HOKKO

2024

Company Information and Market Report of Agrochemicals in Japan

CONTENTS

Part I. COMPANY INFORMATION

1. Briefings (As of November 30, 2023)

Foundation:	February 27, 1950	
Paid-in Capital:	¥3.2 billion	
Main stock holders		
	The Master Trust Bank of Japan Ltd.(trust)	9.3%
	Nomura Shokusan Co., Ltd.	7.8%
	Sumitomo Chemical Co., Ltd.	7.3%
	Resona Bank, Limited.	5.0%
	Custody Bank of Japan, Ltd.(trust)	4.3%
	Hokko Chemical Industry Employee Shareholding Association	3.7%
	LIM JAPAN EVENT MASTER FUND	3.2%
	The Norinchukin Bank	3.2%
	Nomura Holdings, Inc.	3.1%
	National Federation of Agricultural Cooperative Associations(ZEN-NOH)	3.0%
Employees:	628	

Central Research Laboratories

Hokkaido Factory

2. Organization (As of February 22, 2024)

Board of Directors:

President	Ken-ichi Sano
Director, Managing Executive Officer	Shin-ichi Hayakawa
	Takayuki Torii
Director, Executive Officer	Naoyuki Hamada

Head Office:	Sumitomo Fudosan Nihonbashi Building 1-5-4, Nihonbashi Honcho, Chuo-ku Tokyo 103-8341, Japan
Branches:	Sapporo, Sendai, Tokyo, Niigata, West Japan, Fukuoka
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)
	HOKKO CHEMICAL AMERICA CORPORATION (Cary, NC, U.S.A)
	C.Murata & Co., Ltd. (Osaka, Japan)

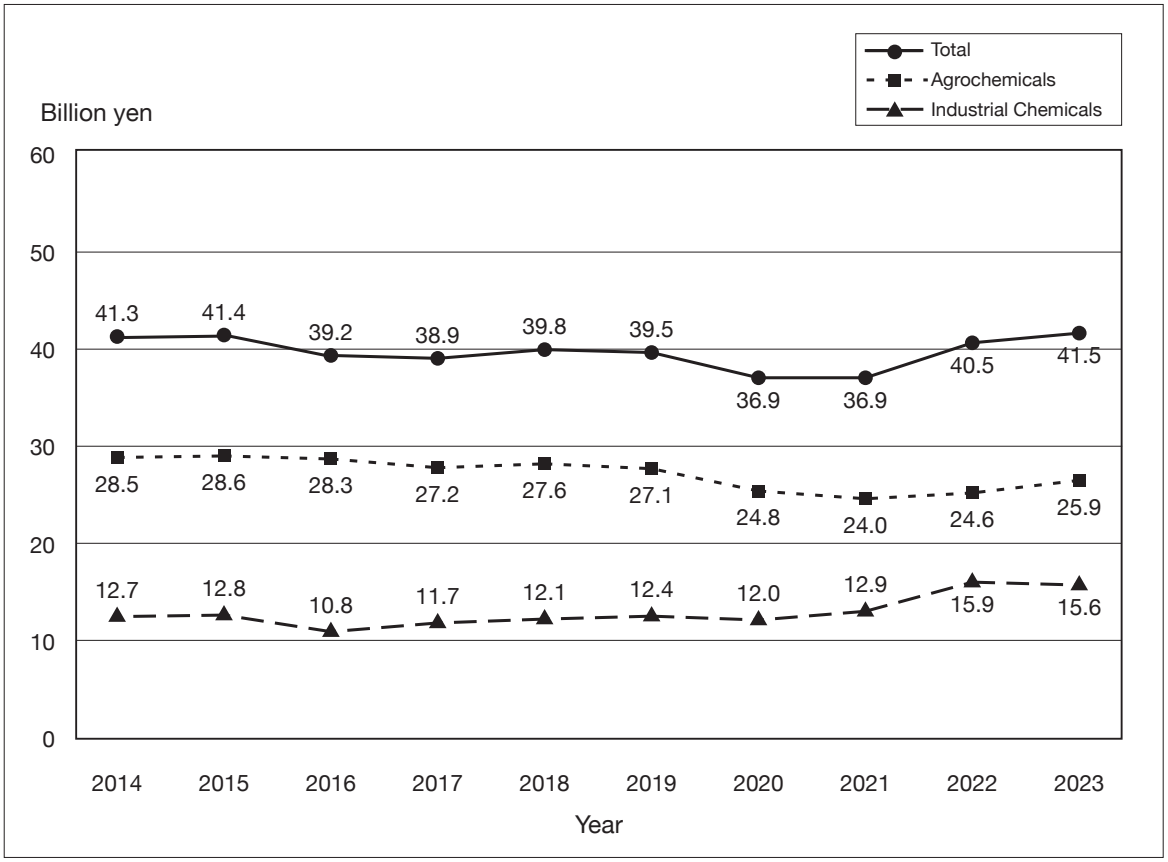
3. 2023 Business Report (As of November 30, 2023)

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

Value: Million yen

	2022		2023		
	Value	Share()	**Value**	**Share()**	**Growth()**
Agrochemicals					
Insecticides	5,172	12.8	**5,235**	**12.6**	**101.2**
Fungicides	7,390	18.3	**7,861**	**19.0**	**106.4**
I/F Combinations	4,889	12.1	**4,437**	**10.7**	**90.8**
Herbicides	6,748	16.7	**7,965**	**19.2**	**118.0**
Others	389	1.0	**360**	**0.9**	**92.5**
Subtotal	24,588	60.7	**25,858**	**62.4**	**105.2**
Industrial Chemicals	15,896	39.3	**15,599**	**37.6**	**98.1**
Total	40,485	100	**41,457**	**100**	**102.4**
Export (Included in Total Sales)					
Agrochemicals	3,669	9.1	**4,025**	**9.7**	**109.7**
Industrial Chemicals	4,360	10.8	**3,361**	**8.1**	**77.1**

3-2. Annual Progress of Business Turnover (2014-2023)



4. Hokko's Leading Products in 2023

4-1. INSECTICIDE

Product Name	Active Ingredient	Crop	Pest
Starkle	dinotefuran	Rice, Vegetables, Fruit	Planthoppers, Stink bugs, Aphids, Thrips, Whiteflies, Scales, etc.
Kirappu	ethiprole	Rice, Fruit, Tea	Planthoppers, Stink bugs, etc.
Prevathon	chlorantraniliprole	Vegetables	Diamondback moth, Cabbage worm, etc.
Ferterra	chlorantraniliprole	Rice	Rice leafroller, Green rice caterpillar, etc.
Ortran	acephate	Fruit, Vegetables	Thrips, Aphids, Lepidopteran pests
Transform	sulfoxaflor	Vegetables, Fruit	Thrips, Aphids, Scales, etc.
Viresco	sulfoxaflor	Suger beet, Soybean, Potato, Corn	Aphids
Exceed	sulfoxaflor	Rice	Stink bugs, Planthoppers, etc.
Finesave	flometoquin	Vegetables, Citrus, Tea	Thrips, mites, Lepidopteran pests, etc.
Brofreya	broflanilide	Vegetables	Diamondback moth, Tobacco budworm, Tobacco cutworm, Leaf beetle, etc.

4-2. FUNGICIDE

Product Name	Active Ingredient	Crop	Disease
Kasumin-Bordeaux	kasugamycin + copper oxychloride	Vegetables, Fruit, Tea, Sugar beet	Bacterial diseases, Powdery mildew, Leaf mold, Downy mildew
Manage	imibenconazole	Fruit, Vegetables, Turf	Rust, Scab, Powdery mildew, Anthracnose
Orthocide	captan	Fruit, Vegetables, Wheats	Scab, Alternaria leaf spot, Downy mildew, Gray mold, Fusarium blight
Affet	penthiopyrad	Vegetables	Gray mold, Powdery mildew, Stem rot
Millionaire	lnpyrfluxam	Vegetables	Rust, Gray mold, etc.
Oryzemate / Dr.Oryze	probenazole	Rice	Blast
Gouketsu	tolprocarb	Rice	Blast
Blasin	ferimzone + fthalide	Rice	Blast, Bacterial disease
Onlyone	tebconazole	Fruit	Gray mold, Stem rot, Anthracnose, Scab, Powdery mildew, etc.
Topsin M	thiophanate-methyl	Fruit, Vegetables	Gray mold, Anthracnose, Bluemold, Blotch, Scab, Sclerotinia rot
Benlate T	thiuram + benomyl	Vegetables	Fusarium disease, Seed-borne disease

4-3. I/F COMBINATION

Product Name	Active Ingredient	Crop	Disease, Pest
Dr.Oryze-Padeet	probenazole + cyantraniliprole	Rice	Blast, Various pests
Dr.Oryze-Ferterra	probenazole + chlorantraniliprole	Rice	Blast, Various pests
Dr.Oryze-Lydia	probenazole + flupirimin	Rice	Blast, Various pests
Scrum	chlorantraniliprole + triflumezopyrim + penflufen + isothianil	Rice	Blast, Various pests, Sheath blight
Doublecut K	kasugamycin + tricyclazole + ethiprole	Rice	Blast, Stink bugs
Topsin Starkle	dinotefuran + thiophanate-methyl	Rice	Blast, Stink bugs, Planthoppers
Rabcide-Starkle	dinotefuran + fthalide	Rice	Blast, Stink bugs
Gouketsu-buster	dinotefuran + tolprocarb	Rice	Blast, Stink bugs, Various pests
Gouketsu-monster	dinotefuran + simeconazole + tolprocarb	Rice	Blast, Various pests
Blasin Kirappu	ferimzone + fthalide + ethiprole	Rice	Blast, Stink bugs, Planthoppers

4-4. HERBICIDE

Product Name	Active Ingredient	Crop	Weed, Use
Kairiki Z	ipfencarbazone + tefuryltrione + propyrisulfuron	Rice	One shot application
Kachiboshi	ipfencarbazone + tefuryltrione + bensulfuron-methyl	Rice	One shot application
Kimarite	ipfencarbazone + tefuryltrione	Rice	One shot application
Winningrun	ipfencarbazone + bromobutide + bensulfuron-methyl	Rice	One shot application
Meteor	pentoxazone	Rice	Annual weed, Pre-emergence application
Yuniherb	benzofenap + pretilachlor	Rice	Annual weed, Pre-emergence application
Clincher	cyhalofop-butyl	Rice	Grass weed, Post emergence application
Basagran	bentazone	Rice, Soybean, Wheats	Broadleaf weed, Post emergence application
Lenapac	lenacil + chloridazon	Sugar beet	Annual weed, Early post emergence 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, 8% SL
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
Hokuto	ipfencarbazone	Herbicide	2.5% GR, 25% SC
Taipan	benzofenap	Herbicide	—
Benfuresate	benfuresate	Herbicide	—
Simetryn	simetryn	Herbicide	—

Formulation

GR / granule
EC / emulsifiable concentrate
WP / wettable powder
SL / soluble liquid
WDG / water dispersible granule
SC / suspension concentrate

5-1. FUNGICIDE

KASUMIN and KASUMIN-BORDEAUX

Original fungicides 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 (*Pyricularia oryzae*)	◎	◎
	Bacterial grain rot (*Burkholderia glumae*)	◎	
	False smut (*Villosiclava virens*)		◎
	Bacterial brown stripe (*Acidovorax avenau* subsp. *avenae*)	◎	
	Bacterial leaf blight (*Xanthomonas oryzae* pv. *oryzae*)	◎	
Sugar beet	Cercospora leaf spot (*Cercospora beticola*)	◎	◎
Cucumber Melon, Watermelon	Angular leaf spot (*Pseudomonas syringae* pv. *lachrymans*)	◎	◎
	Bacterial spot (*Xanthomonas cucurbitae*)	◎	◎
	Anthracnose (*Colletorichum orbiculare*)	◎	
	Powdery mildew (*Podosphaera xanthii*)		◎
	Downy mildew (*Pseudoperonospora cubensis*)		◎
Tomato	Leaf mold (*Passalora fulva*)	◎	◎
	Bacterial canker (*Clavibacter michiganensis* subsp. *michiganensis*)	◎	◎
	Bacterial spot (*Xanthomonas vesicatoria*)		◎
	Late blight (*Phytophthora infestans*)		◎
Onion	Bacterial soft rot (*Pectobacterium carotovorum*)	◎	◎
Potato	Bacterial soft rot (*Pectobacterium carotovorum*)	◎	◎
Paprika Sweet pepper Chile	Bacterial spot (*Xanthomonas vesicatoria*)	◎	◎
	Anthracnose (*Colletotrichum capsici*)	◎	◎
	Powdery mildew (*Leveillula taurica*)		◎
Green beans	Halo blight (*Pseudomonas savastanai* pv. *phaseolicola*)	◎	◎
Apple, Pear	Fire blight (*Erwinia amylovora*)	◎	
Kiwifruit	Bacterial canker (*Pseudomonas syringae* pv. *actinidiae*)	◎	◎
	Bacterial blossom blight (*Pseudomonas marginalis* pv. *marginalis*)	◎	◎
Citrus	Canker (*Xanthomonas citri* subsp. *citri*)	◎	◎
Coffee	Black spot (*Pseudomonas syringae* pv. *garcae*)	◎	◎
Tea	Gray blight (*Pestalotiopsis longiseta*)	◎	◎
	Bacterial shoot blight (*Pseudomonas syringae* pv. *theae*)	◎	◎
Egg plant	Leaf mold (*Mycovellosiella nattrassii*)	◎	
Celery	Early blight (*Cercospora apii*)	◎	
Carrot	Bacterial soft rot (*Pectobacterium carotovorum*)	◎	
Cherry	Bacterial blast (*Pseudomonas syringae* pv. *syringae*)	◎	
	Bacterial canker (*Pseudomonas syringae* pv. *syringae*)	◎	
Walnut	Walnut blight (*Xanthomonas campestris* pv. *juglandis*)	◎	

Crop	Disease (Pathogen)	KASUMIN	KASUMIN-BORDEAUX
Cabbage	Black rot (*Xanthomonas campestris* pv. *campestris*) Bacterial soft rot (*Pectobacterium carotovorum*)		◎ ◎
Lettuce	Bacterial rot (*Pseudomonas cichorii, Pseudomonas marginalis* pv. *martinalis, Pseudomonas viridiflava*) Bacterial spot (*Xanthomonas axonopodis* pv. *vitians*)		◎ ◎
Rose	Powdery mildew (*Podosphaera pannosa*)		◎

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

MANAGE

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

Crop	Disease (Pathogen)
Turf	Rust (*Puccinia zoysiae*)
Rose	Black spot (*Diplocarpon rosae*) Powdery mildew (*Erysiphe Simulans*)
Chrysanthemum	White Rust (*Puccinia horiana*) Rust (*Puccinia tanaceti* var. *tanaceti*)
Japanese spindle tree	Powdery mildew (*Erysiphe euonymicola*)
Crape Myrtle	Powdery mildew (*Erysiphe australiana*)
Poplar	Powdery mildew (*Uncinula adunca* var. *mandshurica*) Marssonina leaf blight (*Marssonina brunnea*)
Tobacco	Powdery mildew (*Erysiphe cichoracearum*)

HEALTHIED

Crop	Disease(Pathogen)	Application
Rice	Bakanae disease (*Gibberella fujikuroi*)	Seed treatment
Cyclamen (greenhouse)	Anthracnose (*Colletotrichum gloeosporioides*)	Spray

5-2. HERBICIDE

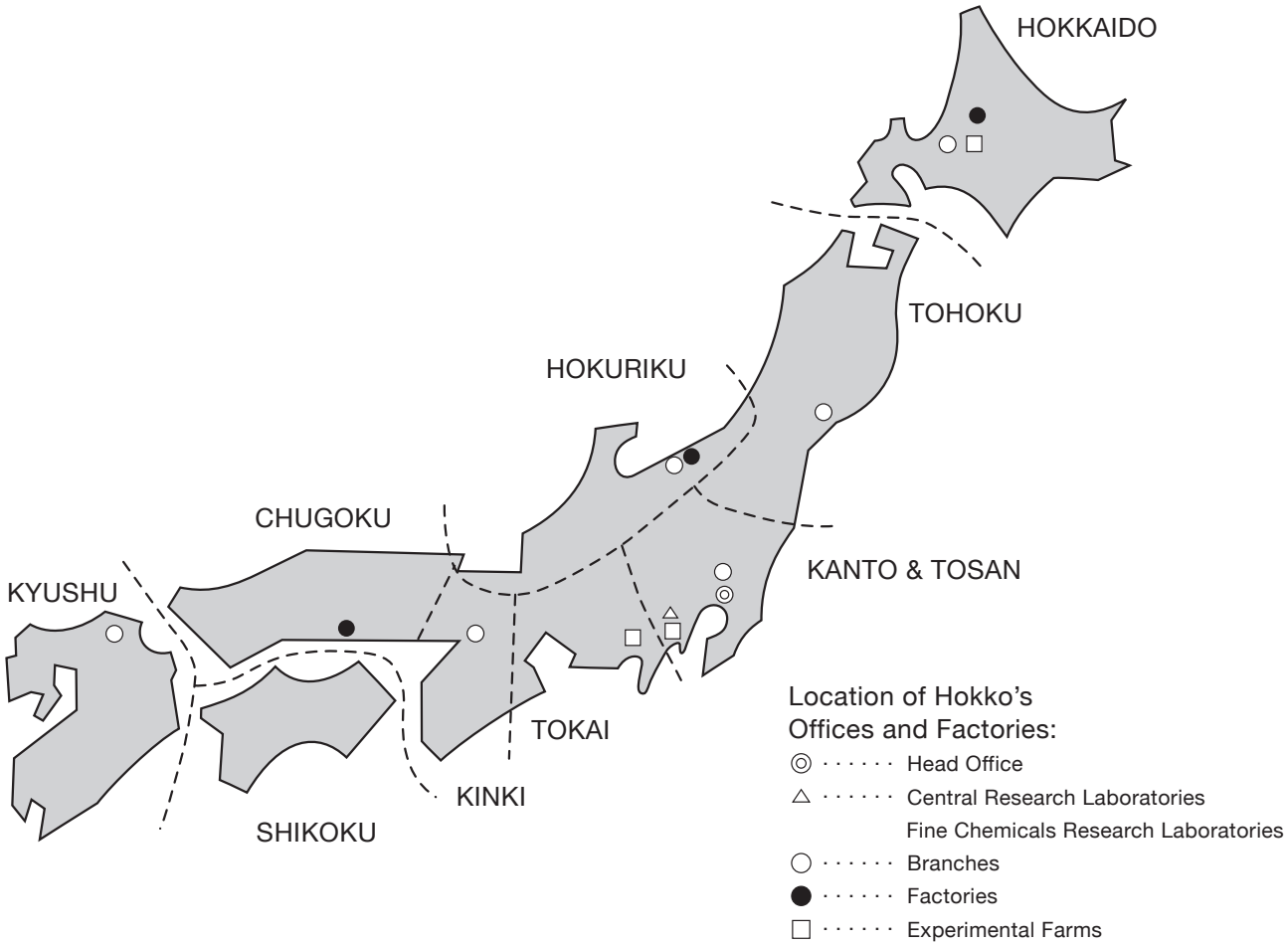
HOKUTO

An azolyl-carboxamides class herbicide having high efficacy against gramineous weeds in paddy field. The mode of action is the inhibition of the very long chain fatty acids biosynthesis in plants

Target weeds	*Echinochloa oryzicola, Echinochloa crus-galli, Leptochloa chinensis, Ischaemum rugosum, Fimbristylis miliacea, Cyperus difformis, Schoenoplectiella juncoides, Lindernia procumbens, Monochoria vaginalis, Cyperus rotundus, 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 2023

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

Unit: 1,000ha.

Region \ Crop	Rice	Wheat/Barley	Potato	Soybean	Citrus*	Apple	Pear	Grape	Cucumber	Cabbage	Tea
HOKKAIDO	93.3	134.1	48.5	45.3	—	0.5	—	1.1	0.1	0.9	—
TOHOKU	349.1	8.4	1.9	38.2	—	26.2	2.1	2.6	1.9	2.3	—
HOKURIKU	197.7	11.2	—	12.6	—	0.1	0.8	0.4	0.4	—	—
KANTO & TOSAN	239.5	38.3	3.4	10.5	1.2	7.1	4.2	6.4	3.1	9.6	0.5
TOKAI	86.8	18.2	0.6	12.4	8.7	0.1	0.4	0.4	0.4	1.6	14.1
KINKI	94.7	11.4	—	10.1	10.1	—	0.2	0.7	0.5	0.5	1.4
CHUGOKU	94.0	7.0	0.5	4.5	3.6	0.1	0.8	1.7	0.5	0.5	—
SHIKOKU	43.1	5.4	—	0.5	17.6	—	0.2	0.3	0.5	0.2	—
KYUSHU	145.9	61.6	7.2	20.7	17.3	—	1.2	1.0	1.7	2.0	11.1
Total	1344.0	295.7	69.0	154.7	62.1	34.6	11.2	16.4	9.5	19.0	27.2
Comparison with Previous Year (100%)	99	102	100	102	98	99	98	100	97	101	98

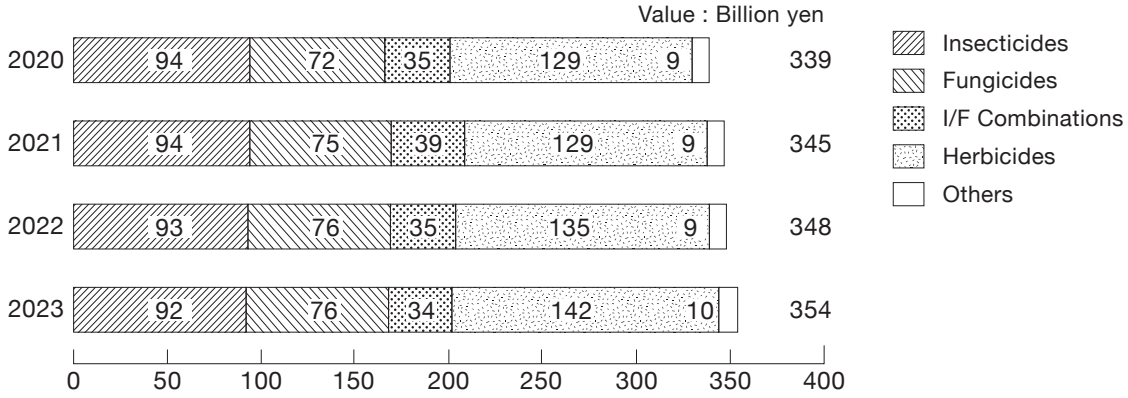
*; Data from 2022

—; not available

3. Agrochemicals Business by the member companies of JCPA* in 2023

(*Japan Crop Protection Association)

3-1 Agrochemicals Deliveries

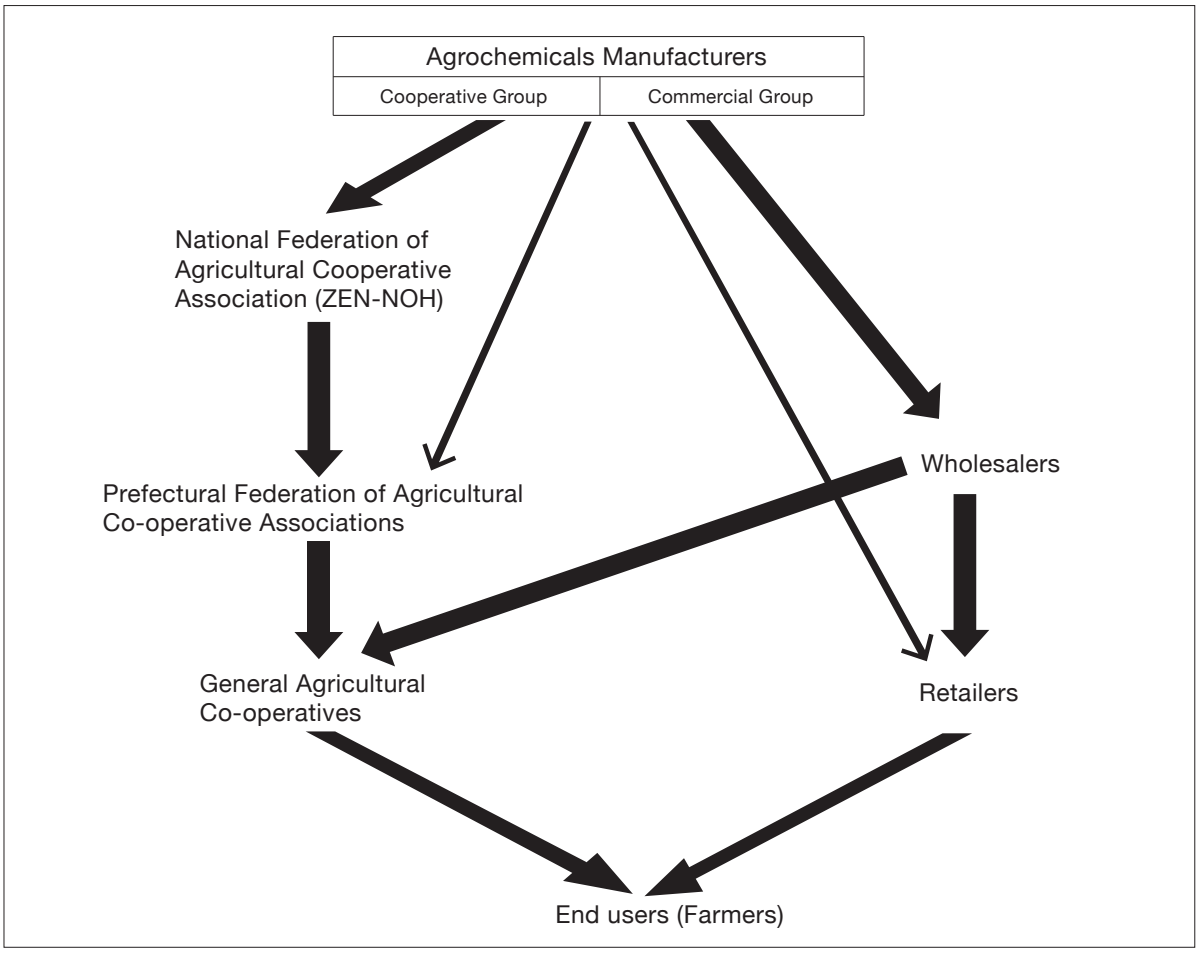


3-2 Agrochemicals Value by Crop

Sector	Agrochemicals group	Value		Comparison with 2022 (100%)
		Billion yen	%	
Paddy rice	Insecticides	11.1	3	87%
	Fungicides	9.0	3	90%
	I/F Combinations	29.2	8	86%
	Herbicides	65.5	18	105%
	Subtotal	**114.8**	**32**	**96%**
Fruit trees	Insecticides	19.2	5	102%
	Fungicides	19.0	5	102%
	I/F Combinations	.2	0	65%
	Herbicides	10.1	3	110%
	Subtotal	**48.5**	**14**	**103%**
Vegetables, potatoes, beans etc.	Insecticides	55.8	16	100%
	Fungicides	41.5	12	103%
	I/F Combinations	3.1	1	105%
	Herbicides	26.1	7	110%
	Subtotal	**126.6**	**36**	**103%**
Others	Insecticides	6.4	2	101%
	Fungicides	6.5	2	112%
	I/F Combinations	1.8	1	95%
	Herbicides	40.0	11	120%
	Subtotal	**54.7**	**15**	**115%**
(Total)	Insecticides	92.4	26	99%
	Fungicides	76.0	21	102%
	I/F Combinations	34.3	10	88%
	Herbicides	141.7	40	110%
	Others	10.0	3	108%
Grand total		**354.4**	**100**	**103%**

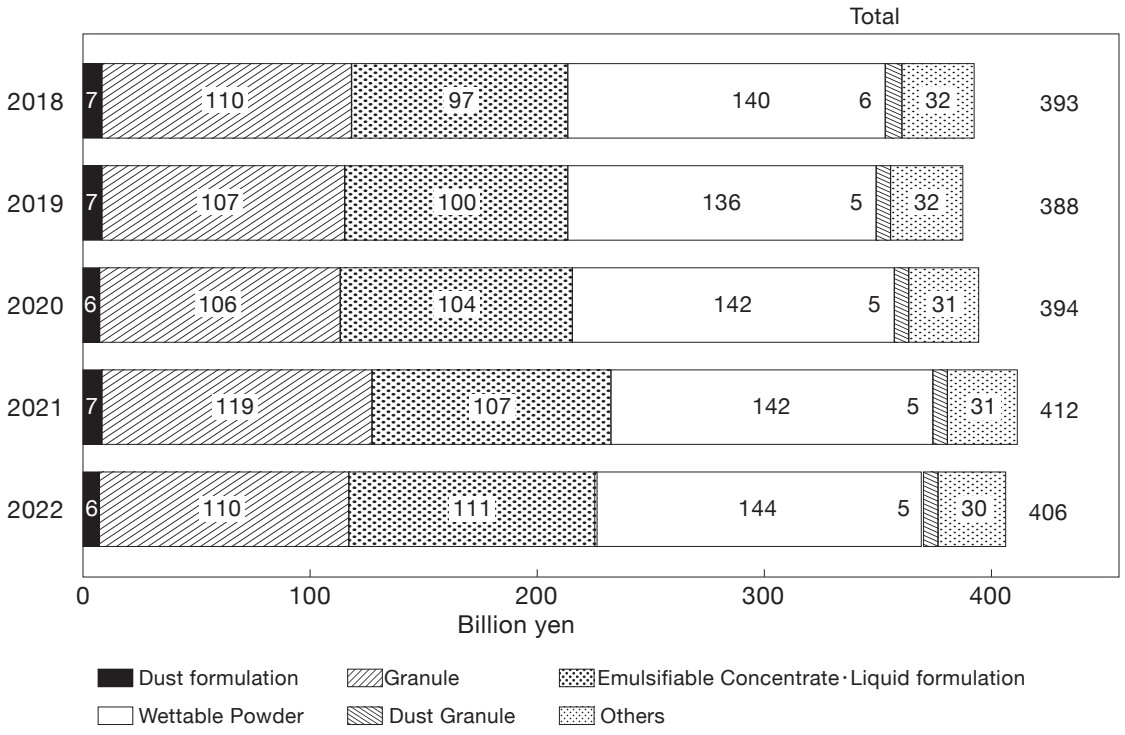
4. Distribution System of Agrochemicals

JPPA* in 2023



(*JPPA/Japan Plant Protection Assosiation)

5. Agrochemicals Production by Formulation (2018-2022) (Source; JPPA)



6. Pest Infestation and Agrochemical Treatment in 2022 (Source; JPPA)

Crop (Planted Area 1,000ha)	Pests and diseases	Net treated area (1,000ha)	Total treated area	
			Area (1,000ha)	Comparison with 2021 (100%)
Rice (1,355)	Seedling blight	811	863	96%
	Blast (leaf)	1,063	1,306	94%
	Blast (neck & ear)	914	1,254	96%
	Sheath blight	641	729	96%
	Bakanae disease	847	860	100%
	Rice stem borer (2nd generation)	146	158	110%
	White-backed planthopper	830	1,280	97%
	Brown rice planthopper	565	973	96%
	Small brown planthopper	851	1,333	95%
	Green rice leafhopper	702	1,036	95%
	Rice leaf beetle	580	583	88%
	Rice stink bug	1,107	1,643	100%
	Rice leafroller	499	493	99%
	Rice water weevil	774	772	87%
Wheat & Barley (287)	Powdery mildew	164	336	101%
	Scab	240	559	107%
	Snow rots	102	110	113%
Potato (69)	Late blight	53	384	105%
	Twenty-eight-spotted ladybird	4	7	37%
Soybean (152)	Purple stain	58	89	96%
	Soybean pod borer	88	164	109%
	Stink bugs	65	82	104%
Citrus (62)	Scab	38	66	96%
	Melanose	50	190	97%
	Arrowhead scale	29	63	84%
	Citrus red mite	49	133	99%
Apple (35)	Blossom blight	25	203	423%
	Alternaria leaf spot	35	310	107%
	Scab	35	360	97%
	Peach fruit moth	34	159	114%
	Apple leafminer	35	68	119%
	Mites	13	38	97%
Pear (11)	Black spot	4	37	97%
	Scab	10	104	96%
Vine (16)	Ripe rot	12	43	100%
	Rust	10	26	96%
	Leaf spot	8	29	91%
	Anthracnose	10	20	69%
	Downy mildew	13	58	97%
	Gray mold	12	30	94%
	Thrips	11	29	97%

Crop (Planted Area 1,000ha)	Pests and diseases	Net treated area (1,000ha)	Total treated area	
			Area (1,000ha)	Comparison with 2021 (100%)
Tea (31)	Anthracnose	32	75	103%
	Smaller tea tortrix	31	68	97%
	Oriental tea tortrix	26	51	96%
	Tea leafroller	31	55	90%
	Tea green leafhopper	31	79	99%
	Kanzawa spider mite	31	67	94%
	Thrips	31	84	100%
Cucumber (10)	Downy mildew	6	27	100%
	Anthracnose	2	9	113%
	Powdery mildew	6	24	100%
	Bacterial spot	2	6	120%
	Aphids	6	20	105%
Cabbage (19)	Black rot	17	24	96%
	Diamondback moth	20	48	107%

7. Herbicide Application in Rice Field

Crop	Application method	2023		
		Volume (t)	Value (million yen)	Estimated Area (1,000ha)
Rice	One-shot application	11,812	40,876	1,605
	Pre- and Early post-emergence application	3,894	5,857	550
	Post-emergence application	5,086	13,197	572
	Total	20,793	59,930	2,727

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

8. Average Agricultural Expenditure by Crop in 2022 (Source; MAFF)

Unit: yen/10a

	Rice		Wheat		Potato		Sugar beet		Soybean	
Seed & Seedling	4,000	4%	3,367	6%	17,073	19%	5,022	5%	4,081	7%
Fertilizers	9,810	9%	10,469	19%	12,082	13%	24,653	24%	6,365	11%
Agrochemicals	7,664	7%	4,384	8%	11,637	13%	13,070	13%	6,367	11%
Fuel	5,567	5%	2,412	4%	4,279	5%	4,362	4%	2,946	5%
Rent & Charge	12,359	11%	13,285	24%	1,344	1%	2,328	2%	8,633	15%
Buildings cost	4,019	4%	742	1%	1,675	2%	2,992	3%	1,078	2%
Agricultural machinery	24,246	21%	9,963	18%	20,236	22%	19,385	19%	12,551	22%
Labor	33,478	30%	6,306	12%	16,365	18%	20,127	20%	9,530	17%
Others	11,659	10%	3,438	6%	6,339	7%	9,517	9%	4,546	8%
Total	112,802	100%	54,366	100%	91,030	100%	101,456	100%	56,097	100%

9. Rice Production (Source; MAFF)

9-1. Transition of Rice Acreage for 10 years

Unit: 1,000ha

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	**2023**
Cultivated Area	2,320	2,310	2,296	2,284	2,273	2,261	2,248	2,236	2,223	**2,207**
Planted Area	1,575	1,506	1,479	1,466	1,470	1,470	1,462	1,404	1,355	**1,344**
Set-aside*1 (%)	32	35	36	36	35	35	35	37	39	**39**

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

9-2. Transition of Rice Production for 10 years

Year	2014	2015	2016	2017	2018	2019	2020	2021	2022	**2023**
Yield (t/ha)	5.36	5.31	5.44	5.34	5.29	5.28	5.31	5.39	5.36	**5.33**
Normal Yield (t/ha)*1	5.30	5.31	5.31	5.32	5.32	5.33	5.35	5.35	5.36	**5.36**
Index number of Rice Yield*2	101	100	102	100	99	99	99	101	100	**99**
Total Production (million ton)	8.4	8.0	8.0	7.8	7.8	7.8	7.8	7.6	7.3	**7.2**

*1; Determined by MAFF

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

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