	98	99
Fruits	560	13413	240	97	95	98
Total	1825	36192	-	98	97	-

1) %

2) 10 thousand ton

3) 100 million yen

4) yen/kg

Table 8: Wholesale Volume, Value and Price of Vegetables.

Item	Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)	Changes from previous year 1)		
				Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)
Total of Vegetables	1266	22779	180	99	98	99
Root crops	242	2541	105	98	100	101
Japanese radish	125	974	78	98	95	98
Carrot	78	821	106	99	101	102
Leaf & Stem Vegetables	339	4618	136	99	93	94
Chinese cabbage	103	582	57	98	83	85
Cabbage	146	1078	74	99	91	91
Spinach	21	777	368	98	91	93
Welsh onion	40	1178	292	99	97	98
Western Vegetables	90	2020	224	101	99	98
Lettuce	64	1078	167	101	94	93
Fruit Vegetables	228	6053	266	96	102	106
Cucumber	67	1614	242	97	102	105
Eggplant	37	1054	283	97	103	106
Tomato	68	2035	301	97	102	105
Green pepper	18	591	333	98	98	101
Beans	12	632	549	90	100	111
Tubers & Corms	279	3141	113	100	93	93
Potato	85	707	83	100	79	78
Taro	12	242	198	97	103	106
Onion	132	837	63	104	82	79
Mushroom	29	1514	515	93	96	104

1) %

2) 10 thousand ton

3) 100 million yen

4) yen/kg

Table 9: Wholesale Volume, Value and Price of Domestic Fruits.

Item	Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)	Changes from previous year 1)		
				Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)
Total of Domestic Fruits	434	11239	259	98	93	95
Mandarin orange	108	1915	177	94	95	101
Iyokan orange	19	223	120	94	71	75
Apple	77	1396	182	114	84	74
Japanese pear	26	636	240	99	102	104
Persimmon	21	416	198	92	97	105
Peach	13	507	397	96	93	97
Grapes	15	893	603	105	103	98
Strawberry	20	1939	987	97	94	97
Melon	29	1152	397	90	93	104
Water melon	51	682	134	90	84	94

1) %

2) 10 thousand ton

3) 100 million yen

4) yen/kg

Table 10 Wholesale Volume, Value and Price of Imported Fruits.

Item	Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)	Changes from previous year 1)		
				Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)
Total of Imported Fruits	1262	2175	172	92	104	113
Banana	715	973	136	91	120	132
Pineapple	79	117	147	103	97	94
Lemon	78	190	243	99	98	99
Grapefruit	195	303	155	95	93	98
Orange	86	161	188	74	76	103
Imported Cherry	7	78	1056	75	85	114
Imported Kiwi fruit	34	128	379	127	137	108
Other Imported Fruits	67	225	335	93	95	102

1) %

2) 10 thousand ton

3) 100 million yen

4) yen/kg

Table 11 Wholesale Volume, Value and Price of Imported Vegetables.

Item	Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)	Changes from previous year 1)			Imported/Domestic 5)	
				Wholesale Volume 2)	Wholesale Value 3)	Wholesale Price 4)	Domestic Price 4)	Ratio 1)
Total of Imported Vegetables	359	864	241	(82)	(87)	(106)	-	-
Asparagus	10	66	688	(79)	(88)	(111)	955	72
Broccoli	45	119	263	(89)	(99)	(111)	307	86
Pumpkin	107	152	143	(90)	(101)	(113)	171	84
Field Pea	12	31	259	(64)	(69)	(108)	867	30
Onion	31	19	60	44	39	90	63	95
Garlic	16	22	135	(82)	(84)	(102)	497	27
Ginger	17	30	178	(99)	(95)	(96)	418	43
Fresh Mushroom	18	62	338	(71)	(71)	(100)	1007	34
Other Imported Vegetables	103	364	352	(99)	(89)	(90)	-	-

1) %

2) 10 thousand ton

3) 100 million yen

4) yen/kg

5) Imported Vegetable's Compared Price, Domestic 100

Note: Please be cautious when you use numbers changes from previous year attached () is mere reference number made from information on comparison to previous year since items are newly separated and added ones.

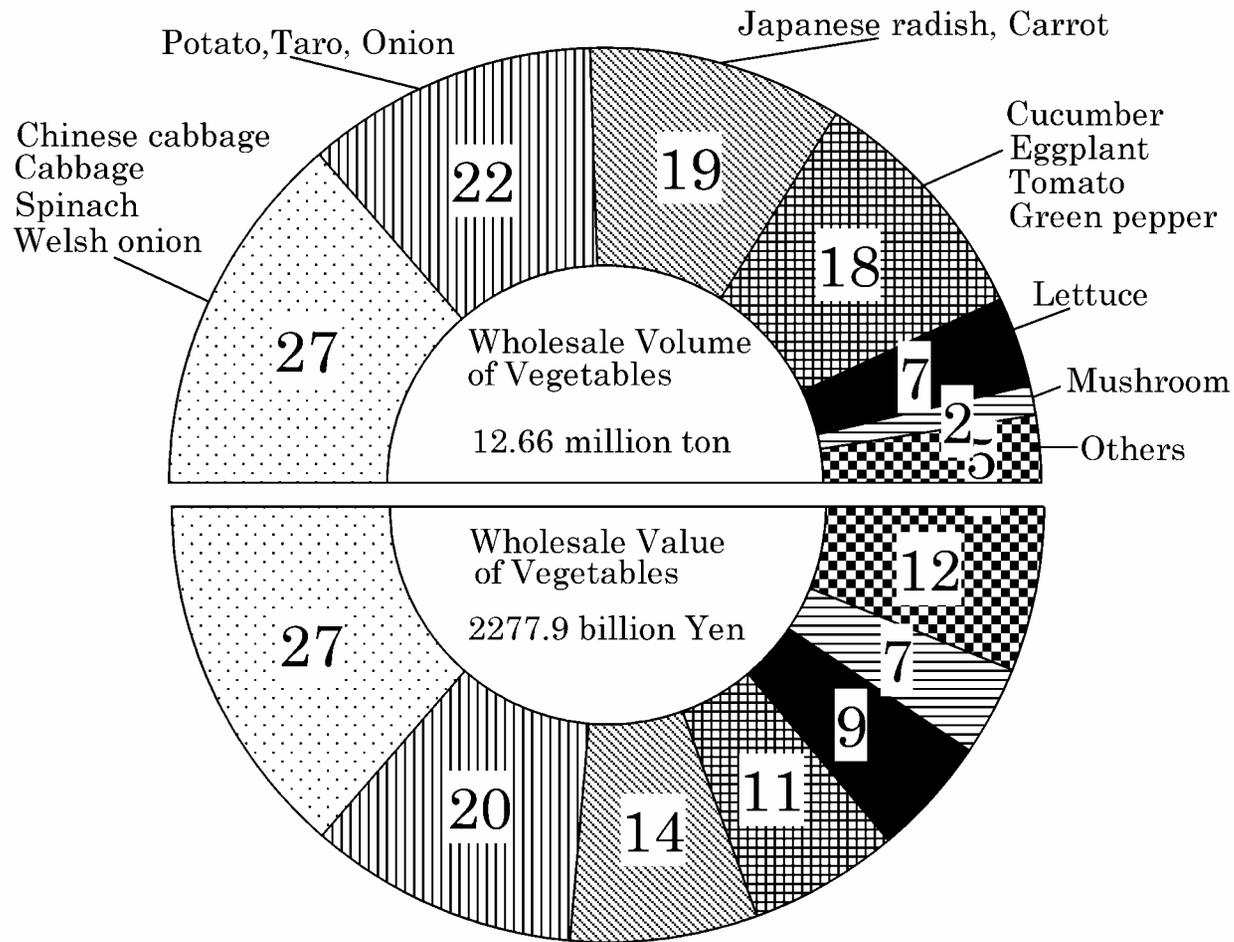


Fig. 1 Breakdown of Wholesale Volume and Value of Vegetables

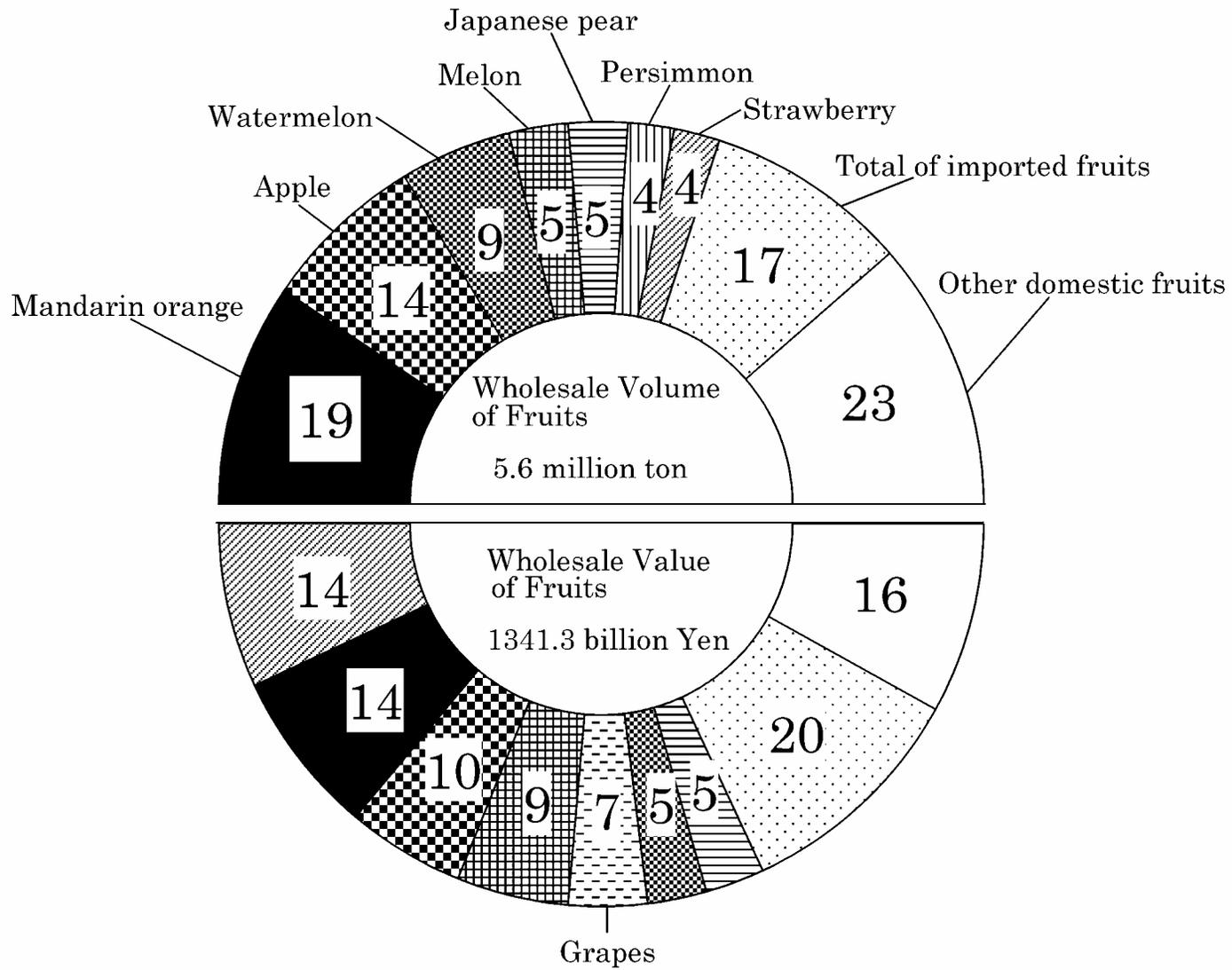


Fig. 2 Breakdown of Wholesale Volume and Value of Fruits

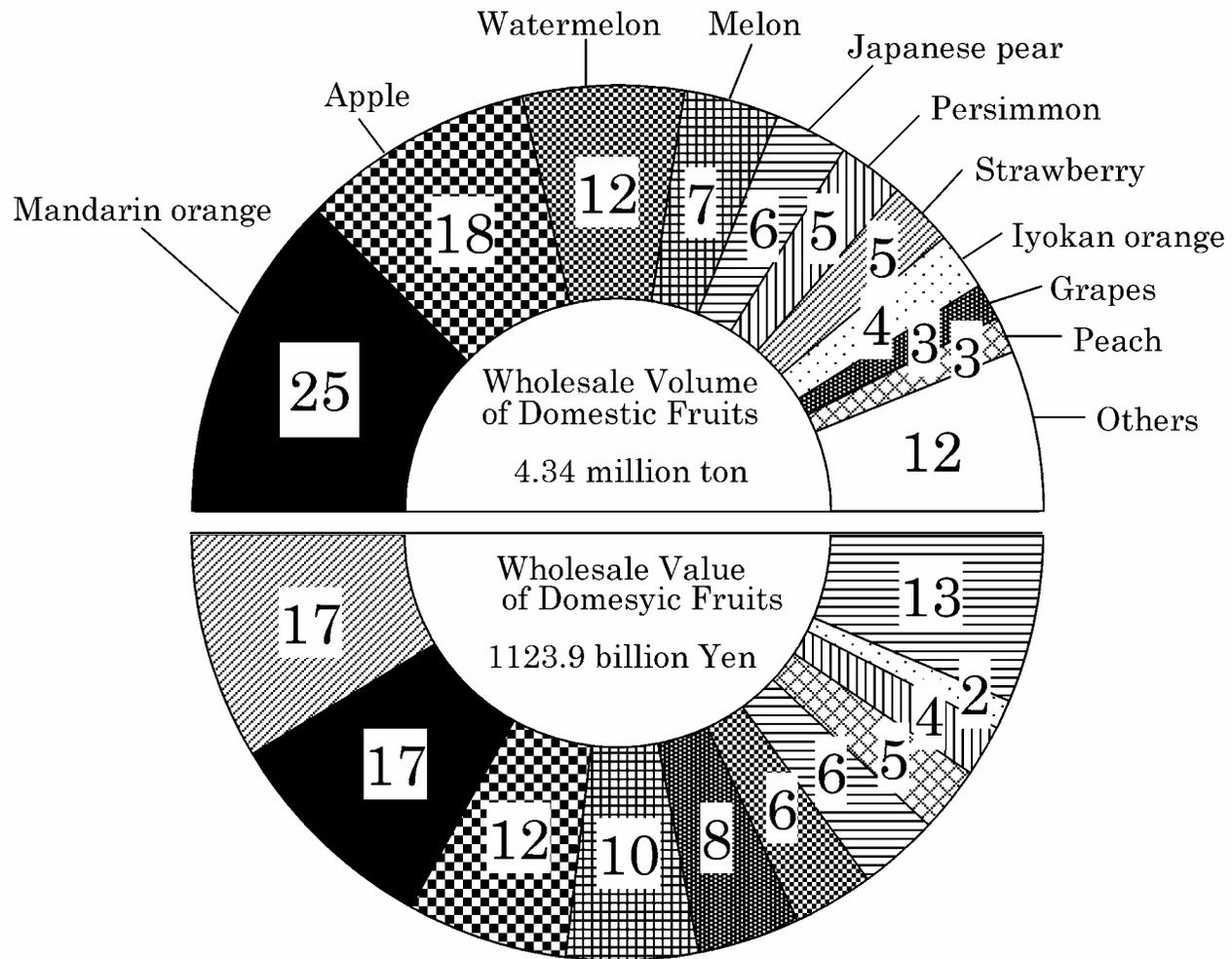


Fig. 3 Breakdown of Wholesale Volume and Value of Domestic Fruits

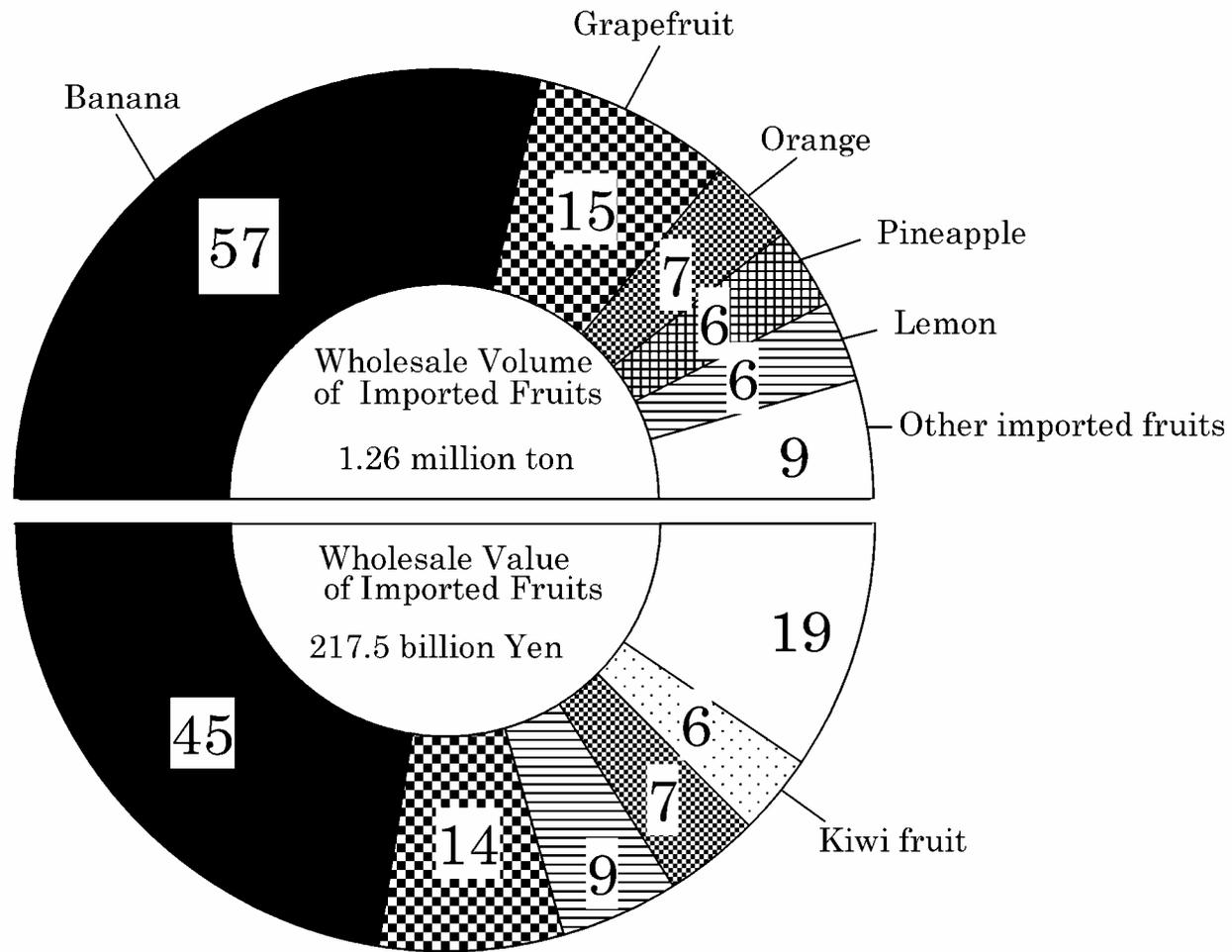


Fig. 4 Breakdown of Wholesale Volume and Value of Imported Fruits

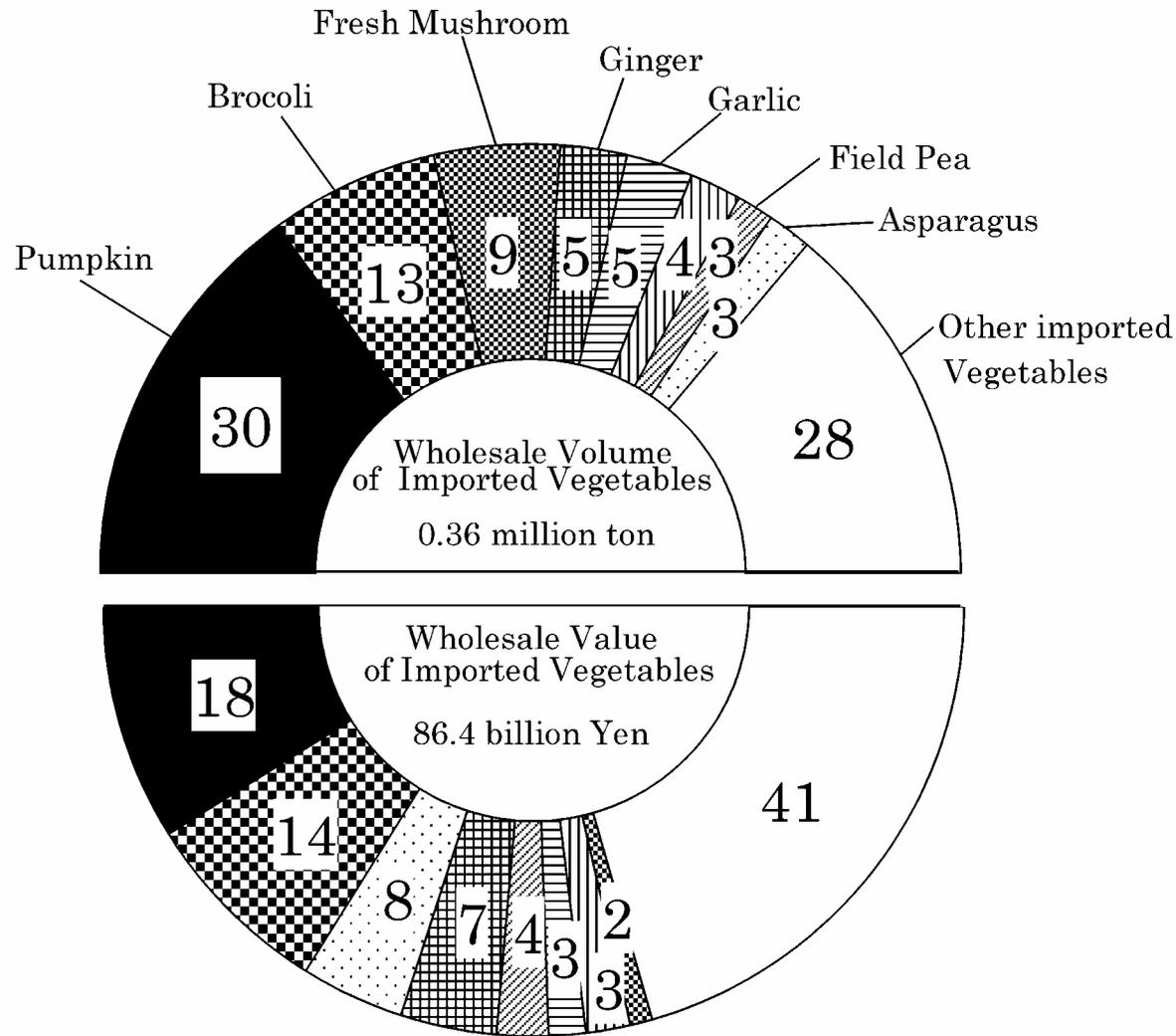


Fig. 5 Breakdown of Wholesale Volume and Value of Imported Vegetables