

# The effects of foliar application of cytokinin to increase flower buds of daylily<sup>1</sup>

Chih-Jung Chang<sup>2</sup>

## Abstract

Daylily is usually propagated by division with rather low multiplication rate. The filament tissue culture is conducive to clonal mass production; however the number of flower buds of a daylily plant including is generally limited. This work is aimed to investigate the effect of cytokinin N6-Benzyladenine (BA) on plant growth and flowering characteristics. The BA concentrations tested were 100, 300, 500 and 700 mg·L<sup>-1</sup>. Foliar spray treatment was given one month before inflorescence appearance. The results showed that 500 mg·L<sup>-1</sup> BA treatment on the test variety increased either inflorescence branching or flower stalk that increased flower bud production, flower diameter, flower stalk length and diameter. There was no effect on leaf length. One month after flowering, the leaf length and width were larger than control, but plant height was not significantly different from control. The suggestion is to give foliar application of 500 mg·L<sup>-1</sup> BA three times (once per week) before flowering on the test variety, it could increase flower buds.

Keywords: daylily, cytokinin, flower bud, *Hemerocallis*

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1. Research article No.287 of the Hualien District Agricultural Research and Extension Station  
2. Assistant researcher, Division of Crop Improvement, Hualien DARES.