

Influence of Different Light Levels in Amaryllis (Hippeastrum X hybridum Hort.) Development and Flowering

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Abstract : An essential factor for flower production is solar radiation, which is part of plant vital processes. As excess as shortage of light can harm the development of the culture leading to loss in product quality, Unfeasible or decreasing their commercial value. The objective of this research was to evaluate different light levels and their influence on Amaryllis (Hippeastrum X hybridum Hort.) development and flowering. The experiment was conducted at UNESP, São Paulo State, Brazil from August to October 2014. The bulbs were placed in black vases of 1.2 L filled with commercial substrate and divided into 4 different lighting environments (treatments): T1-greenhouse, T2-greenhouse with shade cloth (50%), T3-low lights indoor (until 500 lx) and T4-medium lights indoor (between 500-1000 lx). The used design was completely randomized with ten repetitions and three vessels (bulbs), totalling 30 vessels (bulbs) per treatment. The evaluated characteristics were: Chlorophyll content, number of leaves, length of leaf, number of simultaneous rods, rod length, rod diameter, number of flowers, flowers diameter, beginning of flowering and flowering duration. The results showed that in greenhouse provided Amaryllis better quality plants.

Keywords : açucena, bulbs, light, ornamental plants

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