

# Water Requirements of Carnations

## General Effect of Substrate and Air Movement

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Even if a good greenhouse soil is watered to the point of deficient aeration, carnations grown in that soil will transpire less than plants grown under the same conditions in inert media. There seems to be

considerable restriction to water uptake in present greenhouse soils which cannot be attributed solely to the amount of water present.

Although solar radiation is the major factor in determining the demand for water by the carnation, the actual rate of water loss (evapotranspiration) can be modified by the temperature of the air flowing over the plant and the velocity of that air. Evaporative pad cooling has the effect of reducing evapotranspiration below what normally would occur, whereas it appears that operation of fans without the pad may increase water loss.