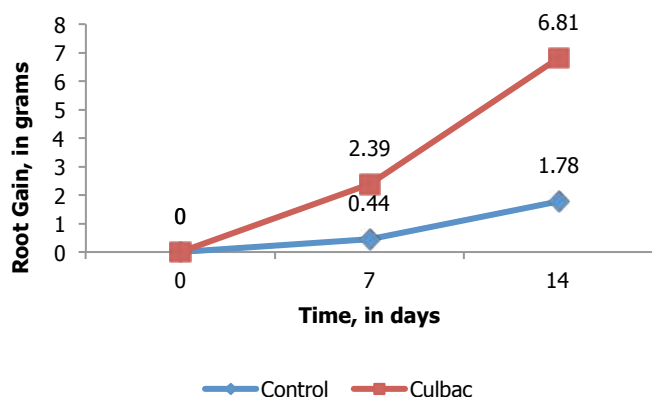# Help seedlings overcome transplant shock

For young, tender seedlings being transplanted into the outdoors is a major life-altering event. After growing for weeks in the climate-controlled confines of greenhouses and other shelters, the transplanted seedlings must adapt to the much harsher environment of cool gardens and open fields. Subsequently, transplanted seedlings frequently experience symptoms of transplant shock, a condition which slows overall growth and may results in stunted plants and, in severe cases, their failure.

While transplant shock might not be completely avoidable, it can be mitigated by soaking the seedlings' roots in a dilution of water and **Culbac® Plant Solution** just before planting.

Culbac® Plant Solution is an all-natural biostimulant that promotes vigorous root development and stress tolerance in plants. In young seedlings, this means faster growth and better establishment. This is demonstrated by the data in Table 1, which compares the growth rate in roots of untreated and Culbac®-treated strawberry transplants.

Ready for the great outdoors with
Culbac® Plant Solution

As Table 1 clearly indicates, the Culbac®-treated strawberry plants had a much faster root-growth rate in the critical two-week period after transplanting. This effect can improve overall plant health and ultimately lead to a better crop later in the season.

Application

When used as directed, **Culbac® Plant Solution** can benefit cuttings, plugs, potted and bare-root transplants of fruits, vegetables, flowering plants, trees and shrubs. The root dip should be prepared according to the mixing rates in Table 2. Prior to planting, soak the base of the plant in the dilution for 30 seconds.

Table 1: Rooting Response of Culbac® In Strawberry Transplants

Table 2: Mixing Rates for Culbac® Root Dip

Product Label	Amount of Culbac®	Amount of Water
Culbac® Plant Solution	1 part	500 parts
Culbac® Plant Solution – Lawn & Garden	1 ½ tbsp. (0.75 fl. oz.)	1 gal.

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