



[Available Issues](#) | [Japanese](#)

Author: [ADVANCED](#) | Volume Page

Keyword:



[TOP](#) > [Available Issues](#) > [Table of Contents](#) > **Abstract**

Horticultural Research (Japan)

Vol. 9 (2010) , No. 3 255-261

Environmental Variation and Selection Efficiency of Area Rate on Petals in Lisianthus (*Eustoma grandiflora*)

[Naoko Fukuta](#)¹⁾, [Shouji Hatano](#)²⁾, [Tohru Akimoto](#)²⁾ and [Ryo Ohsa](#)

1) National Institute of Floricultural Science

2) Miyoshi & Co., Ltd. Yatsugatake Research & Development Center

3) Graduate School of Life and Environmental Sciences, University of Tsukuba

(Received September 11, 2009)

(Accepted December 19, 2009)

We clarified the effect of cultivation environment on the stability of color and the selection efficiency. We investigated the picotee colored area in the market F₁ cultivar under several conditions of temperature and light. Change in cultivation environment affected the rate of picotee colored area. The rate of picotee colored area increased with an increase in vigor under high temperature condition, indicating that, the phenotype of the individual became a

decreased and the phenotype became latescent under high temperature condition in the breed nursery. Several individuals with different rate areas were selected from each set of parents under 20°C subirrigation environment in which the individual picotee phenotype became clear, improving the stability of picotee formation in self progeny and F₁. Importance of picotee formation stability in seed parents that show flavonoid type is effective for improving stability than selection of pollen parent.

Key Words: [F₁](#), [heritability](#), [selfed progeny](#), [stability](#), [vigor](#)

[\[PDF \(814K\)\]](#) [\[References\]](#)

Download

To cite this article:

Naoko Fukuta, Shouji Hatano, Tohru Akimoto and Ryo Ohsawa. : Variation and Selection Efficiency of Picotee Colored Area Rate or (*Eustoma grandiflorum* Raf. Shinn.) . Hort. Res. (Japan) 9: 255-

doi:10.2503/hrj.9.255