INTERACTION BETWEEN IRRADIANCE AND PHOTOPERIOD ON *ANTIRRHINUM MAJUS* L. FLOWER INITIATION

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Antirrhinum majus L. cv 'Winchester' seedlings (first true leaf stage) were placed in controlled environment chambers maintained at 20C under 8, 10, 12 or 14 hr photoperiods for flower induction. Seedlings were grown at irradiance levels of 240, 315, 380 or 460 μmol $s^{-1}m^{-2}$ within each chamber. Plants were removed after 7, 14 or 21 days and were placed in a glasshouse maintained at 20±2C under natural photoperiod and irradiance levels for flower development. Data were collected on flower number and number of nodes below the first flower when all flowers were visible on the inflorescence. Node number decreased from 67 to 43 nodes as photoperiod increased from 8 to 14 hrs. Increasing irradiance hastened flowering on plants grown under 8-12 hr photoperiods only and had no effect on flower number. Flower number increased from 23 to 30 as photoperiod length increased from 8 to 14 hrs. Node number decreased from 57 to 44 nodes and flower number increased from 22 to 31 flowers as the time of treatment increased from 7 to 21 days under the 14 hr photoperiod. Time of treatment had no effect on node number or flower number when plants were grown under 8 or 10 hr photoperiods.

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