

Q2/FYE March 2021

Earnings Conference

November 27, 2020



NIHON NOHYAKU CO., LTED.

Chemical **Innovator**
for Crop & Life 

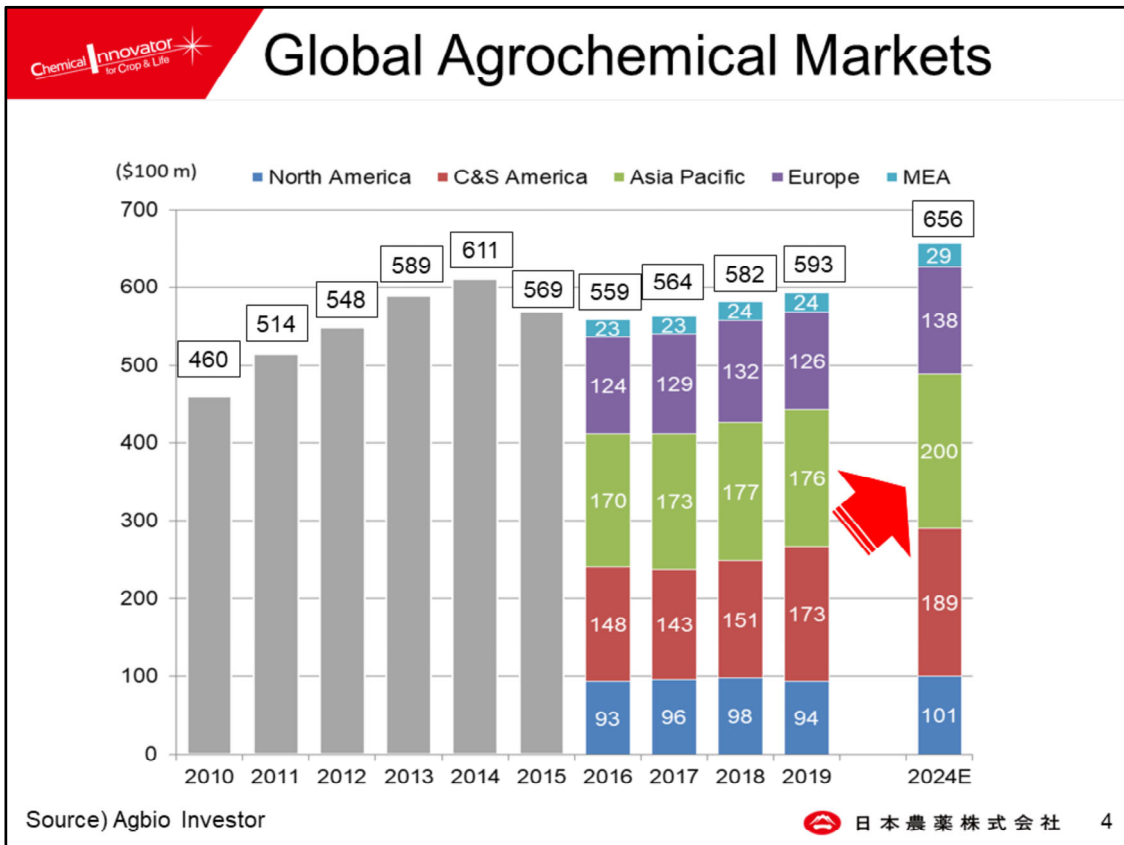
Note

The earnings forecasts and other forward-looking statements indicated in this document are based on currently available information as well as on what we deem to be certain reasonable assumptions but actual earnings may differ due to various factors.

- I. Global Agrochemical Markets
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I . Global Agrochemical Markets

I will begin by explaining trends in Global Agrochemical Markets.



The graphs in this section show the global agrochemical markets performance from 2010 to 2019 and forecasts for 2024.

The global agrochemical market grew from \$46 billion in 2010 to \$61.1 billion in 2014, reflecting population growth and economic development in emerging countries.

Over the past few years, sales have been weak due to the impact of small-scale pests in some regions and the impact of inventories in the past fiscal year due to unseasonable weather. However, sales in major markets such as Brazil have been on an uptrend again in 2019.

According to the study by Agbio Investor, the global agrochemical market is expected to grow at an average annual rate of 2.1% over the next five years to reach \$65.6 billion , approximately ¥7 trillion, in 2024.

North America

Demand for agrochemicals stayed firm on continued warm weather.

Latin America

Overall, the market shifted towards higher sales thanks to the consumption of past inventory in Brazil, the world's largest market, but the future remains unclear due to intensifying competition.

Europe

Demand for agrochemicals was sluggish due to high levels of existing inventory.

Asia

Demand increased in India and regions with favorable weather but overall the market was sluggish.

Japan

Largely unchanged due to impact of reduction in distribution inventory.

Next, I will explain region-specific results on last year's global agrochemical markets.

In North America, demand for agrochemicals were firm thanks to continued warm weather.

On the other hand, in Latin America, overall the market shifted towards higher sales thanks to the consumption of past inventory in the world's largest market Brazil, but the future remains unclear due to intensifying competition.

In Europe, agrochemical demand is sluggish due to high levels of existing inventory.

In Asia, demand increased in India and regions with favorable weather but overall the market was sluggish.

In comparison, Japan was largely unchanged due to impact of reduction in distribution inventory.

Furthermore, this year concerns about the impact of COVID-19 on procurement and logistics as resulted in a trend towards accelerating shipments.

II. Q2/FYE March 2021 Earnings

Next, I will explain earnings for Q2/FYE March 2021.

Q2/FYE March 2021 Earnings

(¥100m./ %)

	Q2/FYE March 2021	(Reference) Apr 2019 to Sep 2019	YoY	Growth %
Net Sales	290	260	29	11.4
Domestic Agrochemical Sales	67	59	8	14.4
Overseas Agrochemical Sales	182	163	19	11.7
Other agrochemicals	7	8	△ 0	△ 4.1
Chemical Products excluding agrochemicals	24	21	3	15.8
Other	8	9	△ 1	△ 9.2
Cost of Sales	197	176	21	12.2
Gross Profit	92	84	8	9.6
SG&A	77	92	△ 15	△ 16.6
Operating Income	15	△ 7	23	—
Ordinary Income	10	△ 10	21	—
Profit Attributable to Owners of Parent	12	△ 2	15	—

Q2 net sales increased by ¥2.9 billion, up 11.4% year on year, to ¥29.0 billion thanks to favorable sales from the agrochemical business, which is one of our core businesses, in both Japan and overseas.

Looking at profit, operating income was ¥1.5 billion, an increase of ¥2.3 billion yen year on year. Ordinary income was ¥1.0 billion yen, an increase of ¥2.1 billion yen year on year. Profit attributable to owners of parent was ¥1.2 billion yen, an increase of ¥1.5 billion yen year on year.

Q2/FYE March 2021 Earnings

Net sales ¥26.0 bn → ¥ 29.0 bn (+¥2.9 bn)

Operating income: -¥0.7 bn → ¥1.5 bn (+¥2.3 bn)

Decrease due to SG&A expenses being shifted to H2
+¥1.6 bn

Increase in sales of overseas agrochemicals +¥0.4 bn

Increase in pharmaceuticals and animal health care
products +¥0.3 bn

Operating income for the six months ended September 30, 2020 was ¥1.5 billion, an increase of ¥2.3 billion year on year. The main factors behind this increase are as follows.

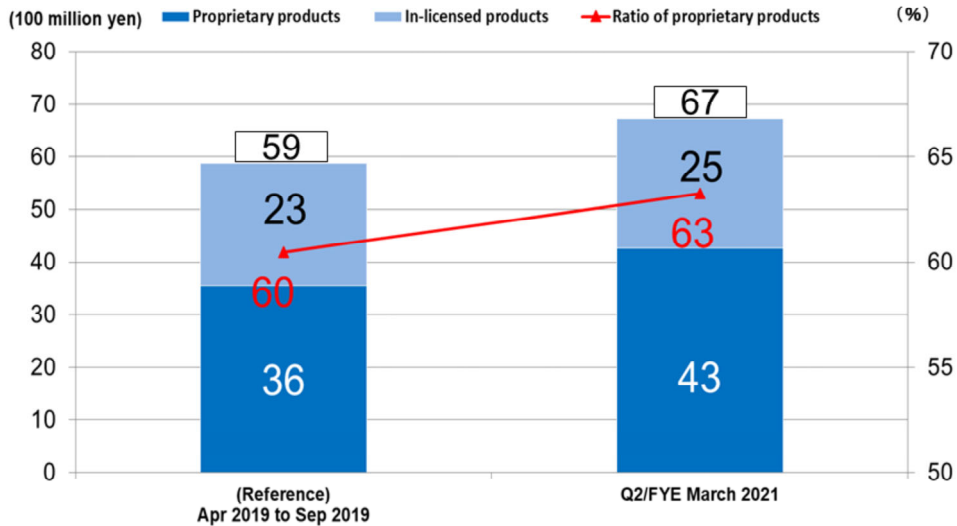
First, there is the fact that the recording of certain portion of SG&A expenses were shifted to the second half, resulting in an increase of ¥1.6 billion.

The increased sales of overseas agrochemicals accounted for ¥0.4 billion.

Furthermore, increased sales of pharmaceuticals and animal health care products accounted for ¥0.3 billion, for a total of ¥2.3 billion.

Agrochemicals (Domestic) - Composition of Net Sales

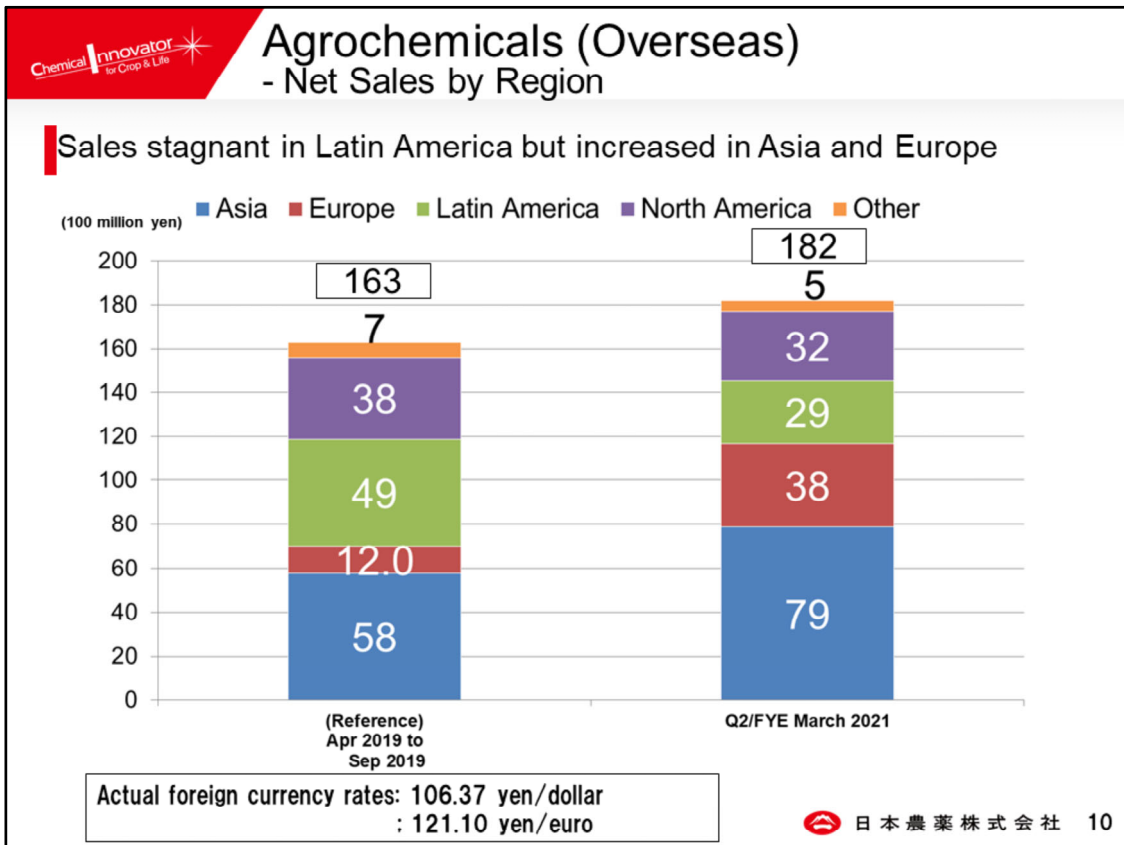
Increase in revenues by expanding sales of mainstay proprietary products



This graph shows net sales composition for domestic agrochemicals sales.

In Q2, we began selling four new products and expanded our product portfolio. We also worked to expand sales of proprietary products, including the horticultural fungicide agent pyraziflumid (domestic product name "PARADE").

Net sales were ¥6.7 billion, an increase of ¥0.8 billion year on year thanks to the balancing of sales, which was achieved by improving sales practices since last year to promote appropriate agrochemical use timing and improve logistics.



The graph shows net sales by region for overseas agrochemicals sales.

Net sales growth was stagnant in Q2 due to decreased crop land for cotton in North America and fewer pest outbreaks, as well as intensifying competition in Latin America.

On the other hand, net sales grew in Asia thanks to increased demand in India for herbicides designed for the rainy season and favorable sales of the insecticide flubendiamide (domestic product name "PHOENIX").

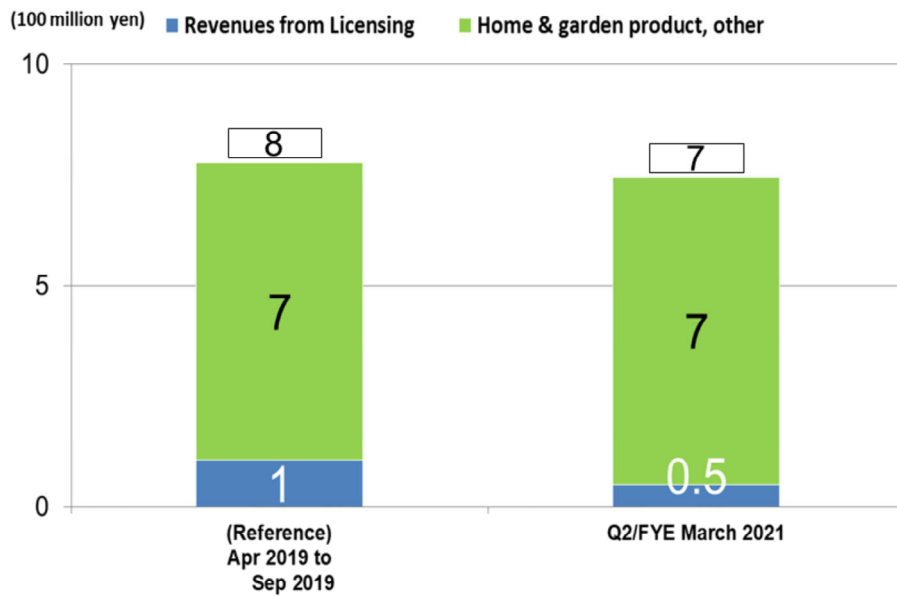
Furthermore, net sales grew in Europe thanks to increased sales of PGR Pyraflufen-ethyl (domestic product name "DECICAN"), which was able to secure market share from competitor products.

As a result, overseas agrochemical sales increased by ¥1.9 billion year on year to ¥18.2 billion.

Furthermore, actual foreign currency rates for Q2 are as indicated here.

Agrochemicals (Others)

Slight decrease in know-how technical fees

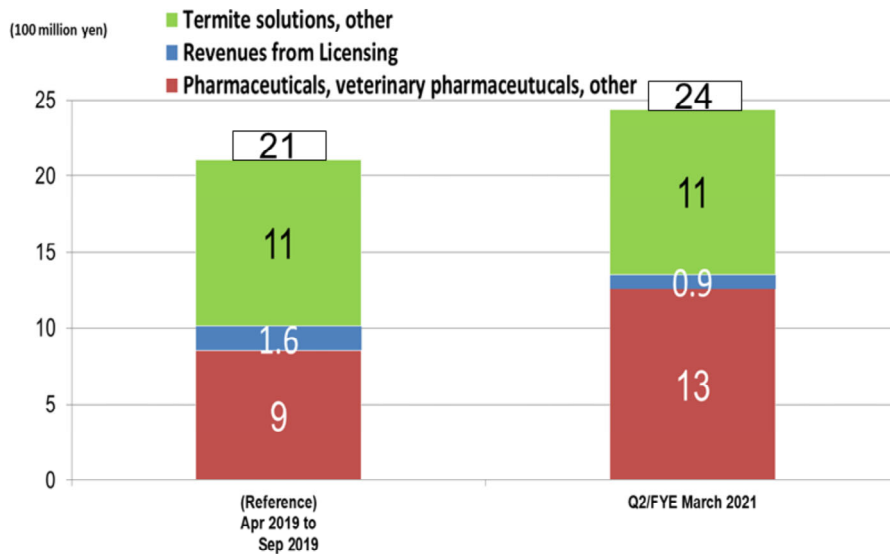


The graph shown here shows earnings in domestic and overseas agrochemicals business sales for non-agrochemical products categorized by know-how technical fees (blue) and horticultural products (green).

In Q2, know-how technical fees decreased slightly.

Chemical Products (Non-agrochemical products)

Pharmaceuticals sales favorable



This graph shows non-agrochemical chemical products divided into categories of pharmaceuticals and animal health care products (red), know-how technical fees (blue), and termite pesticides and other (green). This indicates actual sales.

Q2 overall net sales were ¥2.4 billion, an increase of ¥0.3 billion year on year thanks to favorable sales of the topical antifungal agents Ianoconazole and Iuliconazole in the pharmaceuticals field.

Major Earnings of Domestic Group Companies

(¥m./%)

		Q2/FYE March 2021	(Reference) Apr 2019 to Sep 2019		
				YoY	Growth %
Nihon Nohyaku	Net sales	18,000	13,050	4,949	37.9
	Operating income	325	△ 888	1,213	—
	Net profit	730	△ 198	929	—
Nichino Service	Net sales	2,013	2,361	△ 348	△ 14.7
	Operating income	25	61	△ 36	△ 59.1
	Net profit	15	58	△ 43	△ 74.1
Nichino Ryokka	Net sales	1,026	1,091	△ 64	△ 6.0
	Operating income	63	30	32	109.3
	Net profit	43	20	22	108.5
Nihon EcoTech	Net sales	363	393	△ 30	△ 7.8
	Operating income	1	24	△ 23	△ 92.8
	Net profit	3	16	△ 13	△ 79.5
AgriMart	Net sales	1,127	1,171	△ 43	△ 3.7
	Operating income	187	111	75	68.3
	Net profit	120	75	44	59.7

This table shows major Q2 earnings of domestic group companies.

Nichino Ryokka, shown third from the top in the table, improved profitability by practicing selective acceptance of landscaping construction and reducing SG&A expenses.

Major Earnings of Overseas Group Companies

(¥m./%)

		Q2/FYE March 2021	(Reference) Apr 2019 to Sep 2019		
				YoY	Growth %
Nichino America	Net sales	3,446	3,757	△ 311	△ 8.3
	Operating income	496	280	216	77.3
	Net profit	349	192	156	81.6
Taiwan Nihon Nohyaku	Net sales	262	261	0	0.3
	Operating income	56	37	19	51.6
	Net profit	44	28	16	57.3
Nichino India	Net sales	4,622	3,188	1434	45.0
	Operating income	298	141	156	111.6
	Net profit	198	91	107	119.6
Sipcam Nichino Brasil	Net sales	2,182	4,520	△ 2,337	△ 51.7
	Operating income	△ 200	△ 152	△ 47	—
	Net profit	△ 1,222	△ 266	△ 955	—
Nichino Europe	Net sales	2,267	—	—	—
	Operating income	480	—	—	—
	Net profit	441	—	—	—

This table shows Q2 earnings of major overseas group companies.

Nichino India, shown third from the top in the table, achieved earnings growth thanks to favorable weather during the rainy season and favorable sales of the insecticide tolfenpyrad (domestic product name “Hachi Hachi”).

III. FYE March 2021 Full Year Earnings Forecast

Next, I will explain our full-year earnings forecast for FYE March 2021.

FYE March 2021 Earnings Forecast

(Unit: ¥100M, %)

	FYE Mar 2021 Plan	(Reference) Apr 2019 to Mar 2020	YoY	Growth %
Net Sales	671	617	54	8.7
Domestic Agrochemical Sales	200	187	13	7.1
Overseas Agrochemical Sales	390	343	47	13.7
Other agrochemicals	22	27	△ 5	△ 19.6
Chemical Products excluding agrochemicals	41	40	1	3.5
Other	18	21	△ 3	△ 12.9
Cost of Sales	453	406	47	11.4
Gross Profit	218	211	7	3.3
SG&A	181	179	2	1.3
Operating Income	37	32	5	14.5
Ordinary Income	28	29	△ 1	△ 3.7
Profit Attributable to Owners of Parent	20	12	8	69.5

We forecast net sales of ¥67.1 billion, an increase of ¥5.4 billion, or 8.7% year on year, thanks mainly to sales growth in Japan and overseas for the agrochemicals business, our core business.

We forecast operating income of ¥3.7 billion, an increase of ¥0.5 billion, or 14.5% year on year, and ordinary income of ¥2.8 billion, a decrease of ¥0.1 billion, or 3.7% year on year.

Furthermore, we forecast ¥2.0 billion as profit attributable to owners of parent. This represents an increase of ¥0.8 billion, or 69.5% year on year, thanks to having moved beyond extraordinary losses recorded in the previous fiscal year.

Net sales ¥61.7 bn → ¥67.1 bn (+¥5.4 bn)

Operating income: ¥3.2 bn → ¥3.7 bn (+¥0.5 bn)

Increase in domestic agrochemical sales +¥0.3 bn

Increase in overseas agrochemical sales +¥0.6 bn

Increase in pharmaceuticals and animal health care products: +¥0.1 bn

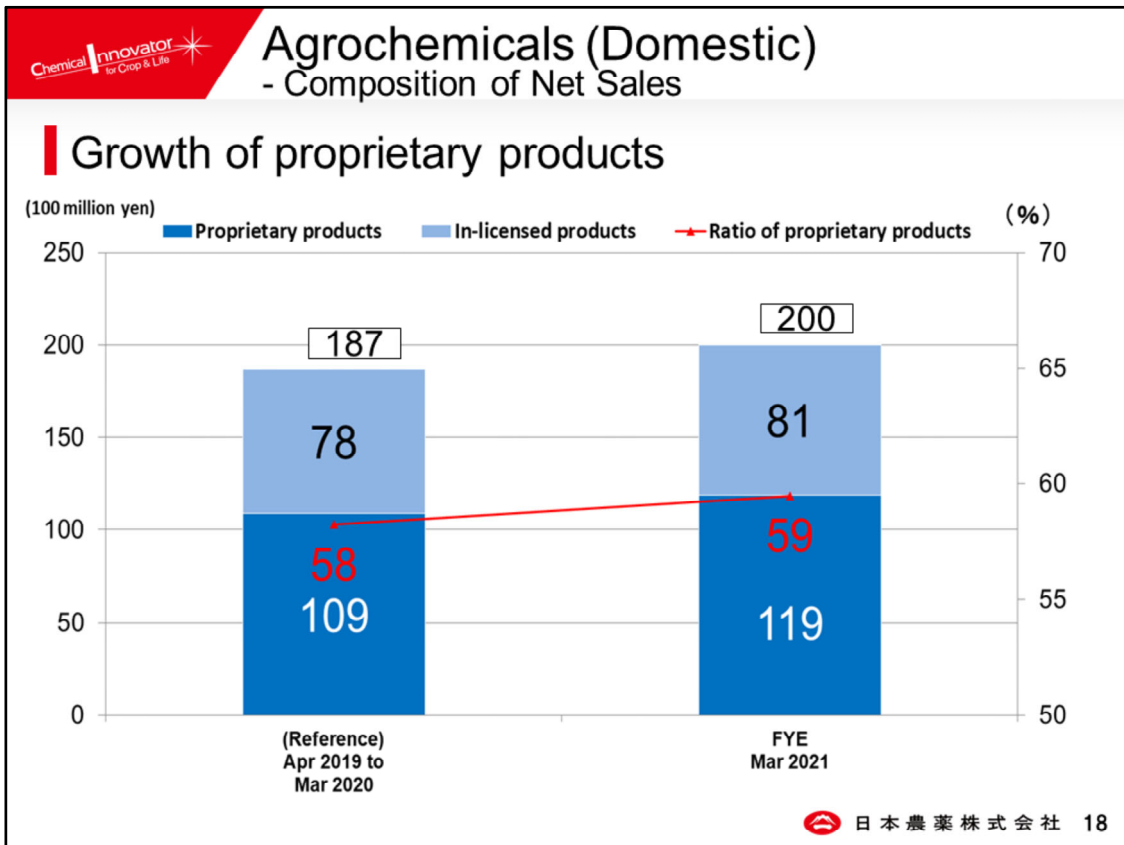
Decrease in know-how technical fees -¥0.3 bn

Decreased demand due to impact of COVID-19 (golf courses) -¥0.2 bn

We forecast operating income of ¥3.7 billion, an increase of ¥0.5 billion year on year.

As an explanation of main factors, domestic and overseas agrochemical sales both will increase by ¥0.3 billion for a total of ¥0.6 billion. Furthermore, sales of pharmaceuticals and animal health care products will increase by ¥0.1 billion.

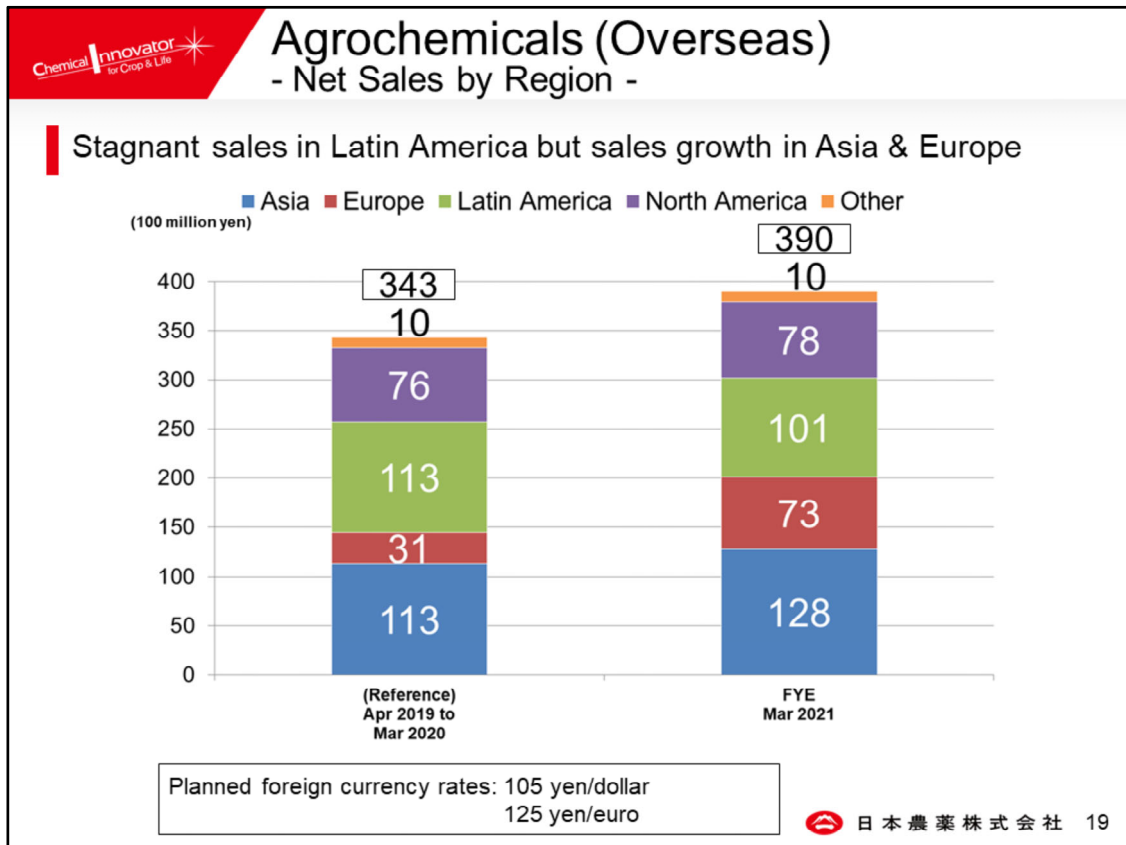
Conversely, decrease factors include sales of know-how technical fees decreasing by ¥0.3 billion and agrochemical demand decreasing by ¥0.2 billion due to COVID-19. In total, these factors result in increased income of ¥0.5 billion.



This graph shows net sales composition for domestic agrochemical sales this fiscal year.

This fiscal year, we establish a proposal style that combines our technical and sales strengths to provide solutions such as Leime AI Disease, Pest & Weed Analysis, a smartphone app.

We will expand sales of the horticultural fungicide agent pyraziflumid by expanding applications. As such, we forecast net sales of ¥20.0 billion, an increase of ¥1.3 billion year on year.



The graph shows net sales by region for overseas agrochemical sales this fiscal year.

In the Asia region, Nichino India will solidify its sales platform in India, strengthen TG manufacturing functions, and accelerate development of the new paddy rice insecticide benzpyrimoxan (domestic product name “ORCHESTRA”).

In the Americas, Nichino America will expand operations by increasing applications for herbicide orthosulfamuron and strengthening business in Mexico.

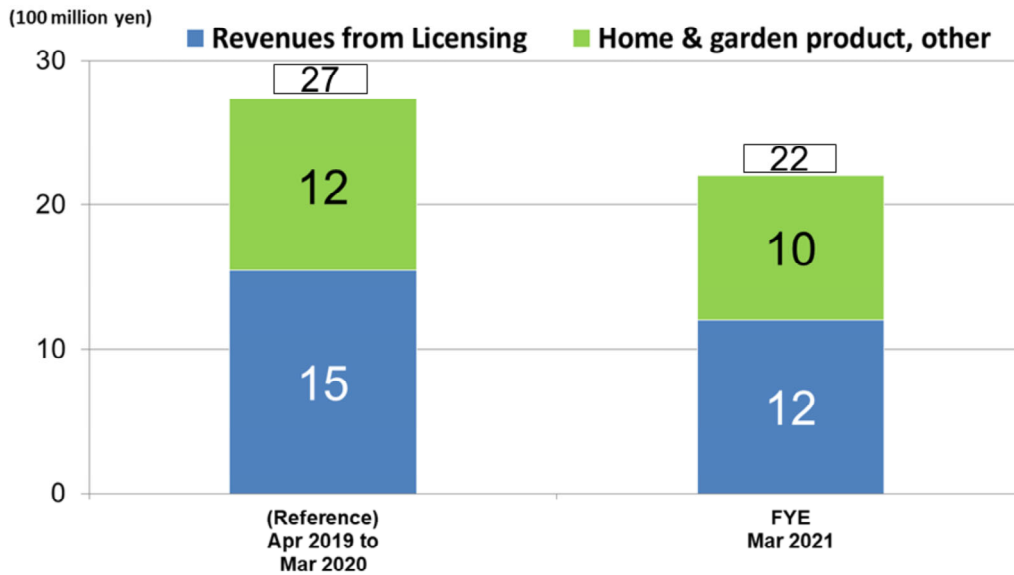
Furthermore, as part of efforts to maximize Group synergy, our local subsidiary in Brazil will promote the development, registration, and sales of horticulture insecticide flubendiamide.

In addition to Sipcam Nichino Brasil leading efforts to establish a structure for expanding sales and maximize the potential of proprietary products, they will strengthen their management foundation.

As a result of the above efforts, we forecast overseas agrochemical sales of ¥39.0 billion, an increase of ¥4.7 billion year on year.

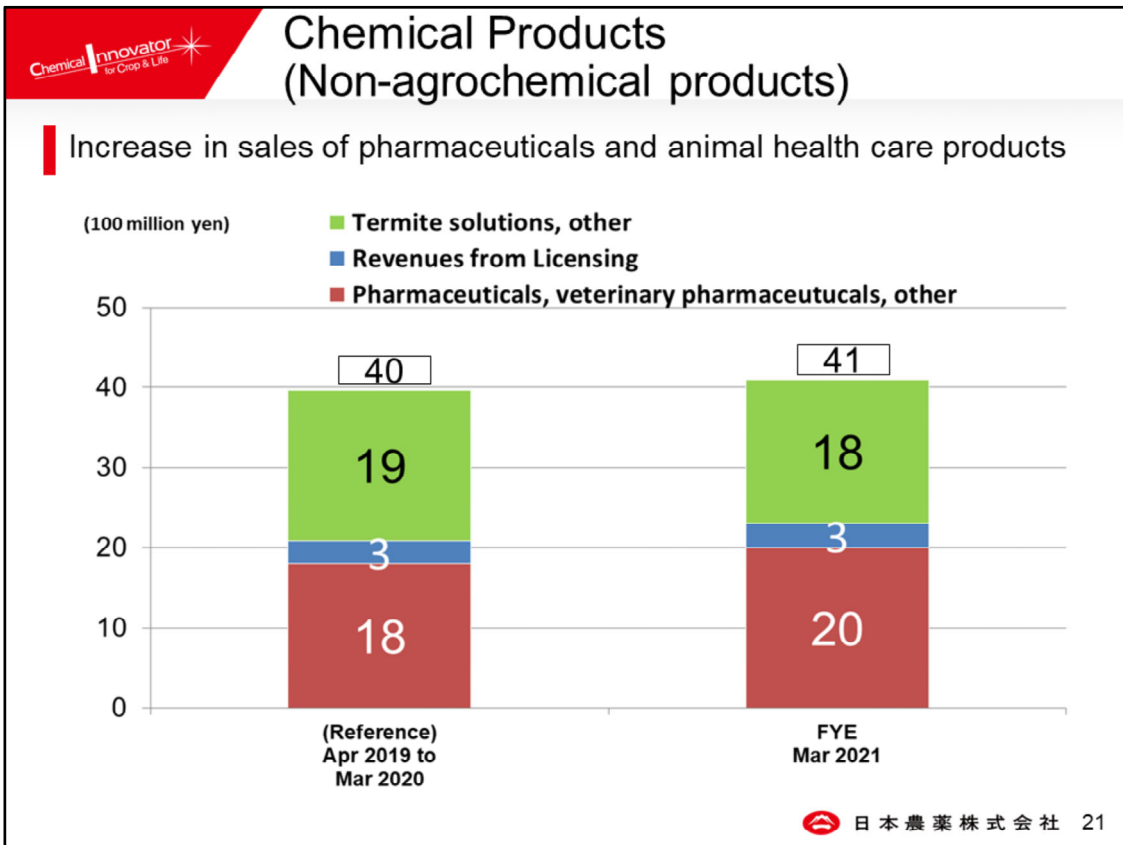
Furthermore, our foreign currency rate plan for the current fiscal year are as indicated here.

Decrease in know-how technical fees



This graph indicates current fiscal year forecasts for know-how technical fees and horticultural products in the agrochemicals business.

We forecast sales targeting customers adopting our technology will struggle and know-how technical fees will decrease.



This graph indicates our forecast for non-agrochemical chemical products this fiscal year.

We forecast overall net sales of ¥4.1 billion, an increase of ¥0.1 billion year on year. Although net sales of termite pesticides will decrease due to a decline in new housing construction triggered by COVID-19, we project increased sales of topical antifungal agent.

Main Plans of Domestic Group Companies

(¥m./%)

		FYE Mar 2021 Plan	(Reference) Apr 2019 to Mar 2020		
				YoY	Growth %
Nihon Nohyaku	Net sales	41,323	34,764	6,559	18.9
	Operating income	2,235	2,004	230	11.5
	Net profit	1,925	△ 3,790	5,715	—
Nichino Service	Net sales	4,518	4,410	107	2.4
	Operating income	112	178	△ 66	△ 37.3
	Net profit	71	143	△ 72	△ 50.6
Nichino Ryokka	Net sales	1,791	2,115	△ 324	△ 15.3
	Operating income	△ 28	61	△ 88	—
	Net profit	△ 18	41	△ 59	—
Nihon EcoTech	Net sales	730	819	△ 89	△ 10.9
	Operating income	1	66	△ 65	△ 98.5
	Net profit	6	45	△ 39	△ 86.1
AgriMart	Net sales	1,900	1,989	△ 89	△ 4.5
	Operating income	150	187	△ 36	△ 19.7
	Net profit	91	123	△ 32	△ 26.4


This table shows the main plans of domestic group subsidiaries for the current fiscal year.

The plans indicated here represent a bottom line but we will aim to further increase sales.

Main Plans of Overseas Group Companies

(¥m./%)

		FYE Mar 2021 Plan	(Reference) Apr 2019 to Mar 2020		
				YoY	Growth %
Nichino America	Net sales	7,760	7,579	180	2.4
	Operating income	900	780	120	15.4
	Net profit	626	562	64	11.5
Taiwan Nihon Nohyaku	Net sales	504	470	33	7.1
	Operating income	51	66	△ 15	△ 22.9
	Net profit	43	52	△ 9	△ 17.7
Nichino India	Net sales	7,357	6,860	496	7.2
	Operating income	50	268	△ 217	△ 81.2
	Net profit	20	140	△ 120	△ 85.4
Sipcam Nichino Brasil	Net sales	8,987	10,373	△ 1,386	△ 13.4
	Operating income	436	33	402	1194.7
	Net profit	△ 437	△ 502	66	—
* Nichino Europe	Net sales	4,043	3,885	157	4.1
	Operating income	332	298	33	11.4
	Net profit	277	269	7	2.8

*Figures in reference for Nichino Europe represents earnings for 18 months (Oct 2018 to Mar 2020)  日本農薬株式会社 23

This table shows the main plans of overseas group subsidiaries for the current fiscal year.

Nichino America, shown at the top, is forecast to record earnings growth on favorable sales of mainstay products.

Furthermore, previous fiscal year figures for Nichino Europe, shown at the very bottom of the table, represent earnings for 18 months.

IV. ESG Initiatives

Next, I will explain our ESG initiatives.

Basic Principles of the Nihon Nohyaku Group

We contribute to society by ensuring a safe and steady food supply and improving the quality of life for all.

We fulfill market needs by creating superior values with innovative technologies.

We commit to be a trustworthy company for all stakeholders through our fair and vigorous business activities.



The Three Basic Principles of Nihon Nohyaku Group shown here represent the basic management principles of our Group. Adopting a mission of securing safe and steady food supplies and improving the quality of life for all, we have continued to engage in technical innovation that contributes to global agricultural industries.

We will continue to engage in corporate activities grounded in these basic principles and apply them to ESG, an increasingly important aspect of corporate management.



Nichino Group business activities are closely tied to agriculture, the environment, and people's lives and welfare.

As we engage in business operations and respond to globalization, we continue to address the broad concepts and issues outlined in the SDGs.



Zero Hunger

- Need to secure food supplies to support a growing global population despite limited agricultural land
- Crop decline** from not using agrochemicals: Rice: 80%; Wheat: 70%; Apples 10% (Note 1)
- Contributing to **stable food provision and quality improvements** by achieving agrochemical registration for 23 formulas in over 100 countries and regions

Technical Grade (Formula) Examples	Year registered	Countries where registered	Estimated land surface area where used (Note 2)
Isoprothiolane (FUJI-ONE: insecticide・PGR)	1975	28	2.57Mha
Buprofezin (APLAUD: insecticide)	1984	62	2.08Mha
Pyraflufen-ethyl (ECOPART: herbicide, plant growth regulator)	1999	38	2.32Mha
Flubendiamide (PHOENIX: insecticide)	2007	70	11.30Mha (Note 3)

(Note 1): Crop reduction in Japan. Source: "Survey Report on Pest Damage If Crops are Grown without Agrochemicals", (1990-2006, Japan Plant Protection Association)
 (Note 2): Estimated based on sales volume and typical usage, (Note 3): Usage includes shipment volume (estimated) for licensee Bayer Corp.



Good Health and Well-being

- Contributions in **antifungal agent sector**; Prescriptions to wide range of patients through 3 manufacturers
- Global sales**: Also selling antifungal agent in the USA and China

Nichino Group operations are closely tied to agriculture, the environment, and people's lives and welfare. As we engage in business operations and respond to globalization, we continue to address the broad concepts and issues outlined in the SDGs.

With increasing demand for food supplies to address a growing global population, we must be able to secure food supplies despite limited agricultural land. Our 23 technical grades have earned agrochemical registration in over 100 countries and regions around the world and contribute to stable food provision and quality improvements.

We also have applied the knowledge we have accumulated as an agrochemical manufacturer to develop technical grades for topical antifungal agents. These products are not only sold as prescription drugs and OTC drugs in Japan, but are also contributing to healthy lifestyles for people overseas.



Gender Equality

- Strengthened **CSR promotion structure**, expanded activities of the “Human Rights and Labor Practices Workgroup” (**designated Diversity Promotion staff, planned fair and equal participation by women**)
- Gradual permeation within Group companies** based on Corporate Vision “Growing Global”



Industry, innovation, infrastructure

- Achieve **labor savings and cost reductions** through technical innovation in the crop protection domain

Benzpyrimoxan: New effect (molting hormone metabolism inhibition)

Buprofezin: World's first IGR for rice stink bugs

Flubendiamide: World's first ryanodine receptor agent

Isoprothiolane: plant growth regulator, high temperature damage countermeasure agent, and hopper density inhibitor

Pyraflufen-ethyl: Withering agent (labor saving)

- Leading shift to smart agriculture** by incorporating advanced technology (IoT)

(Leime AI Disease, Pest & Weed Analysis, a smartphone app, etc.)



Responsible consumption, production

- Expanding and monitoring **responsible care (RC) activities** (research, development, manufacturing, distribution, use, disposal, and recycling)

-**Chemical substance control and waste product reduction** throughout product life cycle (zero waste, maintain/expand emissions controls, etc.)

- Appropriate and regular **information disclosure** (expand CSR report, enlightenment on role of agrochemicals and appropriate use)

We also are working to help realize gender equality by strengthening our CSR promotion system and by designating internal diversity promotion staff to improve employee awareness.

As an R&D-focused company, we engage in technical innovation that has introduced numerous new effective compounds onto the market. In addition to contributing to labor savings and cost reductions, we are also engaged in smart agriculture that incorporates new advanced technology.

To address the concept of responsible consumption and production, we promote RC activities and fulfill our responsibilities as an agrochemical manufacturer by engaging in appropriate and regular information disclosure.



Climate action

- Promote energy conservation activities to **reduce CO2 emissions** (achieved reductions 4 consecutive years)
- Promoting use of renewable energy** by installing solar power generation facilities (Saga Prefecture)
- Achieved rating of “Advanced environmentally-conscious initiatives “ for environmental rating (Development Bank of Japan), rating as **S-Class Energy-Conserving Business** (METI)



Life on land

- By creating and providing effective agrochemicals, we improve crop yield per unit area, thereby contribute to **reducing the unnecessary development of agricultural land to help conserve forests, grasslands, and greenery.**
- Efforts to **reduce the burden on the environment (natural ecosystem including biodiversity)** by creating drugs that are compatible with IPM (Integrated Pest Management) with an emphasis on selectivity

<IPM compatible compounds developed in-house>
Benzpyrimoxan, buprofezin, flubendiamide, metaflumizone pyflubumide, pyrifluquinazon, tebufenozide, teflubenzuron



Strengthen partnerships

- Stimulate global partnerships
- Work to strengthen fair and multi-faceted supply chain management

We engage in initiatives related to climate change, including achieving CO2 emissions reductions for 4 consecutive years. At our Saga Plant, we are working to use renewable energy by installing a solar power generation system. Recognized for these efforts, we have received ratings by various supervisory agencies.

By creating and providing effective agrochemicals and IPM-compliant agrochemicals, we contribute to reducing environmental load by reducing the need for new agricultural land development, which works to protect land biodiversity.

And through our global partnerships and supply chain management improvements, we are enhancing our implementation methods and systems.

Strengthen **Corporate Governance**

-June 2020: Established Audit Committee

Strengthened management supervisory functions and accelerated decision-making process

-Increased ratio of outside directors to 1/3 or more

Promoting **Diversity Management**

-Two female directors, one female executive officer

-One non-Japanese executive officer

Established new **CSR Committee (Oct. 2020) at equal position of the Management Committee**

-Strengthened structure for pursuing **CSR** initiatives as core of management

-Accelerating **SDGs** initiatives

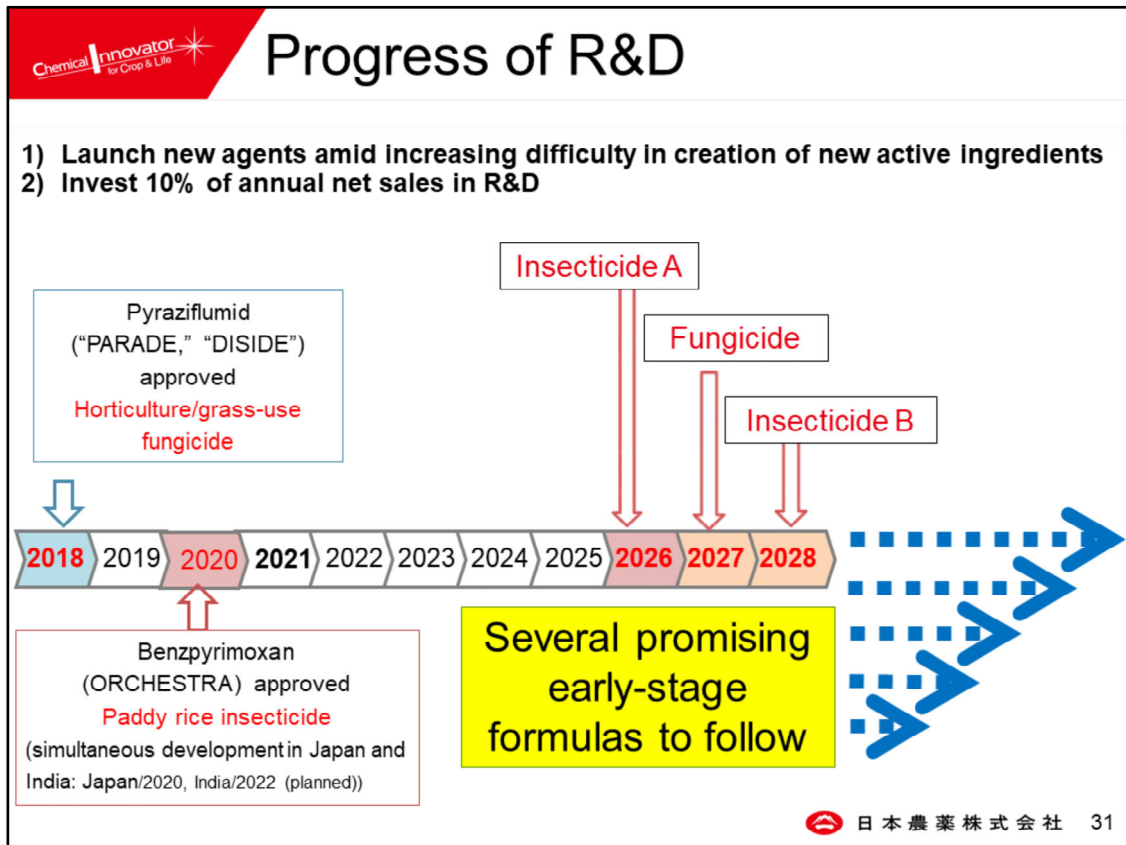
We are enhancing efforts related to governance, one of the pillars of ESG.

In June of this year, we enhanced corporate governance by establishing an Audit Committee.

We are also promoting diversity management by proactively hiring female and non-Japanese executives. Furthermore, to engage in CSR as a core aspect of management, in October of this year we established a CSR Committee at equal position of the Management Committee.

V . Progress of R&D

Next, I will explain the progress of current R&D.



In recent years, discovering new bioactive compounds (creation of new AIs) has become more difficult. At the same time, safety assessment standards have risen and the cost of maintaining existing registrations has increased, resulting in a dramatic increase in research and development expenses.

Amid such conditions, we are investing over 10% of annual net sales into research and development (R&D) in order to further enhance our capabilities of creating new AIs.

Details on new agent development and respective launch schedules are as shown. We are developing the new paddy rice insecticide benzpyrimoxan, in Japan and India.

In addition, as a result of our efforts to quickly expand our pipeline with the goal of launching one agent every three years, we are currently developing three new products, two insecticides and fungicide, with the goal of launching sales at the site.

Additionally, we will have multiple promising early-stage formulas following the pipeline. We are working diligently on R&D to accelerate development.

Progress in Q2/FYE March 2021

Newly developed products

Completion of application for agrochemical registration of new pesticide benzpyrimoxan (product name "ORCHESTRA")

- ✓ Effective against hoppers and leafhoppers
- ✓ In February 2019, application for agrochemical registration in Japan and India was completed
- ✓ In September 2020, we obtained agrochemical registration in Japan
- ✓ In Japan, we plan to start sales in May 2021
- ✓ Working to advance sales in India ahead of schedule (Initial plan: 2023 => 2022)
- ✓ Peak sales: Japan: ¥1 billion, India: ¥6 billion
- ✓ Mixtures with various pesticides and fungicide are under development
- ✓ Registration is under consideration in Southeast Asian countries, etc.



Next, the results of our Q2 R&D.

In September of this year, we achieved agrochemical registration in Japan for benzpyrimoxan, which I mentioned earlier, and plan to start sales in May of 2021. Normally, two and a half years are required after filing to achieve agrochemical registration in Japan, but this product was registered in the short span of 1 year and 7 months. This is the result of being applicable for the priority registration system but also an indication of the high expectations for this product once commercialized.

Sales in India were scheduled to begin in 2023 but we are working diligently to contribute to earnings at an early stage by moving forward this plan to 2022.

We expect peak sales in Japan of ¥1.0 billion and in India of ¥6.0 billion.

We are also developing a mixture product of "ORCHESTRA" with various insecticides and fungicides. In addition to Japan and India, we are also considering acquiring registrations in Southeast Asian countries and other countries, and we will cultivate this product as one of our key global products in the field of paddy rice.

Progress in Q2/FYE March 2021

Promoting development of existing products

Wide spectrum fungicide pyraziflumid (domestic product name "PARADE")

- ✓ Advancing development of **drench application to plug seedling** that will enable new spraying methods
⇒ **Approved for lettuce, cabbage and nappa cabbage (Hakusai), as well as scallions**
- ✓ Formulation approved in Korea in February 2019, started sales in March 2020
- ✓ In the USA, Canada and Mexico we filed for registration in 2019
- ✓ Evaluating possibility for development in Europe and Brazil



Next, I will explain initiatives related to promoting development of existing products.

For the wide spectrum fungicide pyraziflumid, we are advancing the development of drench application to plug seedling that will enable new spraying methods in Japan and received approval for lettuce, cabbage and nappa cabbage, this fiscal year we expanded to scallions.

Overseas, we received formulation approval in Korea in February 2019 and launched sales in March of this year. In addition to completed registration filing in November 2019 in the USA, we are evaluating possibilities for development in Europe and Brazil.

Progress in Q2/FYE March 2021

Promoting development of existing products

Horticulture insecticide flubendiamide (domestic product name: "PHOENIX")

- ✓ Registered the technical grade in Brazil in 2019 and planning to launch sales in 2021
⇒ Peak sales of ¥1.4 billion

Horticulture insecticide pyrifluquinazon (domestic product name "COLT")

- ✓ Acquired U.S. Food Registration in 2018, launched sales via Nichino America Inc. (NAI)
- ✓ Launched sales in Pakistan in 2020

Horticulture insecticide tolfenpyrad (domestic product name "Hachi Hachi")

- ✓ Registered in April 2020 in California, the major US market.

In October 2019, we registered the technical grade for the horticulture insecticide flubendiamide in Brazil and are aiming to launch sales in 2021.

We are driving development with the aim of ¥1.4 billion in net sales during peak season.

We launched sales of horticulture insecticide pyrifluquinazon (domestic product name "COLT") in Pakistan this year.

Furthermore, in April we successfully registered the horticulture insecticide tolfenpyrad in California, a major market in the USA, and will work to expand sales.

VI. Smart Agriculture Initiatives

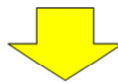
Next, I will explain our smart agriculture initiatives.

Rapid Population Decline and the Advent of a Super-aging Society

- Accelerating decline in the labor force.
- Social need to switch to super-labor-saving and high-quality production



Agriculture labor shortages on the rise



The key to resolving social issues is to establish and disseminate smart agriculture that reduces the labor needed for precise and large-scale production

The labor force population in Japan continues to decline at an accelerating pace due to the declining birthrate, aging population, and population decline. Therefore, in all industries, there is a need for a shift change to super-labor-saving and high-quality production.

In agriculture, labor shortages due to the aging of the population and the reduction in new farmers are conspicuous. Compared to other industries, the agriculture industry is in more need to support labor-savings, and decrease workloads for farmers.

Recently, the establishment and dissemination of smart agriculture technology that incorporates advanced technology such as AI and IoT are seen as the key to resolve social issues.

Established dedicated smart agriculture department

Smartphone app
Leime AI Disease, Pest & Weed Analysis

Established dedicated department
(August 2020) to support farmers through
smart agriculture technology development
and initiatives



Domestic Sales Division
**Smart Agriculture
Promotion Dept.**



Supports iOS/Android

Since release in April 2020 for Paddy Rice

Over 40000 downloads!

In light of these social issues, in August of this year we established the Smart Agriculture Promotion Department as a dedicated department for supporting farmers through smart agriculture technology development and initiatives.

As part of those initiatives, in April 2020 we released Leime AI Disease, Pest & Weed Analysis, a smartphone app capable of diagnosing paddy rice pests and weeds.

In the six months since its release, the app has been downloaded over 40,000 times and we continue to see a rapid increase in users.

Issues related to using agrochemicals

What are destructive
diseases, pests and weeds?
What to use?
How to use?
When to use?



Accurate diagnosis
and control
information

Use a smartphone to receive a useful expert guidance
on disease, pest and weed control.

**Planning large-scale update to include
compatibility for leafy vegetables and enhance
functions in 2020**

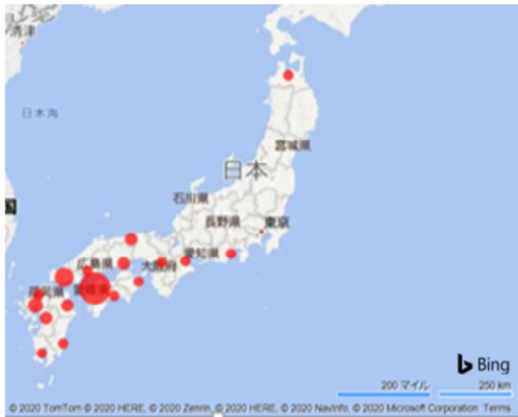
This app aims to be a solution for various issues related to use of agrochemicals by providing accurate diagnosis and control guidance.

We view the release of the version for paddy rice analysis as a first step.

We will continue to incorporate feedback from users and producers towards making enhancements to convenience, efficacy, and functionality.

We also will gradually expand applicable crops with a focus on leafy vegetables and strengthen functions that increase app useability with plans for release in 2020.

Status of brown planthopper analysis in July 2020



Real-time analysis of damage status
->Link to accurate promotion of agrochemicals

Linked
↔

Climate data
Farmland management data
Pest control history
⋮

Highly accurate prediction and steady control proposals

As the number of producers using our app increases, we will be able to accumulate big data about where and what diseases, pests and weeds are occurring or settled

This map plots recorded sites of brown planthopper data diagnosed in July of this year.

Since August of this year, rice paddy damage due to brown planthoppers has spread largely in the northern Kyushu region. We were able to ascertain the status of damage as early as July.

The early discovery of diseases, pests and weeds, and early warnings to regional producers not only protects crops from damage, but can also promote the timely and appropriate use of agrochemicals.

We will link real-time disease, pest and weed data to climate data and farm management data to advanced incident prediction. We will further link this to the development of solutions that enable more accurate control proposals.

Introduction of partner company products




Smartphone app also introduces competitor agrochemicals

 日本農薬株式会社


参加

 日産化学株式会社

 日本曹達株式会社

 三井化学アグロ株式会社

We will continue contributing to the sustainable development of society

 日本農薬株式会社 40

We believe these initiatives will not only benefit agriculture workers, but will also improve the quality of life for the many people who consume agricultural products.

This is a perspective shared with many domestic agrochemical manufacturers. In fact, we also introduce the agrochemicals of Nissan Chemical Corporation, Nippon Soda, and Mitsui Chemicals Agro via our AI Disease, Pest & Weed Analysis smartphone app.

Through partnerships with companies who share this perspective, we will contribute to the development of a stable society.