

PRESS RELEASE

To whom it may concern

10 May 2023



A joint agreement between NIZO Food Research (The Netherlands) and Yaegaki Biotechnology (Japan) on the joint research and development of alternative meat products using mushroom mycelium. The collaboration agreement signed at the Embassy of the Kingdom of the Netherlands, Tokyo.

Since ancient times humans relied upon fermentation in order to produce various foods and beverages and recently it attracts consumer attention more and more, bringing new types of alternative products on the market. Yaegaki Biotechnology, Inc. (Himeji city, Hyogo, Japan; President: Yusuke Hasegawa) has more than 50 years of history researching fermentative techniques on various mushroom mycelia and their functional properties related to flavor formation. Discovered an original mushroom mycelium strain that is a promising candidate for a new type of sustainable “alternative protein”, Yaegaki has agreed to conduct joint research with NIZO Food Research (The Netherlands). NIZO has been the tip of the spear in food and health innovation for 75 years, building expertise and know-how in the areas of the protein transition, smart processing, food safety and health benefits. The signing ceremony was held on 9 May 2023 at the Embassy of the Kingdom of the Netherlands in Tokyo, Japan.



Yaegaki Biotechnology, Inc. and its research on mushroom mycelium as an alternative protein
Yaegaki Group has a 350 years' history as a local sake brewery in Japan. Yaegaki Biotechnology, Inc. (Yaegaki below) was established in 1979 as a spin-off company focused on a research and development of functional food ingredients and fermentation processes.

Yaegaki possess a deep knowledge and expertise on various technologies for the extraction and purification of food coloring agents, research on yeast and mold strains, basidiomycetes (mushrooms), as well as lactic acid bacteria and other bacteria useful for maintaining human health. Recently, an extensive research and development on “alternative proteins” and “alternative meat substitutes” is being performed as the animal proteins depletion is predicted due to global population increase. However, there are still many challenges to overcome. Yaegaki focused on mushroom mycelium as there is still no mass-production supplier of it in Japan, despite the fact that mushroom mycelium has been already commercialized in Western countries and is known as a strong candidate for alternative meat substitutes. As a result, Yaegaki has screened several hundred species of mushroom mycelia and studied different culturing conditions using own large-scale culture tanks to discover a mushroom mycelium strain that is tasty, quick to grow, and has sufficient protein content. To overcome further commercialization issues on the alternative meat substitute market, a joint research collaboration with NIZO Food Research (The Netherlands) has been reached.

NIZO and food technology product development in The Netherlands

NIZO Food Research (NIZO below) was founded in 1948 by the Dutch dairy industries as a cooperative initiative in fundamental research, and process and product development. During 75 years of development, NIZO has always played a pioneering role in the food technology industry, leading revolutionary innovations in areas such as protein technology, fermentation, bioinformatics, food processing, food safety and sensory experiences. Currently, NIZO owns the largest food-grade pilot plant for third-party use in Europe and is a leading company in the field of alternative protein processing, preservation and quality control field. NIZO is involved in research and development of numerous innovative substitute products that provide meat taste and texture, as well as healthy and sustainable food ingredients.

Using innovative alternative protein processing technologies of NIZO and original mushroom mycelium materials of Yaegaki, two companies will work together in order to expand the traditional oriental food culture on the European market and enhance a "new food technology culture" between Japan and the Netherlands".

