

# Bansyu Chomiryo Co., Ltd.

## < Corporate Profile >

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URL	<a href="http://www.bansyu-chomiryo.co.jp/">http://www.bansyu-chomiryo.co.jp/</a>
No. of employees	105
Capital	100 million yen
Founding	March 1966
Representative	Yoshihiro Nakagawa

## < Business Overview >

Production of amino acid liquid, Pro Ekiu (powdered amino acid), bio-enzyme decomposition products, Daiya Ekiu, soup sachets, liquid seasonings, etc.

## < Technology >



Start-to-finish production of food amino acid to flexibly meet multiple customers' needs  
Aiming to create umami, a key to good taste

Bansyu Chomiryo is a manufacturer of food amino acid extraction. By using amino acid liquid that we produce, we fabricate a wide variety of seasoning ingredients and deliver them as Diya-brand products to food processors and food manufacturers.

Our main product, amino acid liquid made from natural ingredients, is manufactured through strict process control using protein mainly from corn, soybean and wheat as its raw material. With abundant amino acid, which has a strong taste intensity, the high-titer seasoning ingredients can be used in a wide range of applications from combined use with soy sauce or Worcester sauce to utilization in processed food such as *sozai* (prepared food.) The amino acid liquid can be converted into a mist and powdered with heated air generated by large spray dryers in our plant. In producing Pro Ekisu (powdered amino acid), the amino acid liquid is processed by equipment into powder or paste form to meet our customers' needs. For example, a low-salt type product and an umami-condensed high-titer type product are available. Furthermore, by providing our equipment to our customers, we work on the commissioned manufacture of other companies' products.

Bio-enzyme decomposition products, a product line we are focused on recently, provide seasoning ingredients with high molecular peptides and other constituents that are produced with the help of microorganism and enzyme catalysts. Thanks to the components, a richer and wider range of taste is available. As the color of the product solution is light, it can be used in all kinds of processed foods. In addition, under careful process control by using well-selected raw materials, we engage in the original equipment manufacture of high-quality soup sachets for commercial use.

As mentioned above, the amino acid that creates umami is used in a wide variety of food products. By combining our tradition and experience with continuously evolving technology, we strive to offer products that meet customers' expectations.

### **[History of development]**

About half a century ago, since there were no companies dedicated to amino acid liquid manufacturing in western Japan, our company was founded through the cooperation of Toyota Tsusho Corporation (then Tomen Corporation) and Sanwa Starch Co., Ltd. (a major corn starch manufacturer). In the early days of the company, a food division of a major pharmaceutical company based in neighboring Takasago City was interested in the powderization of amino acid liquid and concluded a business alliance with us. Based on technical guidance on the introduction of powder spray equipment from the medical company, we launched the full-scale production of Pro Ekisu (powdered amino acid). Taking advantage of such experience, we started manufacturing different types of amino acid from paste to powder form. The various amino acid liquids we produced have long been used for seasoning and food, including soy sauce, Worcester sauce, ramen broth, pickles and *tsukudani* (foodstuffs simmered in soy sauce) to add umami and rich taste to them.

### **[Originality]**

Our amino acid liquid is made from protein derived from corn, soybean and wheat, and is produced through automatic control by computer, with rigorous quality control in each production process. It contains abundant amino acid and is added to seasonings such as soy sauce and Worcester sauce, and processed foods including pickles, *tsukudani* and *sozai* to create richer flavors and tastes. The highly refined Daiya amino acid liquid matches well with and attaches strong initial taste to seasonings and processed foods, including soy sauce, Worcester sauce, *tsukudani*, pickles, *sozai* and soups. Such features of the products enable them to be widely used in the processed food industry. Moreover, the production lines for the powdered and paste forms of Pro Ekisu made from amino acid liquid are equipped with desalting units, which allow production of products that meet the trend in consumer preference for lower-salt foods. Representative products, such as dark-colored amino acid liquids (K and N3) boasting high nitrogen concentration and full-bodied flavor, and light-colored amino acid liquids (SU, R, and U3) which have been highly refined to have strong taste intensity, are available.

### **[Future development]**

A new plant equipped with the latest traveling type LASTA filter press will start operation in April. The machine speeds up the filtering process, which is an essential step in amino acid liquid production. The main 34,000 square meter plant acquired FSSC 22000 certification, an international standard for food safety management systems, in December 2019, to further enhance the safety and hygiene management of our production site. Through these efforts, we aim to expand the production of our products: amino acid liquid, which has been the leading product since our formation; Pro Ekisu (powdered amino acid), which is unique to our company; and bio-enzyme decomposition product, which has significant growth potential. We also strive to further expand our presence in the market as a comprehensive manufacturer of amino acid.

## < TOPICS >



Construction of one of the largest amino acid liquid extraction plants in Japan to be completed in April 2020

Only our company and other two top makers in the amino acid manufacturing industry are equipped with an integrated system of production, from extraction to powderization of amino acid liquid. Since expensive capital investment is required and market growth is uncertain in the amino acid manufacturing business, large-scale capital investment in the industry has not been made since 2005. In addition, along with the decrease in domestic soy sauce consumption, the production volume of amino acid liquid has gradually tapered off recently. On the other hand, the application of amino acid liquid for blended soy sauce is expected to expand to the ramen and hot pot broth business, and the powdered product manufactured by the spraying method has huge potential to be used in various applications. Therefore, we are constructing a new plant with cutting-edge filtering equipment, the construction of which will be completed in April 2020.

In the amino acid production process, there are three issues to be solved: industrial waste disposal, odor treatment, and effluent processing. A “Double Water Scrubber” and a plasma deodorizing unit were introduced to the current plant five years ago, and odor treatment at the plant has been significantly improved. Effluent processing has also improved through the introduction of a swirling jet type ozone drainage unit at the end of 2015. On top of this, state-of-the-art filtering equipment with doubled capacity compared to conventional filtering equipment, an “independent traveling type LASTA filter press,” has been installed in the new plant, expected to reduce industrial waste volume by 20%.



Focusing on the bio-enzyme decomposition product, which has large growth potential

High molecular peptide-containing amino acid has been developed and produced by decomposing protein with an enzyme. Since an enzyme is a “living thing,” inspection values that indicate stable quality of the product is difficult to achieve. After many years of research, however, commercialization of the product has been realized. High molecular peptide-containing amino acid is used in a wide variety of fields. For example, it’s used as a raw material of beverages to give them complex tastes, and for health food products and cosmetics.

## < Corporate History >

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| 1996      | Seiichi Morimoto, the founder of the company, launched the business in Nozato, Himeji City.<br>A plant for manufacturing amino acid liquid, soup sachets and Daiya Ekisu was newly established. |
| Feb. 1971 | Established a new plant for Pro Ekisu (powdered amino acid) and launched production and sales of low-salt seasoning   |
| Oct. 1971 | Bancho Transportation Co., Ltd. was established to handle increased transportation of products smoothly   |
| Mar. 1975 | Installed activated sludge tanks for effluent treatment   |
| Mar. 1979 | Launched production and sales of liquid seasoning (amino acid liquid seasoning)   |
| Nov. 1981 | Established a new plant dedicated to liquid seasoning production  |
| Oct. 1989 | Established an additional plant for Pro Ekisu production (Installed spray dryer No. 2)  |
| Mar. 1992 | Established a new plant dedicated to soup sachets   |

Mar. 1996	Installed a yeast treatment tank for effluent processing
Aug. 1996	Established a plant for bio-enzyme decomposition product production, and launched the production and sales of bio-enzyme decomposition products
Aug. 1998	Established an additional plant for Pro Ekisu production (Installed Spray dryer No. 3)
Jun. 2001	Installed a denitrification unit to enhance effluent processing capacity
Jul. 2005	Established a new plant dedicated to bio-enzyme decomposition product production
Feb. 2006	Established a new gas turbine cogeneration system
Jan. 2009	Established an additional plant dedicated to bio-enzyme decomposition product production
Nov. 2012	Acquired ISO 22000 certification, an international standard for food safety
Dec. 2012	Installed a large plasma deodorizing unit in the amino acid liquid plant to improve the odor environment
Nov. 2015	Installed a swirling jet type ozone drainage unit to enhance effluent processing capacity and improve the environment
Jun. 2016	Awarded as an Excellent Facility in Food Hygiene by Himeji City
Jul. 2016	Certified as a business eligible for a Subsidized Project of Research and Development Assistance for Technological Advancement by Hyogo Science and Technology Association
Sep. 2016	Certified as a Hyogo work-life balance promoting company
Feb. 2017	Awarded the "Progress Award for Zero Work Day Loss Accident Record (900 working days)" by the Japan Industrial Safety and Health Association
Mar. 2017	Fully renovated offices and research buildings as a 50th anniversary project
Jun. 2017	Renewed and added equipment in the plant for bio-enzyme decomposition products to expand sales of functional food materials
Apr. 2018	Launched a new management system, the "Bancho Dai chan visualization system," with the aim of visualizing manufacturing cost
May 2019	Awarded the "Mayor's award for contributing to hazardous material security (excellent business office award)" by Himeji City
Oct. 2019	Delegated as an adviser by the Himeji Chamber of Commerce and Industry
Dec. 2019	Acquired FSSC 22000 certification for enhancement of food safety and hygiene
Mar. 2020	Designated as a Hyogo "Only One" Company