

## Editorial

### Current researches in ornamental plant breeding

Human beings are instinctively drawn to *beauty*, as it gives joy, eases our minds, and makes us happy. A representative of beauty in nature is ornamental plants. We can live without ornamental plants, but when we are surrounded by flowers and greenery, it makes for a better, more joyful life.

Ornamental plants are also important in the agricultural industry. In Japan, 3.8 billion cut flowers and 226 million potted flowers were produced in 2016. Breeding new and attractive cultivars is necessary for further growth of the flower industry. Consumers are always seeking new varieties of ornamental plants. Breeders are asked to create new flower colors, attractive shapes, improved longevity, better fragrance, etc., and basic research on physiological and genetic mechanisms on such target characteristics is very important for breeding new cultivars. Development and adaptation of new breeding methods such as genetic transformation and mutation using ion beams are also useful for

efficiently creating epoch-making unique cultivars.

A large number of plant species are used as ornamentals, and these plants harbor a wide range of breeding targets. The current special issue presents fourteen recent works selected from the numerous research subjects related to ornamental plant breeding. It is our pleasure to introduce these research studies to everyone who is interested in ornamental horticulture.

Ornamental plants provide comfort and peace in our everyday lives. Progress in ornamental plant breeding research will lead to the creation of more ornamentals, thus contributing to the development of the flower industry while making human lives more pleasant.

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