Identification and genetic diversity analysis of a male-sterile gene (MS1) in Japanese cedar (Cryptomeria japonica D. Don)

Yoichi Hasegawa¹, Saneyoshi Ueno¹, Fu-Jin Wei¹, Asako Matsumoto¹, Kentaro Uchiyama¹, Tokuko Ujino-Ihara¹, Tetsuji Hakamata², Takeshi Fujino³, Masahiro Kasahara³, Takahiro Bino⁴, Katsushi Yamaguchi⁴, Shuji Shigenobu⁴, Yoshihiko Tsumura⁵, Yoshinari Moriguchi⁶*

- 1 Department of Forest Molecular Genetics and Biotechnology, Forestry and Forest Products Research Institute, Forest Research and Management Organization, Tsukuba, Ibaraki, Japan.
- 2 Forestry and Forest Products Research Center, Shizuoka Prefectural Research Institute of Agriculture and Forestry, Hamamatsu, Shizuoka, Japan.
- 3 Graduate School of Frontier Sciences, The University of Tokyo, Kashiwa, Chiba, Japan
- 4 National Institute for Basic Biology, Okazaki, Aichi, Japan.
- 5 Faculty of Life and Environmental Sciences, University of Tsukuba, Tsukuba, Ibaraki, Japan.
- 6 Graduate School of Science and Technology, Niigata University, Niigata, Niigata, Japan.