

**News Release of “Development of Environmentally Friendly Coated Fertilizer
Without Using Plastic Materials”**

The Central Glass Group (operating company Central Chemical Co., Ltd.) contributes to the stable food supply in Japan by manufacturing chemical fertilizers, mainly coated fertilizers (Cera-coat) with controlled release of an active ingredient of Nitrogen.

Coated fertilizers are essential products for Japanese agriculture, which is facing labor shortages and an aging population, as they can regulate the release of fertilizing agents to depend on growth stages of crops. However, in recent years, the exposure of plastic-coated shells into environment such as river, lake and ocean has become a problem as “Microplastics Pollution”. As such, there is a strong demand for environmentally friendly coated fertilizers.

We have been developing an environmentally friendly coated fertilizer without using plastic materials, which has excellent slow-elution property (hereinafter referred to as the “Developed Product”). Now, we are ready to take the next step to get a mass production technology of the Developed Product.

The Developed Product is classified as “coated nitrogen fertilizer” on the Japanese regulation, and the coated shell consists of non-plastic materials. The elution behavior of nitrogen component in water at 25°C is similar to that of the current product of Cera-coat, and also the long-term type exhibits sigmoid property by suppressing initial elution (Figure 1). Additionally, because the coated shell after dissolution is fragile and broken with a small force, we believe the Developed Product can significantly contribute to solving environmental issues. Now, we do make the best efforts to succeed in mass production of the Developed Product. The plan is to bring it into market in 2027, after carrying out the field elution tests in 2025 and the field cultivation tests in 2026.



Photograph: Appearance of the Developed Product and the collapsed coated shell

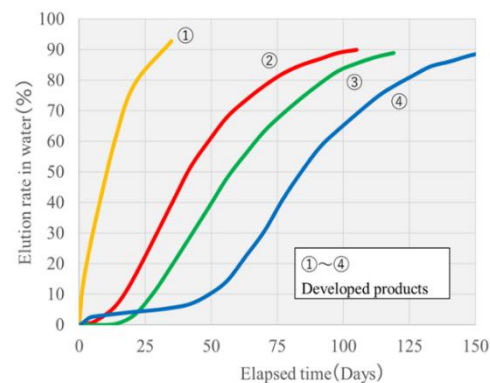


Figure 1: Elution behavior of the Developed Products (4 types) in water at 25°C

[Contact]
Central Chemical Co., Ltd. Technology Department
Telephone: +81-3-3259-2400