

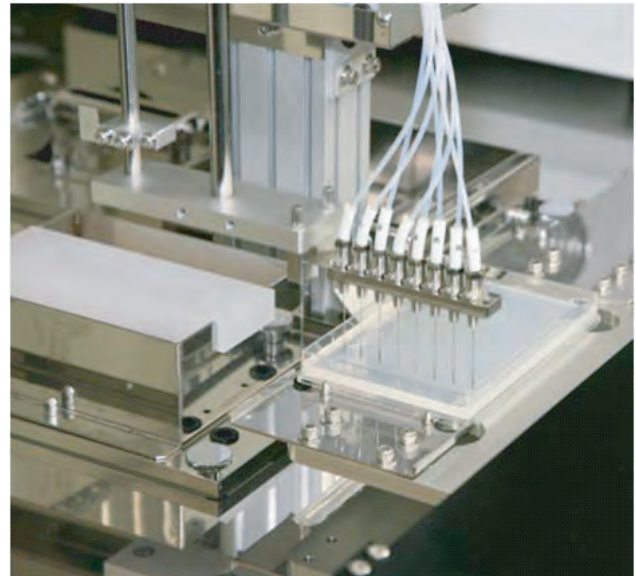
# The Industry's First Automatic Seeder for R & D Use

MOCT-001

AquaSeed® can sow automatically with high speed small size seeds such as *Arabidopsis thaliana*. AquaSeed® can contribute to accelerate the R&D in the life and environmental sciences.

AquaSeed® is an automatic seeder being applicable to very small seeds such as *Arabidopsis* ones.

AquaSeed® can reduce dramatically the time, labor and money spent by conventional manual seeding process. Sterilized seeds in liquid can be directly applied to AquaSeed®. (patent pending) The success rate of seeding at designed accurate position has been proven to be over 99%. AquaSeed® can be installed at a clean bench on the market on account of the compactness of AquaSeed®. AquaSeed® has sterilizing function for nozzles, seeding process can be aseptically operated.



Attaching optional automatic specimen exchange units such as plate stacker or Plate Conveying Robot, seeding process can be operated repeatedly and automatically.

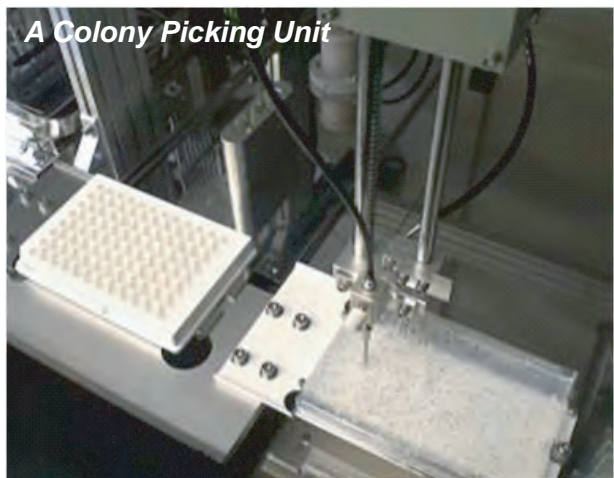
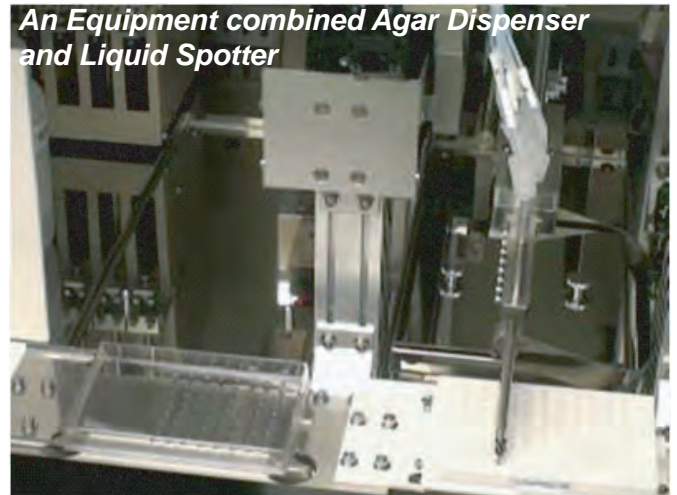
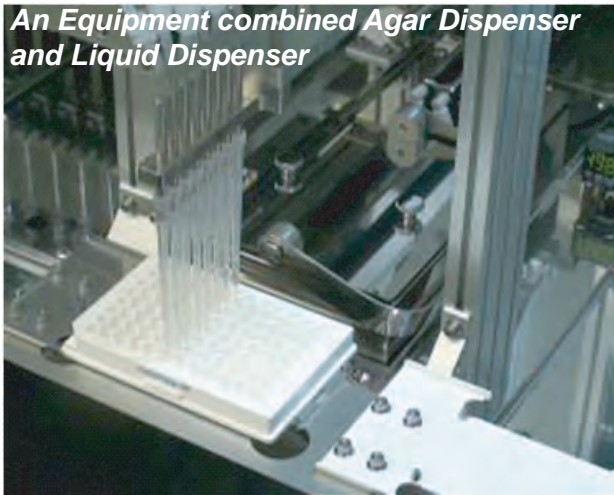
## Features

- ◎ Sterilized seeds in liquid can be directly applied to AquaSeed®.
- ◎ AquaSeed® can be installed at a clean bench on account of the compactness.
- ◎ The success rate of seeding has been proven to be over 99%.
- ◎ AquaSeed® can be applied to various kinds of specimen plates.
- ◎ AquaSeed® can be applied to various kinds of seeds, exchanging a pickup nozzle. Suitable nozzles can be prepared on the customer's demands.
- ◎ AquaSeed® has sterilizing function for nozzles.
- ◎ AquaSeed® can sow 200 thousands seeds within 8 hours.
- ◎ Combining several kinds of automatic units, custom seeding workstation can be arranged on the customer's demands.

## Specifications

- Model number : MOCT-001
- Processing Time : 1.25 Sec/seed, 2Min./plate(96seeds) using 8 parallel nozzles
- Available Specimen Plate : square type Petri dish, round type Petri dish, Omni plate, 96 well plate, etc. Customize plates are available.
- Pickup Nozzle : 4 parallel nozzle, 8parallel nozzle, Customize nozzles are available. Several kinds of nozzles are prepared for various shaped seeds.
- Number of Installed plates : 60 Plates/optional plate stacker Plate Conveying Robot can be connected.
- Seed Storage Tank : Teflon tank with sophisticated structure being applicable autoclave sterilizing Customize tanks are available.
- Accessories : Control Box, Note type PC, Operating software, Cable units, Nozzles, Instruction Manuals
- Dimensions, Weight etc. : 600W x 500D x 450 H mm approximately 30 Kg ( Control Box and PC rejected), AC 100V (500VA)
- Options : Automatic Plate exchange Unit (Plate Stacker or Plate Conveying Robot), Customize Workstation(Ager Dispensing, liquid Dispensing, and Liquid Spotting Unit, Colony Picking Unit, Sealer, Gripper, Plate and Specimen Control Software) etc.

Combining several kinds of automatic units, furthermore, a custom seeding workstation can be arranged on the customer's demands.



Arabidopsis seeds sowed on agar plate



Enlarged Figure of above one

## A Customize Workstation (Sample)



MOCT-002WS

Installed at Nagoya University

These products were developed with Center for Gene Research, Nagoya University (Prof. Masahiro Ishiura's Lab.), Churitsu Electric Corp., Micronix Co., Ltd., and TSUBAKIMOTO KOGYO CO.,LTD. under the R&D project "Development of a next-generation system for real-time monitoring of gene expression using a bioluminescence" supported by SENTAN, JST (Japan Science Technology and Agency).