YAMAGUCHI UNIVERSITY Binational project between Wageningen University & Research (WUR) and Yamaguchi University (YU)

Principal Investigator :

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Target:

To strengthen our research capability for biology and life science by the enhancement of partnerships in the following three topics with the world QS's top-ranked WUR for agriculture and forestry.

Collaborative Research Field & Objectives:

1. Plant Genetic Resources & Breeding (YU: 3 persons, WUR: 5, Off-campus: 6)

- ✓ The world's first achievement of whole-genome sequencing in bulb onion
- ✓ Application of integrated omics analyses by using various bio-resources (lettuce, spinach, strawberry, etc.) to the development of varieties suitable for plant factory production
- 2. Plant factory (YU: 3, WUR: 2)
- ✓ Productivity and functionality enhancements via the use of special varieties for plant factory production
- ✓ Systematization of production management technology by massive data integration between biology & environment engineering and its application to translational research
- 3. Fundamental and applied plant sciences (YU: 10, WUR: 2)
- ✓ Elucidation of cell response mechanism to light in plant
- ✓ Identification of food constituents with the effectiveness of prevention to lifestyle-related diseases and their industrial utilizations

<u>Goal</u>:

- ✓ MOU conclusion between WUR and YU with the assistance of a couple of collaborative research outputs in three research groups.
- ✓ Realization of "Yamaguchi Seed valley" initiative in support of the food value chain consisting of domestic & international agribusiness and food industry