COMPANY PROFILE

NIHON NOHYAKU CO., LTD.
Contributing to the Underlying Strengths for a Stable Food Supply and Agriculture

In 1928, Nihon Nohyaku Co., Ltd. was established as Japan’s first company to specialize in agrochemicals. As a company that is dedicated to protecting food supply and greenery, Nihon Nohyaku puts research, development, and the widespread promotion of agrochemicals at the heart of its business activities. In fulfilling this integral role in society, we have continued to pursue technological innovation.

The world’s population is projected to increase rapidly and estimated to reach 9.8 billion in 2050. There are concerns that this population growth and a change in the structure of demand will cause the global supply and demand of crops to tighten. With the pressing need to lift the yield per unit area of agricultural produce that is of uniform quality, and to increase agricultural productivity in a bid to ensure long-term, stable supply, agrochemicals are expected to play an increasingly important role in identifying a solution.

Our mission is to help increase agricultural production in order to secure this long-term, stable supply. To this end, we continue to develop and provide agrochemicals that offer excellent efficacy, cost-performance, and safety in Japan and overseas. In working to strengthen our agrochemical discovery platform and business competitiveness by promoting growth strategies from a global perspective, we will contribute to the future of food and agriculture while actively engaging in CSR activities.

Corporate Philosophy

- 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.
Nichino Group — **Growing Global**

**To Be an Outstanding, Globally Competitive Group**

To become a group that can contribute to the future of humankind by further enhancing technological capabilities that have been cultivated through the agrochemical business.

To become a group that can contribute to society by supporting agricultural production, including the continuous introduction of new molecules & technologies.

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**Aiming to Attain Our Vision: The Basic Policies of Our Medium-Term Management Plan**

**Advance to Growing Global 2018**

Targeting Net Sales of **70 Billion Yen (Fiscal 2018)**

Under its corporate philosophy of contributing to society by ensuring a safe and steady food supply, the Nichino Group will implement initiatives, such as M&A and partnerships, to expand its business and broaden its business scale on the basis of two key policies: “promote growth strategies” and “improve profitability”.

Actively working on strengthening our business platform to realize these policies, we will achieve the Medium-Term Management Plan and realize our vision.

- **Promote Growth Strategies**
  - Strengthen capability creating new active ingredients
  - Improve business competitiveness
  - Enhance Group capabilities

- **Improve Profitability**
  - Improve profitability of domestic businesses
  - Improve cost competitiveness
  - Optimize expenses

- **Strengthen Business Platform**
  - Develop and utilize human resources
  - Build platform for global operations
Nihon Nohyaku is actively engaged in the development and promotion of agrochemical products. While upgrading and expanding our three core bases in Asia, the Americas, and Europe, we have acquired the registration of our agrochemical products in more than 100 countries and regions worldwide.

**Domestic base**
- **Overseas group company**
- **Overseas investing company**
- **Satellite office**

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**HISTORY**

**90th Anniversary of Establishment**

1928
Company Established

- 1930
  Kawachi Disease and Insect Research Farm opened
- 1934
  Construction of Tsukuda Plant (now Osaka Office) completed
  Kyushu Liaison Office (now Fukuoka Branch) opened

- 1956
  Chemical Research Center constructed
- 1959
  Head Office relocated to Tokyo
- 1969
  Agricultural Chemicals (Malaysia) Sdn. Bhd. established
- 1974
  Nichino Ryokka Co., Ltd. established
  Fungicide isoprothiolane launched
- 1975
  Nichino do Brasil Agroquimicos Ltda., Sao Paulo, Brazil established
  Sipcam Nichino Brasil S.A. Uberaba, Brazil
- 1984
  Insecticide buprofezin launched
- 1985
  Fungicide flutolanil launched
  Pharmaceutical malotilate launched
- 1989
  Japan House Tech Co., Ltd. (now Nichino Service Co., Ltd.) established

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**Agrochemical Registration Number of Nichino Group’s Products**

More than 100 countries and regions worldwide
Overseas Sales Ratio (Consolidated)

53.8%

Proactively advancing overseas development and expanding sales

Ratio of R&D Expenses to Net Sales (Non-consolidated)

12.8%

Maintaining high ratio within industry, strengthening R&D capabilities

Number of Employees (Consolidated)

1,461

679 employees in Japan and 782 employees overseas who play active roles on the global stage

Ratio of Female Employees in Management Positions (Non-consolidated)

6.9%

Encouraging to target over 10% in the near future

(As of September 2017)

1990
Japan EcoTech Co., Ltd. established

1991
Insecticide (miticide) fenpyroximate launched

1992
London Office opened

1994
Pharmaceutical lanoconazole launched for ethical use

1995
Construction of Integrated Research Center completed
New York Office opened

1996
Taiwan Nihon Nohyaku Co., Ltd. established

1999
Herbicide pyraflufen-ethyl launched

2001
Nichino America, Inc. established in U.S.A.

2002
Portion of Tomono Agrica Co.’s business acquired
Mitsubishi Chemical Corp.’s plant protection business acquired
Insecticides tolfenpyrad and tebufenpyrad acquired
Fungicide basic copper sulfate acquired
Herbicide indanofan acquired

2003
Fungicide tiadinil launched

2005
Shanghai Office opened
Pharmaceutical lanoconazole launched for ethical use

2007
Nichino Europe Co., Ltd. established in U.K.
Insecticide flubendiamide launched
Animal health care products pyriprole and metaflumizone launched

2010
Insecticides metaflumizone and pyrfluoquinaazone launched

2011
Nichino Shanghai Co., Ltd. established

2014
All shares of Arysta Life Science AgroMart (now AgriMart Corporation) acquired; company included in scope of consolidation as wholly owned subsidiary
Invested in Brazilian company Sipcam Agro S.A. (company name changed to Sipcam Nichino Brasil S.A.)
Nichino do Brasil Agroquímicos Ltda. established

2015
Hyderabad Chemical Ltd. (now Nichino India Pvt. Ltd.) became subsidiary
Miticide pyflubumide launched

2016
Sipcam Nichino Brasil S.A. became consolidated subsidiary
Termiticide pyriproxifen launched

2017
Nichino Vietnam Co., Ltd. established

2018
Shares of Colombian company Adnicol S.A.S. acquired (company name changed to Nihon Nohyaku Andica S.A.S.)
Fungicide pyrazifumid launched
BUSINESS ACTIVITIES AND MAIN PRODUCTS

With an unwavering commitment to safety and quality, Nihon Nohyaku is mainly engaged in the research and development, manufacture and sale of agrochemicals. At the same time, we have expanded our activities into such wide-ranging fields as chemical products as well as pharmaceuticals and animal health products.

Main Products

With its cultivated research and development capabilities and trust as Japan’s first manufacturer of agrochemicals, Nihon Nohyaku has extended its operations beyond the shores of Japan to actively enter overseas markets. Taking into consideration the local environments and needs, we are working to spread the technological advisory of agrochemical use that are suitable for each community.

### Insecticide

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Major Trade Name</th>
<th>Major Target Pests or Efficacy</th>
<th>Major Countries of Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>flubendiamide</td>
<td>PHOENIX, TAKUMI, KATANA</td>
<td>Insecticide for horticulture and turf Lepidoptera pests</td>
<td>India, Vietnam, Korea</td>
</tr>
<tr>
<td>buprofezin</td>
<td>APPLAUD, COURIER</td>
<td>Insecticide for paddy rice and turf Planthoppers, Jassids, Scales, Mealybugs, Whiteflies, Bulb mites</td>
<td>U.S.A., Brazil, Guatemala</td>
</tr>
<tr>
<td>fenpyroximate</td>
<td>ORTUS, DANITRON</td>
<td>Insecticide and Acaricide for horticulture Spider mites, Scales</td>
<td>U.S.A., U.K., Spain</td>
</tr>
<tr>
<td>tolflupyr</td>
<td>HACHI-HACHI, APTA, TORAC, BEXAR</td>
<td>Insecticide and Fungicide for horticulture Aphids, BBM, Green Caterpillars, Thrips, Whiteflies, Leafminers, Powdery mildew, Rust</td>
<td>U.S.A., India, Taiwan</td>
</tr>
<tr>
<td>tebufenpyrad</td>
<td>PYRANICA</td>
<td>Insecticide(Miticide) and Fungicide for horticulture Spider mites, Aphids, Powdery mildew</td>
<td>U.K., Thailand, Korea</td>
</tr>
<tr>
<td>pyflubumide</td>
<td>DANIKONG</td>
<td>Acaricide for horticulture Spider mites</td>
<td>Korea</td>
</tr>
</tbody>
</table>

### Fungicide

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Major Trade Name</th>
<th>Major Target Pests or Efficacy</th>
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</tr>
</thead>
<tbody>
<tr>
<td>flutolanil</td>
<td>MONCUT, CONVOY</td>
<td>Fungicide for paddy rice and horticulture Sheath blight, White mold, Seedling blight, Root rot (caused by Rhizoctonia), Black scurf</td>
<td>U.S.A., U.K., Mexico</td>
</tr>
<tr>
<td>isoprothiolane</td>
<td>FUJI-ONE</td>
<td>Fungicide for paddy rice, PDR Rice blast, Healthy seedling Growth, Improvement of grain ripening, Decrease in white immature grains, Rooting facilitation</td>
<td>China, Vietnam, India</td>
</tr>
<tr>
<td>tiadinil</td>
<td>V-GET</td>
<td>Fungicide for paddy rice (SAR) Rice blast, Bacterial disease</td>
<td>Korea</td>
</tr>
<tr>
<td>fenoxanil</td>
<td>ACHI-BU, KATANA, HELMET</td>
<td>Fungicide for paddy rice Rice blast</td>
<td>Vietnam, Korea, Taiwan</td>
</tr>
<tr>
<td>pyraziflumid</td>
<td>PARADE</td>
<td>Fungicide for horticulture Broad spectrum fungicide for vegetables, fruits, and turf</td>
<td>Japan (newly launched product)</td>
</tr>
</tbody>
</table>

### Herbicide

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Major Trade Name</th>
<th>Major Target Pests or Efficacy</th>
<th>Major Countries of Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>pyraflufen-ethyl</td>
<td>ECOPART, THUNDERBOLT, ET, KABUKI</td>
<td>Herbicide for wheat and turf, Defoliant for cotton, Potato desiccant, NSH Broad leaf weeds, Cotton, Potato</td>
<td>U.S.A., U.K., Australia</td>
</tr>
<tr>
<td>orthosulfuron</td>
<td>KELION</td>
<td>Herbicide for paddy rice, sugar cane ripening Broad leaf weeds</td>
<td>Brazil, Pakistan, Korea</td>
</tr>
</tbody>
</table>

In our chemical products business, we handle a wide range of products including those for use in home gardening, greenery, and termite control.

In Japan and overseas, we are operating business of topical anti-fungal agents (drugs for so-called athlete’s foot), which were derived from our agrochemical fungicide research.

Nihon Nohyaku is also active in a variety of fields including landscape work, agrochemical residue analysis, and real estate rental.
R&D CAPABILITIES THAT CREATE NEW VALUE

We are continuing to develop new agrochemicals that are attuned to the needs of the ages from a global perspective in order to contribute to the sustainable supply of an abundance of food and to protect the environment. On an ongoing basis, we are aiming to invest approximately 10% of net sales in R&D to serve as a driving force and to launch new active ingredients at a rate of “one agent every three years.”

Role of the Research Center

In order to strengthen the structure and function of R&D, we integrated facilities that had independently conducted research work in each of the chemistry, biology, toxicology, and pharmaceutical fields, into the Research Center in 1995. Researchers collaborate strategically outside of their respective research fields with each other and are engaged in the discovery of novel active ingredients and the development of new products.

Discovery Biology Research Field

Our aim is to discover new compounds through flexible targeting that meets global market conditions and changes as well as the unique evaluation system that can detect variable biological characteristics. We are also working to maximize sales and extend the lives of existing products through the development of new mixtures and applications.
- Investigation of biological characteristics
- Study on modes of action
- Pursuit of business opportunities other than agrochemicals

Invention Chemistry Research Field

To find attractive compounds that have new chemical structures and novel biological performances, we are working to introduce new technologies such as computational science and to broadly develop them. Also, we focus on process chemistry aimed at reducing the cost of goods.
- Synthesis of new compounds
- Discovery and improvements to the manufacturing process
- Pursuit of ways to reduce the cost of active ingredients

Assurance Toxicology Research Field

We are pursuing the safety of new agrochemicals not only for humans and animals, but also for the total environment as well as global registrability from multilateral perspectives. Considerable efforts have continuously been made to establish a new evaluation system to reduce the period and resource for the phase, which can also contribute to animal welfare.
- Toxicology studies
- Environmental fate and toxicology studies with risk assessment
- Development of new technology for potential risk prediction

Collaboration Collaboration

Delivering High-Quality Products

At a time of growing interest in food safety and environmental conservation, as a company that handles agrochemicals, we are working to optimally manage the entire supply chain-including production, quality control and distribution-while delivering products that can be safely utilized to our customers.

Acquiring Certifications

Nichino Service Co., Ltd., which undertakes both manufacturing and distribution functions, has acquired ISO 9001, ISO 14001 and OHSAS 18001 certifications. Underpinned by such management systems, the company is advancing the quality control, environmental protection and occupational health.

For Safe Management of Products and Their Raw Materials

To prevent occupational accidents and to support the safe handling of chemicals, not only of final products but also of materials and intermediates, Nihon Nohyaku has prepared and provided internally and externally approximately 700 safety data sheets (SDS) for those chemicals that require risk assessment.

Promoting Responsible Care Activities

A signatory to the Responsible Care Global Charter, the Company is a member of the Responsible Care Committee of the Japan Chemical Industry Association. We work diligently to create products that boast outstanding safety, while considering continuous improvement in safety, health and environmental performance.
CORPORATE DATA  (As of May 2018)

Company Name  Nihon Nohyaku Co., Ltd.
Head Office  19-8, Kyobashi 1-Chome, Chuo-ku, Tokyo 104-8386
              Tel: +81-3-6361-1400
Founded  November 17, 1928
Capital  10,939 million yen
Main Business  Manufacture, import, export, and sale of a variety of products including agrochemicals, pharmaceuticals, veterinary pharmaceuticals, quasi-drugs, industrial chemicals, wood preservatives, and agricultural materials

Board of Directors and Corporate Auditors
Representative Director, Chairman  Yoshihisa Kohyama
Representative Director, President  Yosuke Tomoi
Director, Senior Managing Executive Officer  Sumitaka Kose
Director, Senior Executive Officer  Hirohisa Yano
Director (Outside)  Akio Kohri
Auditor  Nobumasa Hamade
Auditor (Outside)  Haruhiko Tomiyasu
Senior Executive Officers  Jeffrey R. Johnson, Kozo Machiya
Executive Officers  Gakuo Fukutomii, Hideo Yamamoto
Mitsuhiko Kishida, Hiyuuki Iwata
Shinji Takahashi, Kazuhiro Motoba
Junjiro Inokita, Tetsuji Nishimatsu

Business Offices
Head Office
Sapporo Branch
Sendai Branch
Tokyo Branch
Tokai-Hokuriku Sales Office / Osaka Branch
Fukuoka Branch
Osaka Office
Research Center
Naganuma Nursery

Main Group Companies
Companies in Japan  Nichino Ryokka Co., Ltd.
                       Nichino Service Co., Ltd.
                       Japan EcoTech Co., Ltd.
                       AgriMart Corporation
Overseas Companies  Nichino America, Inc.
                       Nichino Europe Co., Ltd.
                       Taiwan Nihon Nohyaku Co., Ltd.
                       Nichino Shanghai Co., Ltd.
                       Nichino do Brasil Agroquimicos Ltda.
                       Nichino India Pvt. Ltd.
                       Nichino Chemical India Pvt. Ltd.
                       Sipcam Nichino Brasil S.A.
                       Nichino Vietnam Co., Ltd.
                       Nihon Nohyaku Andica S.A.S.

Organization

For addresses and contact details, please visit our website.


Printed in Japan