



2016

Company Information and Market Report of Agrochemicals in Japan

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Part I. COMPANY INFORMATION

1. Briefings (As of November 30, 2015)

Foundation: February 27, 1950

Paid-in Capital: ¥3.2 billion

Main stock holders

Nomura Shokusan Co., Ltd. 7.0%

Sumitomo Chemical Co., Ltd. 6.6%

Hokko Chemical Industry Employee
Shareholding Association 4.6%

Resona Bank, Limited. 4.5%

The Norinchukin Bank 2.9%

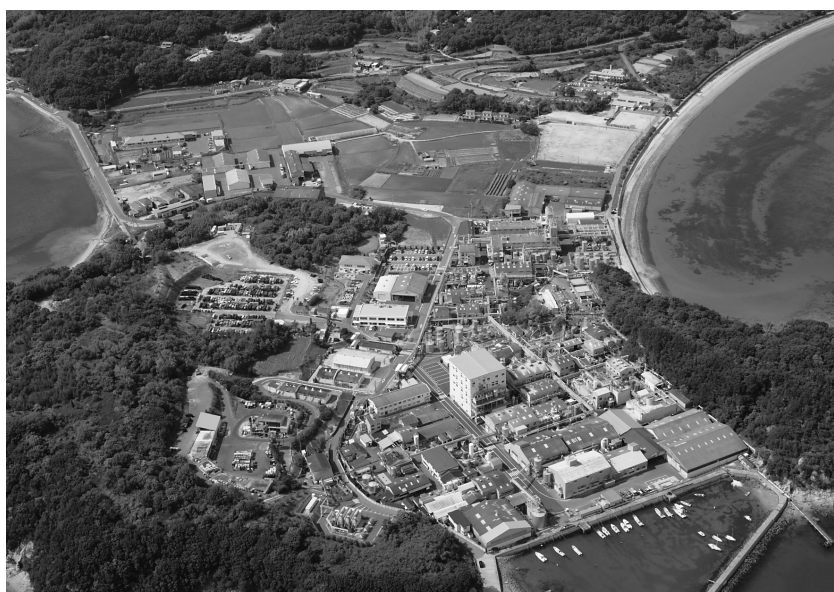
Nomura Holdings, Inc. 2.8%

National Federation of Agricultural
Cooperative Associations(ZEN-NOH) 2.7%

Employees: 661



Central Research Laboratories



Okayama Factory

2. Organization (As of July 8, 2015)

Board of Directors:

President Yoshikatsu Nakashima

Director, Senior Managing Executive Officer
Yuji Ogawa

Director, Managing Executive Officer
Nobuyoshi Kamaki

Director, Executive Officer
Ken-ichi Sano

Head Office: Sumitomo Fudosan Nihonbashi Building
1-5-4, Nihonbashi Honcho, Chuo-ku
Tokyo 103-8341, Japan

Branches: Sapporo, Sendai, Tokyo, Niigata,
Osaka, Okayama, Fukuoka (7 Branches)

Main Factories: Hokkaido, Niigata, Okayama

Laboratories: Central Research Laboratories (Kanagawa)
Fine Chemicals Research Laboratories (Kanagawa)

Experimental Farms: Hokkaido, Kanagawa, Shizuoka

Subsidiaries: HOKKO SANGYO CO., LTD. (Tokyo, Japan)
BIEI HAKUDO INDUSTRY CO., LTD. (Hokkaido, Japan)
HOKKO PAX CO., LTD.(Okayama, Japan)
Zhangjiagang HOKKO CHEMICAL INDUSTRY CO., LTD.
(Jiangsu, China)

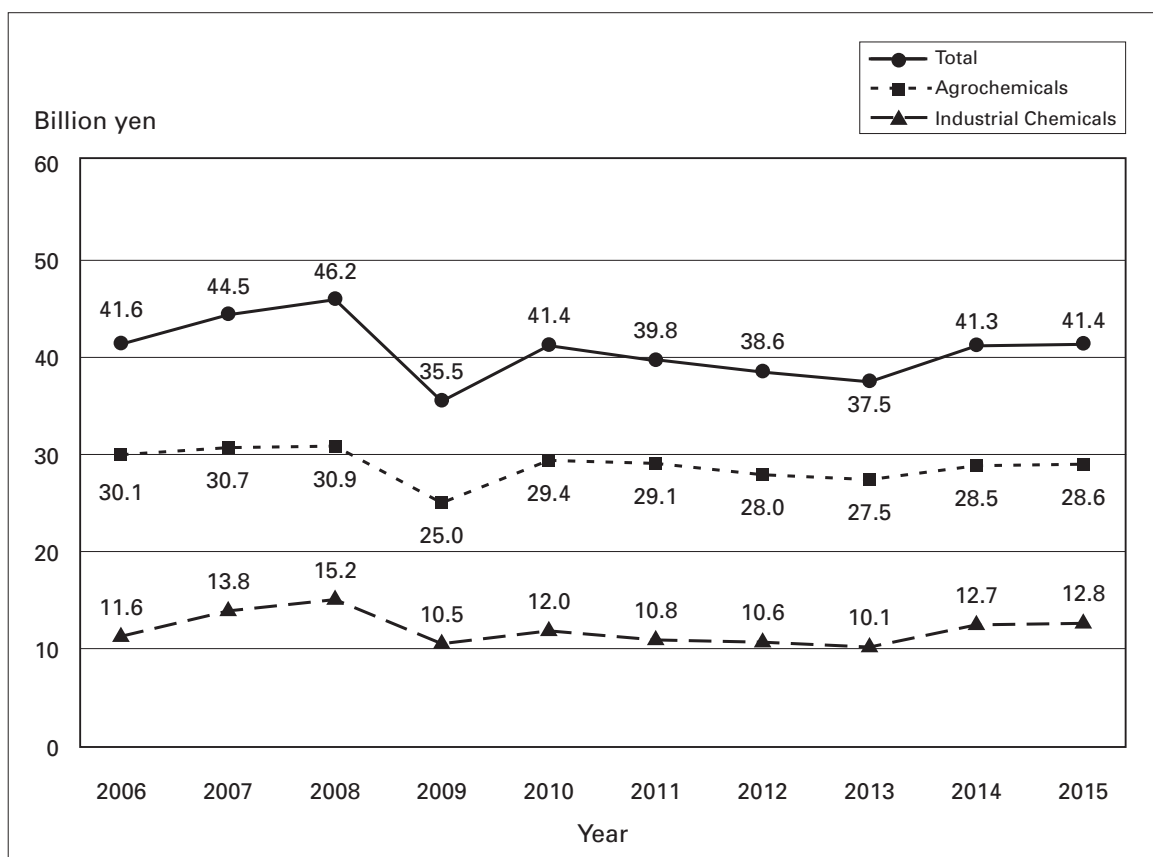
3. 2015 Business Report (As of November 30, 2015)

3-1. Sales Splits of Crop Protection Products(Fiscal Year)

Value: Million yen

	2014		2015		
	Value	Share(%)	Value	Share(%)	Growth(%)
Agrochemicals					
Insecticides	6,708	16.3	5,840	14.1	87.1
Fungicides	7,292	17.7	7,855	19.0	107.7
I/F Combinations	7,414	18.0	6,975	16.8	94.1
Herbicides	6,617	16.0	7,580	18.3	114.6
Others	485	1.2	387	0.9	79.9
Subtotal	28,516	69.1	28,637	69.1	100.4
Industrial Chemicals	12,735	30.9	12,780	30.9	100.4
Total	41,251	100	41,417	100	100.4
Export (Included in Total Sales)					
Agrochemicals	1,962	4.8	2,713	6.5	138.3
Industrial Chemicals	2,320	5.6	3,001	7.2	129.3

3-2. Annual Progress of Business Turnover(2006-2015)



4. Hokko's Leading Products in 2014

4-1. INSECTICIDE

Product Name	Active Ingredient	Crop	Pest
Ortran	acephate	Fruit, Vegetables	Thrips, Aphids, Lepidopteran pests
Starkle	dinotefuran	Rice, Vegetables, Fruit	Diamondback moth, Cabbage worm, Cabbage armyworm
Ferterra	chlorantraniliprole	Rice	Rice leafroller, Green rice caterpillar, Rice stem borer
MR.Joker	silafuofen	Rice	Planthoppers, Stinkbugs, etc.
Kirappu	ethiprole	Rice, Fruit, Tea	Planthoppers, Stinkbugs, etc.
Rody	fenpropathrin	Vegetables, Fruit, Tea	Thrips, Aphids, Lepidopteran pests, Mites, etc.
Prince	fipronil	Rice	Planthoppers, Locust, Rice leafroller, etc.
Prevathon	chlorantraniliprole	Vegetables	Diamondback moth, Cabbage worm, Cabbage armyworm

4-2. FUNGICIDE

Product Name	Active Ingredient	Crop	Disease
Oryzmate / Dr.Oryze	probenazole	Rice	Blast
Manage	imibenconazole	Fruit, Vegetables, Turf	Rust, Scab, Powdery mildew, Anthracnose
Topsin M	thiophanate-methyl	Fruit, Vegetables	Gray mold, Anthracnose, Bluemold, Blotch, Scab, Sclerotinia rot
Hokguard	tetraconazole	Sugar beet	Cercospora leaf spot
Kasumin-Bordeaux	kasugamycin+ copper oxychloride	Vegetables, Fruit, Tea	Bacterial diseases, Powdery mildew, Leaf mold, Downy mildew
Benlate T	thiuram+benomyl	Vegetables	<i>Sclerotium cepivorum</i>
Linber	furametpyr	Rice, Sugar beet	Sheath blight, Root rot, Leaf blight
Sumilex	procymidone	Vegetables	Gray mold, Stem rot
Aphet	penthiopyrad	Vegetables	Gray mold, Powdery mildew, Stem rot
Validacin	ValidamycinA	Rice, Vegetables	Sheath blight, Bacterial soft rot

4-3. I/F COMBINATION

Product Name	Active Ingredient	Crop	Disease, Pest
Dr.Oryze-Ferterra	probenazole + chlorantraniliprole	Rice	Blast, Various pests
Dr.Oryze-Prince	probenazole + fipronil	Rice	Blast, Various pests
Builder-Ferterra-Chess	probenazole + chlorantraniliprole + pymetrozine	Rice	Blast, Green rice caterpillar, Rice leaf beetle, Planthoppers
Imotiace Starkle	metominostrobin + dinotefuran	Rice	Blast, Stinkbugs
Builder-Prince-Greatam	probenazole + fipronil + thifluzamide	Rice	Blast, Various pests
Rabcide-Starkle	dinotefuran + phthalide	Rice	Blast, Stinkbugs
Doublecut K	kasugamycin + tricyclazole + ethiprole	Rice	Blast, Stinkbugs
Topsin Starkle	dinotefuran + thiophanate-methyl	Rice	Blast, Stinkbugs, Planthoppers

4-4. HERBICIDE

Product Name	Active Ingredient	Crop	Weed, Use
A-one	oxaziclomefone+tefuryltrione	Rice	One shot application
Mr.Homerun	oxaziclomefone+clomeprop+bensulfuron-methyl	Rice	One shot application
Winner	ipfencarbazone +bensulfuron-methyl +bromobutide	Rice	One shot application
Kachiboshi	ipfencarbazone +tefuryltrione +bensulfuron-methyl	Rice	One shot application
Meteor	pentoxazone	Rice	Annual weed, Pre-emergence application
Yuniherb	benzofenap+pretilachlor	Rice	Pre-emergence application
Clincher	cyhalofop-butyl	Rice	Grass weed, Post application
Basagran	bentazone	Rice, Beans, Wheats	Broadleaves weed, Post application
Lenapac	lenacil+chloridazon	Sugar beet	Annual weed, Early post application
Zaxa	glufosinate-P	Fruit, Vegetable, tea	Non Selective

5. Hokko's Products for Export

Product Name	Active ingredient	Type	Formulation
Kasumin	kasugamycin	Fungicide, Bactericide	2% SL, 2% GR
Kasumin-Bordeaux	kasugamycin + copper oxychloride	Fungicide, Bactericide	2%+75.6% WP 5%+75.6% WP
Manage	imibenconazole	Fungicide	5% WP, 15% WP, 30% WDG
Hokko Bordeaux	copper oxychloride	Fungicide, Bactericide	84.1% WP
Healthied	pefurazoate	Fungicide	15% EC, 20% WP
Fighter	ipfencarbazone	Herbicide	2.5% GR, 25% SC

Formulation

GR / granule

EC / emulsifiable concentrate

WP / wettable powder

SL / soluble liquid

WDG / water dispersible granule

5-1. FUNGICIDE

KASUMIN and KASUMIN-BORDEAUX

Original fungicides are globally used and highly reputed, having excellent control of various kinds of fungal and bacterial diseases on rice, vegetables, beans, fruits, ornamentals, etc.

MANAGE

A triazole fungicide having high efficacy against scab and rust in apple and pear, additionally showing remarkable performances in controlling grape anthracnose and citrus scab, both of which have been known as diseases difficult to control

HOKKO BORDEAUX

A contact fungicide having high preventive activities and low phytotoxicity

HEALTHIED

An imidazole fungicide having preventive and curative activities, low phytotoxicity, broad spectrum of pathogen such as ASCOMYCOTINA (*Diaporthe*, *Monilinia*), BASIDIOMYCOTINA (*Typhula*), DEUTERROMYCOTINA (*Fusarium*, *Gibberella*, *Valsa*, *Cladosporium*, *Colletotrichum*), additionally showing high performance against benzimidazole-resistant strains of *Gibberella fujikuroi*. This fungicide is recommended for seed treatment and in green house application because of its property of rapid photolytic degradation

KASUMIN and KASUMIN-BORDEAUX

Crop	Disease (Pathogen)	KASUMIN	KASUMIN-BORDEAUX
Rice	Blast (<i>Pyricularia oryzae</i> Cavara)	⊙	⊙
	Bacterial grain rot (<i>Burkholderia glumae</i>)	⊙	
	False smut (<i>Villosiclava virens</i>)		⊙
	Bacterial Brown stripe (<i>Acidovorax avenae</i> subsp. <i>avenae</i>)	⊙	
Sugar beet	Cercospora leaf spot (<i>Cercospora beticola</i> Saccardo)	⊙	⊙
Cucumber Melon, Watermelon	Angular leaf spot (<i>Pseudomonas syringae</i> pv. <i>lachrymans</i>)	⊙	⊙
	Bacterial spot (<i>Xanthomonas cucurbitae</i>)	⊙	⊙
	Anthrachnose (<i>Colletotrichum orbiculare</i>)	⊙	
	Powdery mildew (<i>Sphaerotheca cucurbitae</i>)		⊙
	Downy mildew (<i>Pseudoperonospora cubensis</i>)		⊙
Tomato	Leaf mold (<i>Passalora fulva</i>)	⊙	⊙
	Bacterial canker (<i>Clavibacter michiganensis</i> subsp. <i>michiganensis</i>)	⊙	⊙
	Bacterial spot (<i>Xanthomonas vesicatoria</i>)		⊙
	Late blight (<i>Phytophthora infestans</i>)		⊙
Onion	Bacterial soft rot (<i>Pectobacterium carotovorum</i>)	⊙	⊙
Potato	Bacterial soft rot (<i>Pectobacterium carotovorum</i>)	⊙	⊙
Paprika Sweet pepper Chile	Bacterial spot (<i>Xanthomonas vesicatoria</i>)	⊙	⊙
	Anthrachnose (<i>Colletotrichum capsici</i>)	⊙	⊙
	Powdery mildew (<i>Oidiopsis sicula</i> Scalia)		⊙
Green beans	Halo blight (<i>Pseudomonas savastanae</i> pv. <i>phaseolicola</i>)	⊙	⊙
Apple, Pear	Fire blight (<i>Erwinia amylovora</i>)	⊙	
Kiwifruit	Bacterial canker (<i>Pseudomonas syringae</i> pv. <i>actinidiae</i>)	⊙	⊙
	Bacterial blossom blight (<i>Pseudomonas marginalis</i> pv. <i>marginalis</i>)	⊙	⊙
Citrus	Canker (<i>Xanthomonas citri</i> subsp. <i>citri</i>)	⊙	⊙
Coffee	Black spot (<i>Pseudomonas syringae</i> pv. <i>garcae</i>)	⊙	⊙
Tea	Gray blight (<i>Pestalotiopsis longiseta</i>)	⊙	⊙
	Bacterial shoot blight (<i>Pseudomonas syringae</i> pv. <i>theae</i>)	⊙	⊙
Egg plant	Leaf mold (<i>Mycovellosiella nattrassii</i>)	⊙	
Celery	Early blight (<i>Cercospora apii</i>)	⊙	
Carrot	Bacterial soft rot (<i>Pectobacterium carotovorum</i>)	⊙	

Crop	Disease (Pathogen)	KASUMIN	KASUMIN-BORDEAUX
Cabbage	Black rot (<i>Xanthomonas campestris</i> pv. <i>campestris</i>) Bacterial soft rot (<i>Pectobacterium carotovorum</i>)		◎ ◎
Lettuce	Bacterial rot (<i>Pseudomonas cichorii</i> , <i>Pseudomonas marginalis</i> pv. <i>martinalis</i> , <i>Pseudomonas viridiflava</i>) Bacterial spot (<i>Xanthomonas axonopodis</i> pv. <i>vitians</i>)		◎ ◎
Rose	Powdery mildew (<i>Sphaerotheca passosa</i>)		◎

※also effective for various fungal and bacterial diseases to control on passion fruits, agave, etc.

MANAGE

Crop	Disease (Pathogen)
Citrus	Scab (<i>Elsinoe fawcetti</i>)
Grape	Anthracoise (<i>Elsinoe ampelina</i>) Powdery mildew (<i>Erysiphe necator</i> var. <i>necator</i>) Pestalotia-tsurugare-byo (<i>Pestalotiopsis menezesiana</i>) Rust (<i>Physopella ampelopsidis</i>)
Apple	Scab (<i>Venturia inaequalis</i>) Rust (<i>Gymnosporangium yamadae</i>) Powdery mildew (<i>Podosphaera leucotricha</i>) Fly speck (<i>Zygophiala jamaicensis</i>) Sooty blotch (<i>Gloeodes pomigena</i>) Alternaria leaf spot (<i>Alternaria mali</i>)
Pear	Scab (<i>Venturia nashicola</i>) Rust (<i>Gymnosporangium asiaticum</i>)
Peach	Scab (<i>Cladosporium carpophilum</i>)
Japanese apricot	Scab (<i>Cladosporium carpophilum</i>)
Apricot	Brown rot (<i>Monilinia fructicola</i>)
Melon and Watermelon	Powdery mildew (<i>Sphaerotheca fuliginea</i>)
Groundnut	Brown leaf spot (<i>Mycosphaerella arachidis</i>)
Soybean	Purple stain (<i>Cercospora kikuchii</i>)
Tea	Anthracoise (<i>Discula theae-sinensis</i>) Blister blight (<i>Exobasidium vexans</i>) Brown round spot (<i>Pseudocercospora ocellata</i>)
Banana	Black sigatoka (<i>Mycosphaerella fijiensis</i>)

Crop	Disease (Pathogen)
Turf	Rust (<i>Puccinia zoysiae</i>)
Rose	Black spot (<i>Diplocarpon rosae</i>) Powdery mildew (<i>Sphaerotheca pannosa</i>)
Chrysanthemum	Rust (<i>Puccinia horiana</i>) Rust (<i>Puccinia tanacetii</i> var. <i>tanacetii</i>)
Japanese spindle tree	Powdery mildew (<i>Oidium euonymi-japonicae</i>)
Crape Myrtle	Powdery mildew (<i>Uncinuliella australiana</i>)
Poplar	Powdery mildew (<i>Uncinula adunca</i> var. <i>mandshurica</i>) Massoning leaf blight (<i>Marssonina brunnea</i>)
Tobacco	Powdery mildew (<i>Erysiphe cichoracearum</i>)

HEALTHIED

Crop	Disease(Pathogen)	Application
Rice	Bakanae disease (<i>Gibberella fujikuroi</i>)	Seed treatment
Cyclamen(greenhouse)	Anthrachnose (<i>Colletotrichum gloeosporioides</i>)	Spray

5-2. HERBICIDE

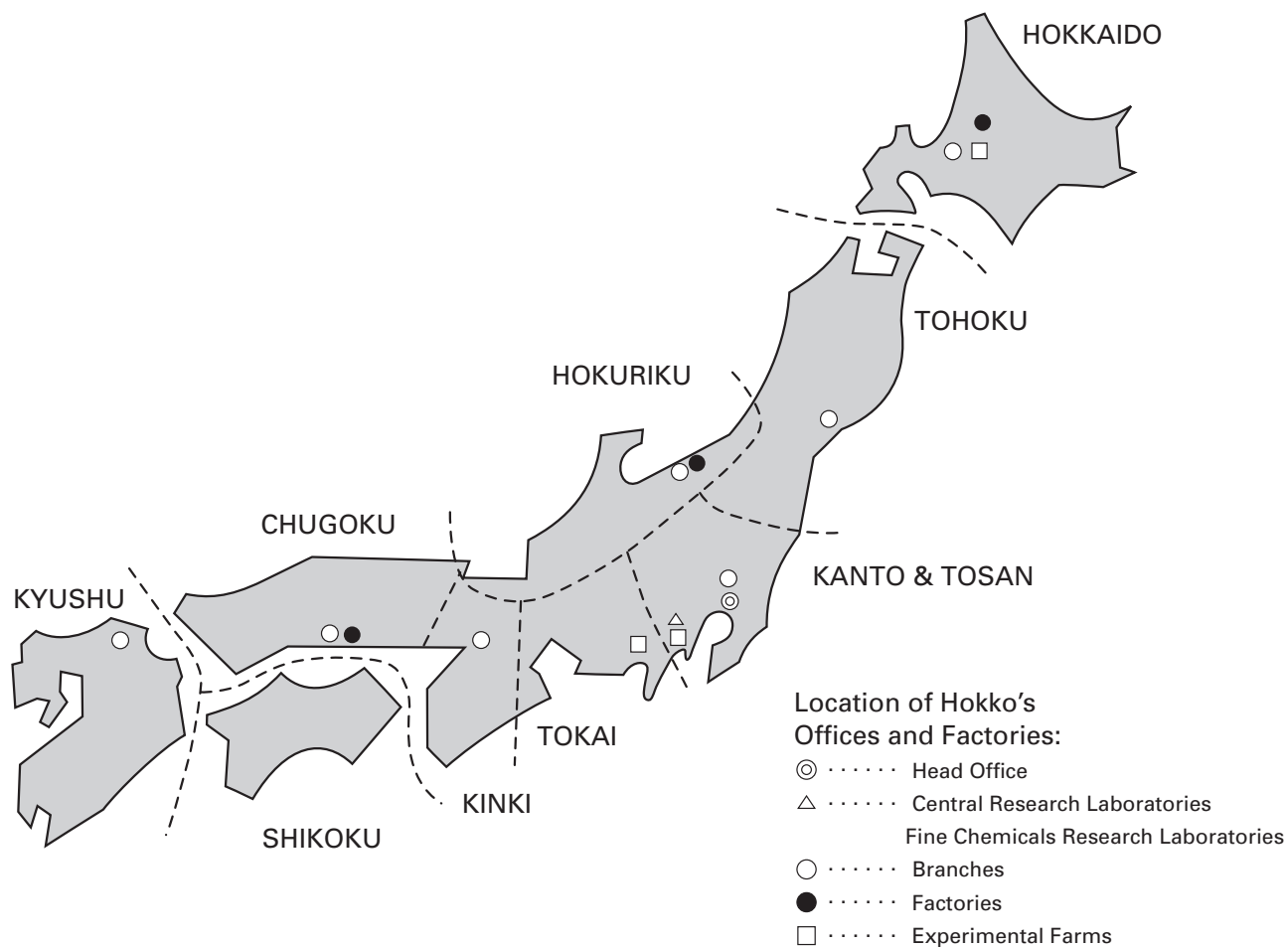
FIGHTER

A triazolinone class herbicide having high efficacy against gramineous weeds in paddy field. The mode of action is deemed as the inhibition of the very long chain fatty acids biosynthesis in plants

- Target weeds: *Echinochloa oryzicola*, *Cyperus difformis*, *Scirpus juncoides*, *Leptochloa chinensis*, *Lindernia procumbens*, *Monochoria vaginalis*, etc.
- Application timing: From pre emergence to early post emergence of weeds

Part II. MARKET REPORT OF AGROCHEMICALS IN JAPAN

1. Map of Japan by Agricultural Region



2. Area of Main Crops by Agricultural Region in 2015

(Source; MAFF / The Ministry of Agriculture, Forest and Fisheries of Japan)

Unit: 1,000ha.

Crop \ Region	Rice	Wheat/Barley	Potato*	Soybean	Citrus	Apple	Pear	Grape	Cucumber	Cabbage*	Tea
HOKKAIDO	107.8	124.3	51.5	33.9	0.0	0.6	0.1	1.1	0.2	1.2	0.0
TOHOKU	381.3	8.8	3.8	34.6	<0.1	28.7	2.9	2.9	2.2	2.5	—
HOKURIKU	207.8	10.4	1.5	13.3	0.1	0.2	1.0	0.5	0.7	0.8	<0.1
KANTO & TOSAN	276.3	42.9	6.7	10.6	1.9	8.7	5.5	7.6	3.7	13.2	2.2
TOKAI	95.2	16.7	1.5	12.2	10.2	0.1	0.8	0.7	0.6	6.6	22.2
KINKI	105.8	10.6	1.1	9.8	11.3	<0.1	0.3	1.1	0.7	1.9	3.1
CHUGOKU	108.1	5.5	—	5.0	5.0	0.2	1.5	1.9	0.6	1.4	0.5
SHIKOKU	52.1	4.6	—	0.6	20.0	<0.1	0.5	0.5	0.6	—	0.9
KYUSHU	171.5	57.2	10.1	21.9	22.9	—	1.8	1.8	1.9	6.2	15.1
Total	1,506.0	281.0	78.3	142.0	71.3	38.6	14.4	18.1	11.0	34.7	44.0
Comparison with Previous Year (100%)	96	101	98	108	98	99	97	99	99	101	98

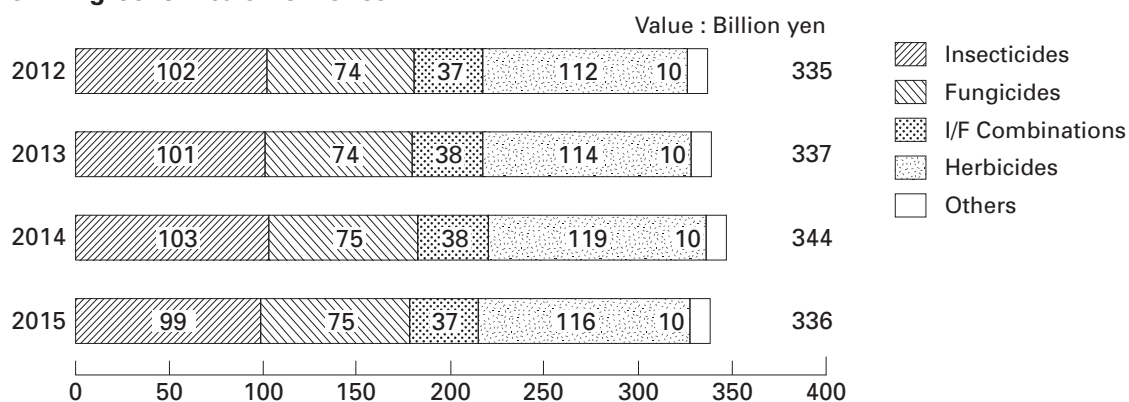
*; Data from 2014

—; not available

3. Agrochemicals Business by the member companies of JCPA* in 2015

(*Japan Crop Protection Association)

3-1 Agrochemicals Deliveries

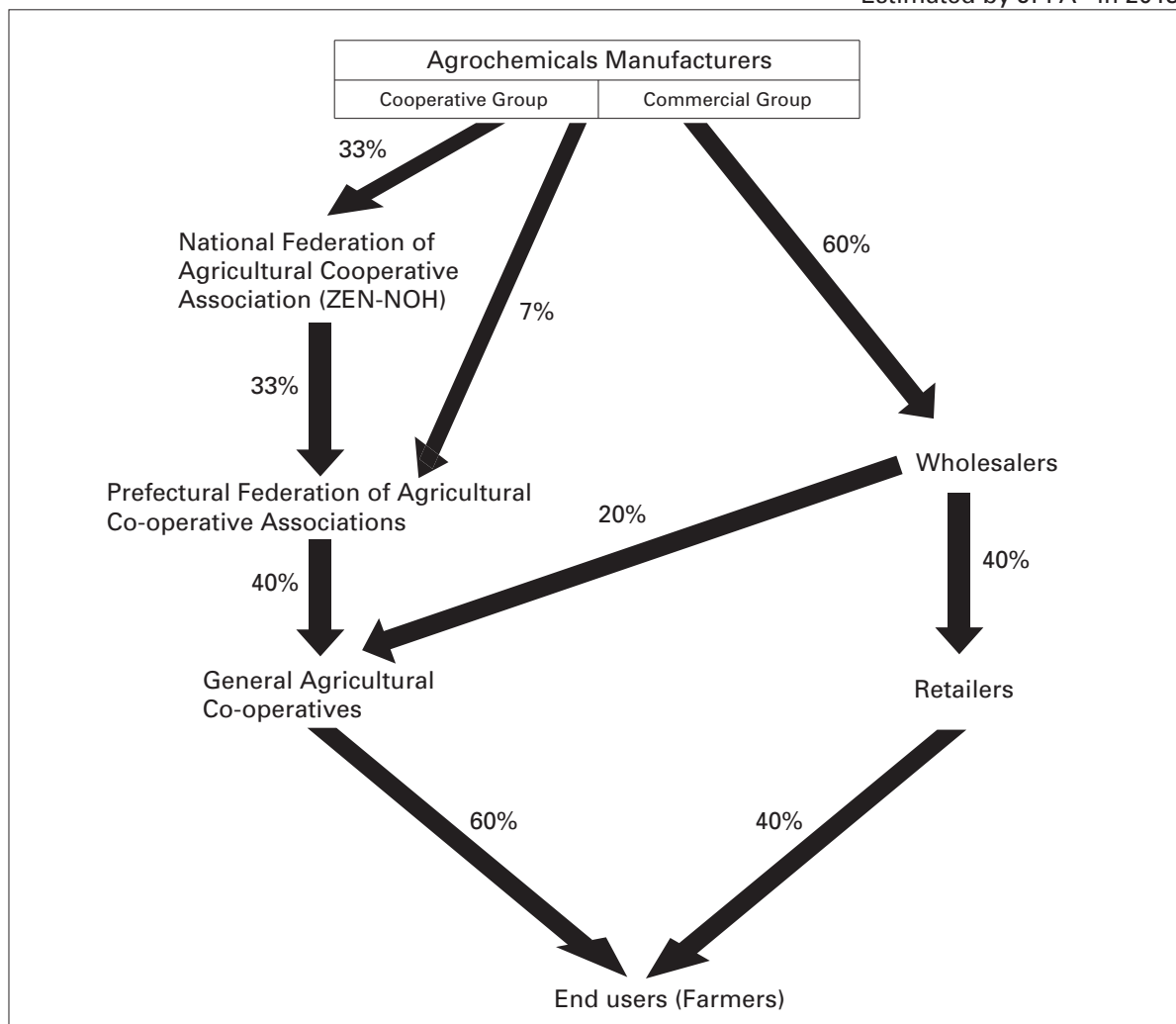


3-2 Agrochemicals Value by Crop

Sector	Agrochemicals group	Value		Comparison with 2014 (100%)
		Billion yen	%	
Paddy rice	Insecticides	12.9	4	89%
	Fungicides	10.4	3	95%
	I/F Combinations	32.0	10	96%
	Herbicides	64.8	19	96%
	Subtotal	120.2	36	95%
Fruit trees	Insecticides	22.1	7	97%
	Fungicides	19.7	6	101%
	I/F Combinations	0.3	0	98%
	Herbicides	7.9	2	102%
	Subtotal	50.0	15	100%
Vegetables, potatoes, beans etc.	Insecticides	56.6	17	97%
	Fungicides	38.8	12	99%
	I/F Combinations	2.8	1	106%
	Herbicides	21.1	6	102%
	Subtotal	119.2	36	99%
Others	Insecticides	6.9	2	100%
	Fungicides	5.9	2	109%
	I/F Combinations	1.7	1	103%
	Herbicides	22.2	7	97%
	Subtotal	36.8	11	99%
(Total)	Insecticides	98.5	29	96%
	Fungicides	74.9	22	100%
	I/F Combinations	36.8	11	97%
	Herbicides	116.0	35	97%
	Others	9.6	3	101%
Grand total		335.9	100	98%

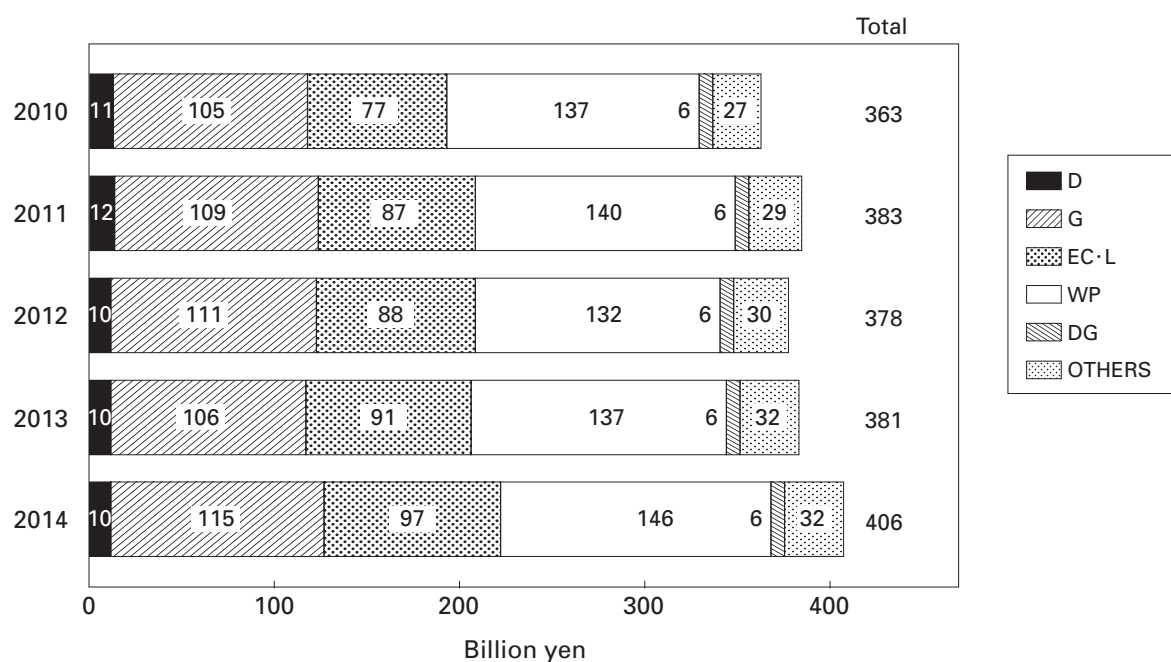
4. Distribution System of Agrochemicals

Estimated by JPPA* in 2013



(*JPPA/Japan Plant Protection Association)

5. Agrochemicals Production by Formulation(2010-2014) (Source; JPPA)



6. Pest Infestation and Agrochemical Treatment in 2014(Source; JPPA)

Crop (Planted Area) (1,000ha)	Pests and diseases	Net treated area (1,000ha)	Total treated area	
			Area (1,000ha)	Comparison with 2013 (100%)
Rice (1,574)	Seedling blight	893	930	90%
	Blast(leaf)	1,100	1,541	104%
	Blast(neck & ear)	941	1,410	106%
	Sheath blight	647	768	103%
	"Bakanae"disease	854	854	88%
	Rice stem borer(2nd generation)	170	184	75%
	White-backed planthopper	839	1,188	93%
	Brown rice planthopper	581	1,065	103%
	Small brown planthopper	735	1,548	121%
	Green rice leafhopper	642	1,027	103%
	Rice leaf beetle	759	774	97%
	Rice stink bug	1,150	1,841	107%
	Rice leafroller	360	473	94%
	Rice water weevil	835	846	103%
Wheat & Barley (278)	Powdery mildew	136	287	118%
	Scab	135	174	32%
Potato (78)	Late blight	60	406	98%
	Twenty-eight-spotted ladybird	5	7	99%
Soybean (132)	Purple stain	54	76	96%
	Soybean pod borer	67	119	97%
	Stink bugs	62	90	96%
Citrus (73)	Scab	41	85	109%
	Melanose	58	218	101%
	Arrowhead scale	38	59	70%
	Citrus red mite	59	168	98%
Apple (39)	Blossom blight	25	50	89%
	Alternaria leaf spot	37	296	97%
	Scab	37	307	128%
	Peach fruit moth	34	166	106%
	Apple leafminer	37	73	174%
	Mites	37	116	83%
Pear (15)	Black spot	5	40	104%
	Scab	12	133	99%
Vine (18)	Ripe rot	13	42	100%
	Rust	11	28	97%
	Leaf spot	12	40	97%
	Anthracnose	11	26	88%
	Downy mildew	13	56	97%
	Gray mold	10	32	114%
	Thrips	12	32	88%

Crop (Planted Area (1,000ha))	Pests and diseases	Net treated area (1,000ha)	Total treated area	
			Area (1,000ha)	Comparison with 2013 (100%)
Tea (45)	Anthracnose	38	81	98%
	Smaller tea tortrix	37	77	104%
	Oriental tea tortrix	32	61	105%
	Tea leafroller	38	65	98%
	Tea green leafhopper	38	92	100%
	Kanzawa spider mite	39	76	95%
	Thrips	37	96	101%
Cucumber (11)	Downy mildew	6	28	87%
	Anthracnose	2	8	105%
	Powdery mildew	6	26	91%
	Bacterial spot	2	5	90%
	Aphids	6	20	84%
Cabbage (35)	Black rot	15	30	103%
	Diamondback moth	17	43	91%

7. Herbicide Application in Rice Field

Crop	Application method	2015		
		Volume (t)	Value (million yen)	Estimated Area (1,000ha)
Rice	One-shot application	14,568	41,536	1,731
	Pre- and early post-emergence application	4,531	6,400	611
	Post-emergence application	7,095	11,486	625
	Total	26,194	59,423	2,966

(Source; JAPR / The Japan Association for Advancement of Phyto-Regulators)

8. Farm Household Economy (Source; MAFF)

8-1. Average Income per Household (include tax)

Value:1,000 yen

	2010	2011	2012	2013	2014
Agriculture	1,223	1,196	1,347	1,321	1,186
Non-agriculture	1,610	1,604	1,553	1,531	1,455
Others (Annuity etc.)	1,820	1,825	1,853	1,865	1,909
Total income	4,660	4,663	4,762	4,727	4,562

8-2. Average Agricultural Expenditure by Crop in 2014

Unit: yen/10a

	Rice		Wheat		Potato		Sugar beet		Soybean	
Seed & Seedling	3,693	3%	2,724	5%	12,782	18%	2,793	3%	3,121	6%
Fertilizers	9,520	8%	9,941	19%	10,630	15%	23,042	24%	5,405	11%
Agrochemicals	7,630	7%	4,566	9%	9,742	13%	12,931	13%	5,170	10%
Fuel	5,095	4%	2,324	4%	3,819	5%	4,564	5%	2,345	5%
Rent & Charge	12,576	11%	14,656	27%	775	1%	3,274	3%	8,760	17%
Buildings cost	4,502	4%	1,000	2%	1,275	2%	2,244	2%	1,045	2%
Agricultural machinery	24,114	21%	8,635	16%	13,405	19%	14,766	15%	9,264	18%
Labor	35,396	31%	5,816	11%	14,889	21%	23,539	24%	11,754	23%
Others	12,804	11%	3,958	7%	4,916	7%	9,823	10%	4,335	8%
Total	115,330	100%	53,620	100%	72,233	100%	96,976	100%	51,199	100%

9. Rice Production (Source; MAFF)

9-1. Transition of Rice Cultivated Area for 10 years

Unit: 1,000ha

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Cultivated Area(1,000ha)	2,543	2,530	2,516	2,506	2,496	2,474	2,469	2,326	2,320	2,310
Planted Area (1,000ha)	1,688	1,673	1,627	1,624	1,628	1,576	1,581	1,599	1,575	1,506
Set-aside*1 (%)	34	34	35	35	35	36	36	31	32	35

*1; Set-aside (%) = $\frac{(\text{Cultivated area} - \text{Planted area})}{\text{Cultivated area}} \times 100$

9-2. Transition of Rice Production for 10 years

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Yield (t/ha)	5.07	5.22	5.43	5.22	5.22	5.33	5.40	5.39	5.36	5.31
Normal Yield (t/ha)*1	5.29	5.29	5.30	5.30	5.30	5.30	5.30	5.30	5.30	5.31
Index number of Rice Yield*2	96	99	102	98	98	101	102	102	101	100
Total Production (million ton)	8.5	8.7	8.8	8.5	8.5	8.4	8.5	8.6	8.4	8.0

*1; Determined by MAFF

*2; Index number = $\frac{\text{Yield}}{\text{Normal Yield}} \times 100$



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