

# Breakthrough technologies to accelerate breeding and strain improvement in biological production for a sustainable society

## Synthetic molecules that accelerate plant breeding

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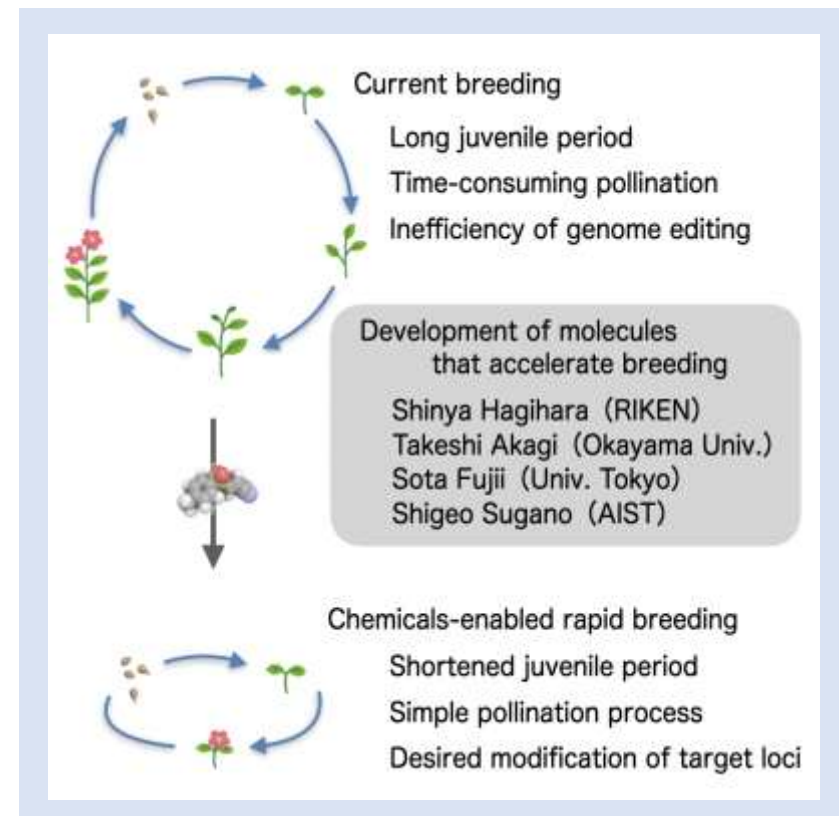
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## Summary :

Since the birth of civilization, humankind has spent thousands of years and enormous effort to breed today's crops. Although various technological advances have been made during this period, breeding is still a laborious task, and it is far from being able to solve the food issues that are foreseen in the near future. Therefore, establishing rapid breeding technology is an urgent issue.

There are three major factors that make breeding time-consuming process: 1) generation time, 2) labor for mating, and 3) genome editing efficiency. In this research, we will establish a rapid breeding technology by developing molecules that solve each of the problems .



<http://molecular-bioregulation.riken.jp/index.html>