Health & Crop Sciences

Businesses

Agrosolutions Business
Crop protection chemicals, Biorationals, Fertilizers, Rice, etc.

Environmental Health Business
Household pesticides, Disease control insecticides, Products for controlling tropical diseases, Veterinary drugs, etc.

Feed Additives Business
Methionine

Pharma Solution Business
Active pharmaceutical ingredients for small molecule drugs, Nucleic acid medicine, etc.

Based on our own research and development capabilities, we contribute to solving the world's food, health, hygiene and environmental problems.

水戸 信彰

Nobuaki Mito
Representative Director & Senior Managing Executive Officer

Strengths of the Health & Crop Sciences Sector

We globally distribute not only excellent crop protection chemicals developed in-house, but also unique crop protection and enhancement products such as biorationals and post-harvest with high market shares. The strength of our crop protection business is in our lineup of unique products and the research and development capability that created it, as well as our global sales network. Moreover, in our methionine business, Sumitomo Chemical offers a stable supply, with integrated production from raw materials using advanced production technology. In the pharma solution business, we supply active pharmaceutical ingredients and intermediates and provide technology by utilizing our advanced organic chemical synthesis technology and quality assurance system.

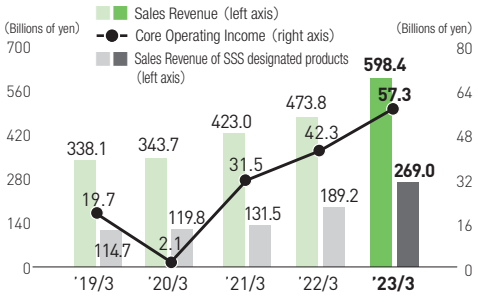
Initiatives in FY2022

We have received registration approval in Brazil, the world's largest country of soybean production, for our soybean fungicide EXCALIA MAX™, which contains the novel active ingredient INDIFLIN™, and have begun full-scale sales. In the South American region, the world's largest crop protection chemicals market, we intend to further expand sales of this product. In the biorational business, in addition to the expansion of the research center and the U.S. plant, we built a new organization in the U.S. and began selling directly, thereby strengthening each function of the manufacturing, sales, and R&D. Furthermore, with the acquisition of FBSciences Holdings, Inc., a U.S. company engaged in the business of biostimulants, which are naturally-derived agricultural materials, we have made a full-scale entry into the market and will continue to expand our business.

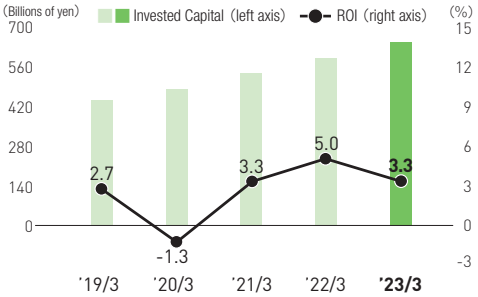
Future Initiatives

We will continue to manage our business operations with an awareness of one of the sector's long-term visions, which is to expand our sustainable products business. In the biorational and botanical business, where we are strong, we will continue to work on further business expansion in each region and strengthening the functions of our global manufacturing and sales and R&D. In chemical crop protections, we will focus on maximizing sales of new large-scale products such as INDIFLIN™ (a fungicide for soybean rust), while developing and launching products with more emphasis on reducing environmental impact. In addition, we will strengthen our supply chain, which has expanded through business acquisitions in South America, and aim to improve capital efficiency by steadily recovering the results of our investments. In R&D, we will invest resources with emphasis on business areas where we have strengths and actively utilize open innovation.

Sales Revenues and Core Operating Income / Sales revenue of SSS designated products



Invested Capital・ROI



Transition to date

This sector is a future growth driver, and we have continued to invest aggressively in this sector. FY2022 and beyond will see the full effect of the South American acquisitions, while the deteriorating market for methionine is weighing on the market.

Future Measures and Issues

We are on a growth trajectory through global footprint expansion (India and South America) and development of new crop protection chemicals. We have also made a full-scale entry into the biostimulant field and will ensure PMI while also securing a vehicle for future growth.

Business portfolio reforms aimed at strengthening a group of sustainable products

In addition to biorational products, that utilize ingredients derived from natural products, such as microbial-based crop protection products, environmental health products, plant growth regulators, and rhizosphere microbial materials, we will differentiate ourselves from our competitors by leveraging our technologies and product lines in areas where we have strengths, such as biorationals and botanicals, including the biostimulants* area, which we enter in earnest in 2023. We will also promote the development and marketing of chemical crop protection with a stronger awareness of the need to contribute to the reduction of environmental impact.

*Biostimulants: A group of naturally-derived agricultural materials and a class of biorationals that have the effect of drawing out the inherent strength of crops and soil

Initiatives to Accelerate Biorational Growth

To accelerate the growth of biorationals, we will implement the following initiatives in each field, aiming to achieve 120 billion yen in consolidated sales of biorationals and botanicals in FY2030.

R&D

Accelerate development and launch in pipeline

- Promote more than 40 projects planned for the current Corporate Business Plan
- Expand facilities at Biorational Research Center (BRC)

Sale

Strengthen sales capabilities

- Utilize each region's Sustainable Solutions Business Unit
- Build a new organization in the U.S., and begin selling directly
- Expand sales of botanicals to the organic agriculture field

Manufacturing

Strengthen product supply capabilities

- Expand the Osage Plant in the U.S.
- Utilize regional companies, such as Sumitomo Chemical Brazil

Business

Strengthen business management and expand business area

- Simplify reporting lines and achieve agile allocation of management resources
- Pursue expansion of business sphere through acquisitions

Contribution to low environmental impact agriculture using crop protection chemicals

Contributed to the spread of no-till farming

No-till farming is an agricultural method of growing crops without tilling, and is attracting attention from the perspective of reducing greenhouse gas (GHG) emissions by contributing to the reduction of CO_2 emissions from the ground, in addition to its significant environmental benefits such as soil protection and organic matter conservation. We have several herbicides suitable for use before sowing crops, and we will contribute to the spread of this farming method by ensuring the convenience of no-till cultivation through the promotion of these herbicides.

Product	Initiatives, characteristics, etc.	FY2024 sales revenue target
Flumioxazin	•Superb long-lasting effect makes it possible to reduce treatment frequencies, and its efficacy against a broad range of weeds makes it suited to no-till farming	70+bn. yen
Rapidicil®	•Fast-acting and plenty efficacious on low doses •Its efficacy against a broad range of weeds makes it suited for no-till farming	–

Utilization of seed treatments

Seed treatment is an application method in which the chemical is applied directly to the seed. By pinpointing the treatment to the seed, the amount of chemical required can be kept to a minimum, contributing to a reduction in environmental impact.

Advances and efficiencies in R&D

We identify our focus areas and concentrate our resources in areas where we have strengths, while actively utilizing open innovation.

Partners in the Food Field

Ginkgo Bioworks(synthetic biology), Nuritas(development of bioactive peptide for improving animal health and performance), Kansas State University, Danforth(soil health/carbon negative technology), Nufarm (joint development of mixture products), Bayer(development of next-generation weed control system), etc.

Partners in the Healthcare Field

IVCC (development of innovative products and technologies for mosquitoes that transmit malaria and other vector-borne diseases), etc.

Secure returns on investments already made

We will work to ensure the recovery of investments made, and aim to achieve ROIC that exceeds the cost of capital as soon as possible.

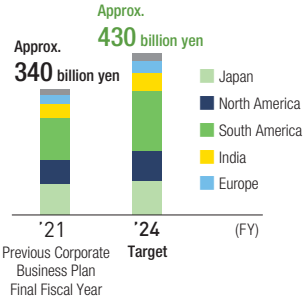
Agrosolutions Business in South America

August 2020: Start of integrated operation of four acquired Nufarm South American subsidiaries and our existing affiliates in South America

May 2022: Launch of EXCALIA MAX™, a fungicide for soybeans containing the new active ingredient INDIFLIN™ in Brazil

EXCALIA MAX

Sales revenue target for crop protection business
(excluding environmental health business)



Strengthen global supply chain

To maximize profits from our expanded global footprint, we will strengthen our supply chain to ensure consistent product quality and security of supply.

Roll out Integrated Business Planning (IBP) framework

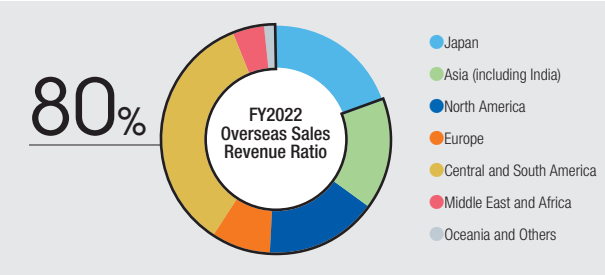
- Realize speedy decision-making based on financial information based on real-time information sharing and integrated management across the entire supply chain of production, sales, purchasing, and logistics.
- Expanding globally following South America

Status of Global Expansion

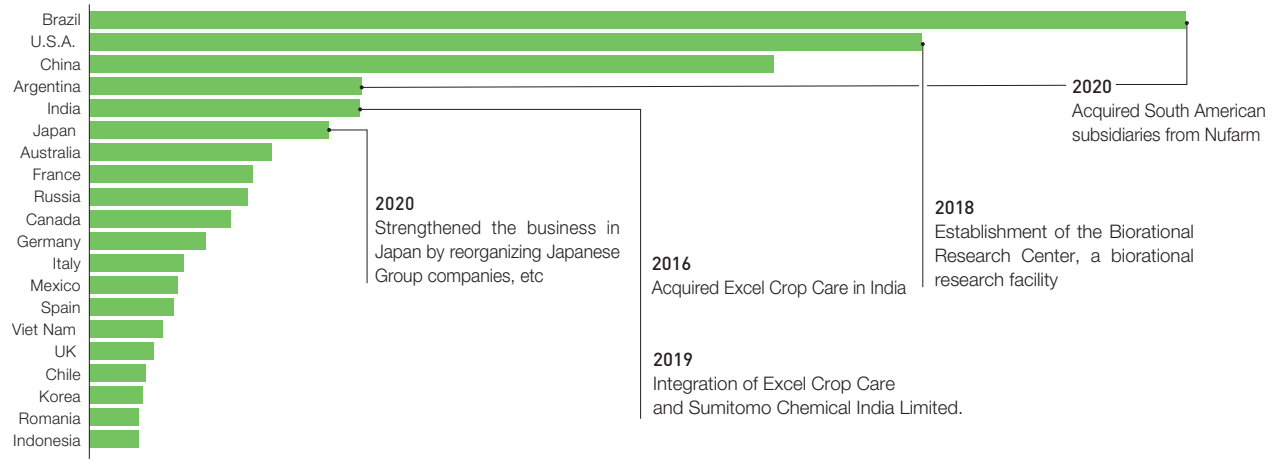
Business development that responds immediately to customer needs

The global expansion of our crop protection business began in the early 1960s when we started exporting the pesticide Sumithion to North America. Since then, following on from the establishment of Valent U.S.A. in 1988, we have been building up research, production, and sales facilities around the globe. Because climate and crops vary widely depending on the region, we have built a system that enables us to develop products suited for a particular region, and to respond quickly to the needs of the region. We have been expanding our facilities in the world's major crop protection markets, including the U.S.A. and Europe, Asia, and South America, and of the countries with the six largest crop protection markets around the world, we are currently securing or strengthening our sales capabilities in five of them.

Sales Revenue Ratio by Region



Crop Protection Market Size (2022)



(Source) AgbioCrop (May. 2023)

Q&A

Q : In recent years, the multinational crop protection companies have undergone a consolidation, and the gap between the scale of Sumitomo Chemical's crop protection business and that of the major companies is widening, so how do you plan to compete going forward?

A : With the mergers of Dow and DuPont in 2017 and Bayer and Monsanto in 2018, two major players were born. At the moment, however, we have no plans to emulate them and merge with another company. We will employ the following three strategies to secure a place among our global competitors.

Compete on Our Research and Development Capabilities

Living things will inevitably develop resistances to crop protection products over the course of time. For this reason, it is necessary to continuously develop new crop protection products, and research and development capabilities are extremely important to achieve this. The number of patents we hold compares favorably with those of multinational crop protection companies, and we intend to compete going forward as a crop protection company based on our research and development capabilities.

→ P.53 Investors' Handbook 2023

Compete on Our Extensive Global Footprint

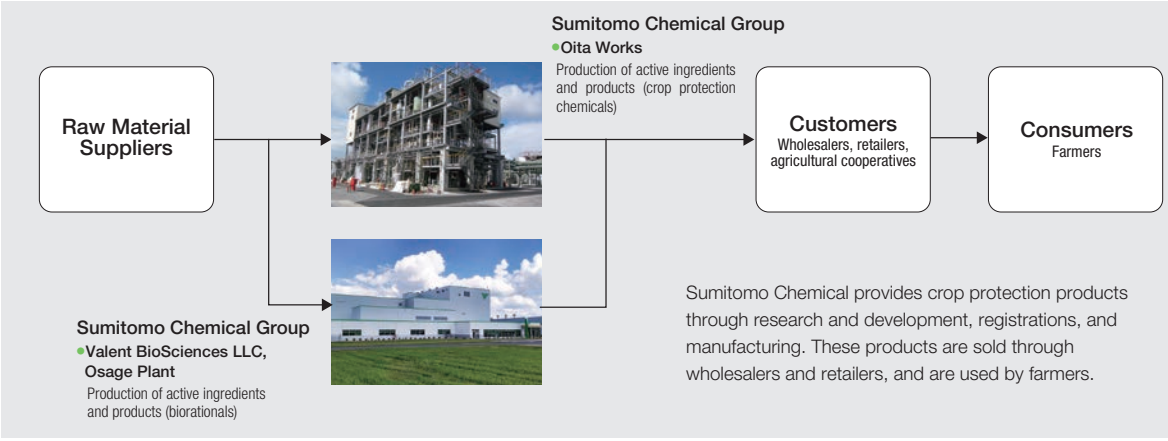
Up until a few years ago, our global footprint did not measure up when compared with the major players, who have the ability to deliver products to all sorts of regions around the world. In recent years, however, in addition to our acquisition of Excel Crop Care in 2016, we also acquired the South American business of Nufarm in 2020, among other initiatives, making steady progress in our efforts to strengthen our global footprint. In addition, we are not only selling the crop protection products we have developed using our own global footprint, we are also selling them as part of pest control systems offered by multinational crop protection companies, enabling us to access an even broader range of regions.

Leading the way in regenerative agriculture with a dual approach to biorationals and crop protection chemicals

→ P.46 Contribute to the food supply advance sustainable agriculture

Value Creation Model: Global Agrosolutions Business

Value Chain



System for Providing Added Value

Sumitomo Chemical's Competitive Advantages

There are many players in the global crop protection market, from multinational companies based mostly in the U.S.A. and Europe to comparatively small ones. Crop Protection products differ significantly in needs by region and crops. Sumitomo Chemical pursues unique positioning in various markets around the world, by using its product portfolio consisting of chemical and biorational products for crop protection and enhancement. We are undertaking new solution development from a long-term perspective, from the discovery of novel lead compounds to the product development for end-users, and the proprietary products and technologies derived from this process are the foundation of our competitive advantage.


Health & Crop Sciences Research Laboratory

Major Processes Generating Competitive Advantages

In the discovery stage, which is important in developing new solutions, we search for active ingredients for new crop protection products. In this process, we evaluate not only a compound's efficacy but also its safety for people and the environment. We utilize our global research and development network so as to develop new solutions as soon as possible. In addition, in the product development for end-users, we are also putting effort into product development for new formulations and applications to add more value to existing active ingredients.


The technical guidance of biorationals

Providing Customer Value

Farmers use crop protection products as they hope to improve the quality and yield of their agricultural crops. In addition, they also expect to make farming work more efficient, and improve profitability. At the same time, they also pursue safety and reliability of crops, hoping that the crop protection products will not harm either their health or that of the consumers of the agricultural products. For this reason, we provide unique, highly effective products that meet customer needs. By creating solutions that reflect the needs of each region or crop, we contribute to the creation of new sustainable agricultural techniques.

Added Value Provided to Society

Contributing to a Stable Food Supply by Improving Food Productivity

Plant growth regulators, one of the products of our overseas crop protection business, act to enhance the fruit-bearing ability of fruits and vegetables, increase their size, and improve their quality. As they can adjust the flowering and maturity periods, plant growth regulators can help crop cultivation even in cold and dry regions, and contribute to increasing food production in various regions around the world. In the face of an increasing world population and a growing world economy, there has been an increasing demand for safe and reliable food. We are increasing food productivity by globally supplying unique materials, and we aim to contribute to a stable food supply.

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