Effects of Days of Lighting Enhancement During the Night on the Yielding Date and Fruit Quality of Indian Jujube[1]

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Abstract

The yield and quality of Indian jujube can be improved through cultural practice improvement. Techniques for regulation of production date of Indian jujube by lighting enhancement during the night can increase the income of famers. Lighting enhancements of 15, 30 and 45 days after dark by using flourescent light for flowering, fruiting and yielding behaviors of Indian jujube were studied at Teinliao, Kaohsiung County. Results showed that the flowering date was earliered, and number of flowers per node and fruit-setting rates were increased significantly when treated with light during the night. The yielding date was advanced as early as 60 days and the yield was increased as high as 140.4% for the best lighting enhancement treatments of 30 and 45 days. No significant differences in fruit quality were found between light-treated and non-treated (control) fruits. The best light enhancement of 45 days was found from this study.

Key words: Indian jujube, Light enhancement during the night, Forcing culture

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