

DETERMINATION OF SPECIFIC COMPACT LIGHT FOR FLOWERING CONTROL OF CHRYSANTHEMUM IN HANOI

Nguyen Thi Han, Tran The Mai, Nguyen Thi Ly Anh,
Nguyen Doan Thang, Nguyen Quang Thach

Summary

This study indicated the influence of some specific lighting types and lighting length on the growth and development of Golden chrysanthemum “Pha Le”. The results showed that all the studied compact lighting types have higher impacts on flower inhibition in comparison to the control type (incandescent 40 W). The CFL-20 W NN-R660 is determined as the appropriate light. The process of budding and flowering of the Golden chrysanthemum was reduced 5 days with the CFL-20 W NN-R660 (in autumn –winter seasons). Using CFL-20 W NN-R660 with different lighting length (10 h/night, 3 h/night, 2 h/night, 1 h/night) showed the similar impact on some criteria of growth and development of the Golden chrysanthemum. However, this expressed much better effect than that of the incandescent 40 W (with 10 h lighting length). This light inhibited slowly the process of budding and flowering 11-12 days compared to the control (in winter- spring seasons) . The replacement of the incandescent 40 W (4 hours/night) by the specific CFL-20 W NN-R660 light (1 hour/night) decreased to 87.5% of electricity consumption. Therefore, the study allows building the lighting process with using the specific electricity saving lights in commercial chrysanthemum production.

Keywords: *Golden chrysanthemum “Pha Le”, lighting length, specific compact light.*