

### Launch of PROBLAD SL, a new plant-derived fungicide

We, Kumiai Chemical Industry Co., Ltd. launched PROBLAD SL, a new plant-derived fungicide, in the domestic market on March 17, 2026.



Product bottle



Sweet lupin beans

PROBLAD SL is a novel agricultural fungicide containing plant-derived polypeptides, discovered and developed by the Portuguese company CEV, S.A., as its active ingredient.

We are the first company ever to sell this fungicide in Japan.

The active ingredient BLAD is a polypeptide that formed during the germination process of sweet Lupines (*Lupinus albus*), which is edible pulse crop.

BLAD has a new mode of action, categorized as 'BM01' in the FRAC Code List© and shows antibacterial activity against fungi and bacteria.

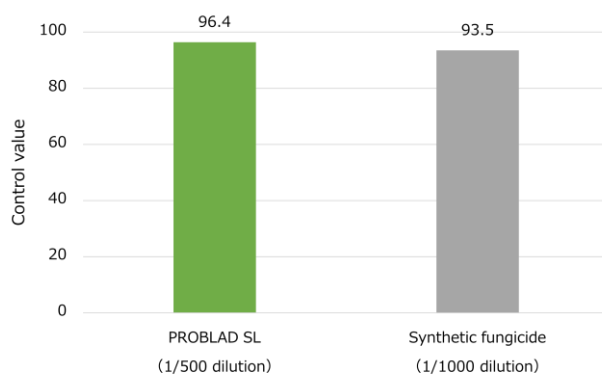
In Japan, public research institutions have admitted its effectiveness against powdery mildew and gray mold.



Gray mold in tomato



Powdery mildew in strawberry



**Location:** Gifu Prefectural Agricultural Technology Center  
**Variety:** Reiyō  
**Plot:** 5 m<sup>2</sup>, 10 plants per plot, 3 repetitions  
**Severity:** moderate incidence (inoculation) (incidence rate in untreated fruit: 28.4%)  
**Planting:** February 5, 2018  
**Application:** March 20, 2018; March 27, 2018; April 3, 2018; April 10, 2018  
**Investigation:** April 17, 2018 (7 days after the final application)  
 Calculate the control value from the incidence rate of infected plants in each plot  
**Others:** On March 20, eggplant which is forming conidia on fruits surface were hung as inoculum sources, two or three per plot. Additionally, on April 6, a conidial suspension was sprayed throughout the facility for inoculation.

### Effect of PROBLAD SL on tomato gray mold

Furthermore, BLAD is defined as "a substance that is clearly not likely to harm human health" under the Food Sanitation Act in Japan.

There is no need to set a Maximum Residue Limit, and there is no limit on the number of times it can be used.

It is expected to be a product that complies with the "MIDORI Strategy for Sustainable Food Systems," formulated by the Ministry of Agriculture, Forestry and Fisheries of Japan, to build a sustainable food system and reduce agricultural chemicals.

We have introduced PROBLAD SL from CEV, S.A. in Portugal through Nagase Sanbio Co., Ltd.

We will collaborate with the JA Group to promote this product in Japan as a material that supports producers engaged in environmentally friendly agriculture and crop producers for export, primarily in the production of fruits and vegetables grown in facilities.

Our group is working to develop and disseminate products that support sustainable

agriculture by utilizing the technology, knowledge, and R&D capabilities we have cultivated over the years.

The launch of PROBLAD SL is part of this initiative, and we will continue to work to solve social issues.

Name of Crops	Target Disease	Dilution Ratio	Application Volume	Application timing	Number of uses	Application method
Vegetables	Powdery mildew	400-600 times	100-300L/10a	Pre-onset to early onset	-	Spray
Tomatoes Cherry tomatoes	Gray mold	300-500 times				

Target diseases and application methods of PROBLAD SL (As of March 1, 2026)

※PROBLAD is a registered trademark of CEV, S.A.

Web site of Nagase Sanbio Co., Ltd.

<https://division.nagase.co.jp/nagasesanbio/en/index.html>

### About Kumiai Chemical

Kumiai Chemical Industry Co., Ltd. is a research and development-oriented chemical company that contributes to the realization of a sustainable society by developing and providing innovative agricultural production technologies, mainly crop protection products that can support agricultural production around the world, as well as a variety of fine chemical products that enrich daily life of people.

<https://www.kumiai-chem.co.jp/english/>

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Kumiai Chemical Industry Co., Ltd.

Customer Inquiry Form (<https://www.kumiai-chem.co.jp/english/contact.html>)