

عنوان مقاله:

Frostbiting Prevention in Agricultural Plants Using Infra Red Radiant Heaters; A Novel Application

محل انتشار:

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خلاصه مقاله:

In this paper, heat radiation is proposed as a solution for frostbiting problem in agricultural plants for the first time due to intrinsic benefits of this method. Moreover, it is shown how to calculate the amount of heat required to save the plants and the novel technique of using radiant infra red heaters in the agricultural gardens is described by an example with the real statistical and biological data from the pistachio tree. Finally, it isshown that the proper selection of design parameters is of great importance and a great immunity from frostbiting can be achieved provided that the radiant heaters are selected and located correctly

كلمات كليدى:

heat radiation, frostbiting phenomenon, energy balance, shape factor

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