Booster and Starter Solutions for Vegetable Transplants

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The two plants at the left have been treated with booster solution prior to transplanting. Under normal conditions the untreated plant at the right will never completely make up the growing time lost in the transplanting.

Cover picture—Booster solution has been used on these tomato plants and they are ready for transplanting. A starter solution should be used about a week to 10 days after the plants are set out.

This bulletin supersedes Extension Circular 384, a mimeograph leaflet on booster and starter solutions by O. T. McWhorter, Extension Horticulturist.
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Starter solutions have a very definite use in our culture of vegetable crops. The commercial and home gardener will benefit from the rapid and unchecked growth of his plants if such a solution is used just before they are moved to the field from the greenhouse, hot bed, or cold frame. Greenhouse operators have long made use of this help in bringing their crops to a rapid and profitable production. Earlier yields have also been reported from this treatment in the field.

The main benefit received from these solutions is that of providing the plant with immediately available food. This stimulates leaf and root growth, giving the plant a quick pickup after transplanting. These solutions are used especially on young lettuce, tomatoes, celery, peppers, melons, eggplant, cabbage, cauliflower, and all kinds of transplanted plants.

Booster or starter solutions are made by mixing small, measured amounts of fertilizers in water. Some of the material dissolves while the rest is carried in suspension.

When to Use Booster and Starter Solution

Booster solutions are used on plants prior to moving them to the greenhouse or field where they are to grow to maturity.

A starter solution of from \( \frac{1}{2} \) to 1 pint can be used around each plant a week after planting. Both are of much benefit to plants which are being moved.

Avoid getting solutions on the foliage of plants or wash off any spilled on them.

Measuring Important

While booster and starter solutions should not be strong enough to injure young plants if slight errors are made, the concentrated fertilizers should be measured quite accurately for best results. Standard measures are better to use than irregular sizes of teacups or tablespoons.
Keep Starter Solution Stirred

The fertilizer and water mixture should be kept well stirred while it is being applied in order that all plants will be equally fertilized.

Suggested Formulas for Booster and Starter Solutions

I.

A. 20 ounces of 11-48-0 ammoniated phosphate in 50 gallons of water. (20 ounces = approximately 3 standard cups.)

B. 3 rounded tablespoonsful in 5 gallons of water.

II.

A. 12 ounces of sulphate of ammonia in 50 gallons of water. (12 ounces = approximately 1½ standard cups.)

B. 1½ rounded tablespoonsful in 5 gallons of water.

III.

A. 2½ pounds of 6-10-4 garden fertilizer or 3 pounds of 5-10-10 in 50 gallons of water.

B. 1 rounded tablespoonful per gallon of water.

IV.

Fill barrel or other container ¼ full of barnyard manure (use ½ as much if poultry manure is used). Continue to fill container with water, stirring several times during next 24 to 48 hours.

In using, dilute liquid to a light amber color with water. Pour one pint around each plant when setting out or later as necessary to force growth. Liquid manure can be used at 10-day to 2-week intervals especially when soils are not high in fertility.