

Abstract

Chrysanthemum is a cut flower that can produce whole year. It is extended by the Royal Project Foundation. In summer and rainy season of chrysanthemum productions showed poor flower qualities and a outbreak of white rust disease. These were cause of short vase life. New chrysanthemum cultivars; white rust disease resistance and non-response to day length could be reducing production cost; black plastic covering for short day length and reduce the risk of outbreak of white rust disease. In this study, eight chrysanthemum commercial cultivars included 'Amalia', 'Anat', 'Ayala', 'Cannoli', 'Corona', 'Flsah Back', 'Souffle' and 'Toffee White' were evaluated. The results revealed that all cultivars gave 100% rooting and the growths of them are suitable for mother plant production. After the first time of harvesting, the 'Toffee White' gave the highest shoot number per plant. It was 5 shoots per plant, approximately.

Eight varieties of Chrysanthemum that planted in rainy season and uncover with black plastic, showed the good growth at the Huay Luek (HL) and Khun Huai Hang (KHH). The vegetative growth rates of all varieties at HL were higher than those at KHH. In contrast, the reproductive growth rates of all varieties at KHH were higher than those at HL. So, the flower initiation and the harvesting stage of Chrysanthemum at KHH were earlier than that at HL for 2 months, approximately. The highest of vegetative growth at HL was 'Cannoli', while the 'Corona' and 'Souffle' at KHH gave the earliest of harvesting (87 days; planting to harvesting). Moreover, plant height that was treated with turn off the light showed three and two times than that with turn on the light at HL and KHH, respectively. The flower qualities; the branch diameter, the number of flowers per inflorescence and the flower diameter were arranged in the grade of Royal Project Foundation. Except, the length of flower stalk is more than 10 cm, it is not good quality. Because the eight varieties of Chrysanthemum at the HL and KHH were grown in long day, that weren't treated short day using covered black plastic found that unusual form of branching and flowering. Preliminary, 'Anat' tended to be a white rust tolerance.

The eight Chrysanthemum varieties were evaluated for vase life. At HL, they showed more than seven days for vase life, while at KHH three of them ('Anat', 'Ayala' and 'Toffee White') gave more than seven days. However, the product of all varieties at the both location couldn't send to the customer as the sample for the requirement assessment, because of the unusual form of branching and flowering.

Keywords: chrysanthemum, white rust disease, vase life