

# A rolling dibble marker for easy transplant spacing

Hand transplanting seedlings into the field can be tedious and time-consuming. Some growers lay a tape measure or knotted string on the planting bed to space transplants evenly. Others just estimate plant spacing with their eyes. Many growers then use a hand trowel to dig holes for the transplants. A rolling dibble marker, or dibble drum, is a tool that helps you transplant seedlings faster and more accurately. The hand-pulled tool rolls across the planting bed, punching or scooping transplant holes into the soil at regular intervals.

## How does it work?

You walk down the path beside the prepared planting bed, pulling the dibble drum behind you by its handle. As it rolls along, “dibbles”, or scoops which are screwed into a PVC drum at regular intervals, create indentations in the soil for transplants.

In loose soil, the dibble drum will dig holes but in heavy or compact soil it will mark locations for transplant holes. After rolling the dibble drum along your planting bed, plant transplants into the holes or scoop marked holes with a trowel.

## Why use a dibble drum?

**Saves time.** You can set out, plant and water in transplants 24% faster when using a dibble drum to space and dig holes, compared to visually estimating spacing and using a trowel.



**More accurate.** If you mark your planting bed with a dibble drum, you will ensure exact spacing of your transplants in a grid pattern, even when the task is performed by inexperienced workers. Consistent spacing makes weeding easier, since you can use a hand hoe or wheel hoe in two directions or use a mechanical cultivator. Accurate plant spacing will conserve bed space and maintain plant quality. Even experienced growers tend to overestimate plant spacing, which can waste productive land. If growers underestimate spacing, plants can be crowded and yield might suffer.

## Easier on the body.

Using a dibble drum to space transplants lets you stand instead of stooping or kneeling to mark transplant spacing.



## WORK EFFICIENCY



## Tip Sheet

A series of tip sheets on labor efficiency for fresh-market vegetable growers.

by Bob Meyer  
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and Larry Chapman

**Simple.** It can be complicated and time-consuming to explain how to space transplants to inexperienced field hands. With a dibble drum, you can instruct workers to simply roll the drum down the planting bed and set one plant in each hole.

## How do I make one?

This rolling dibble marker, designed by Bob Meyer, is made from readily available hardware, lumber, and PVC pipe. The drum is a section of 12" dia. PVC pipe (\$45-\$50) commonly used for sewer connections. Check with plumbing supply stores and ask for a section as long as your bed is wide. Parts for the dibble drum will total approximately \$100.

## Materials and assembly.

### Drum:

(1) 12" dia. PVC pipe cut to length of bed width.

### Scoops:

(1) 2" x 3" PVC pipe cut into (12) 4" sections which are each cut in half lengthwise at a 45° angle.

(12) 2" metal angle brackets, fastened to each scoop and then to the PVC drum.

### Axle assembly (galvanized plumbing fittings):

(2) 1' x 1' x 3/4" plywood pieces, cut to fit end

- of drum and fastened with screws.
- (2) 3/4" floor flange, screwed into center of plywood.
- (2) 3/4" x 6" nipple threaded through PVC handle "T" and screwed into flange.
- (2) 3/4" coupler or end cap.

### Handle assembly:

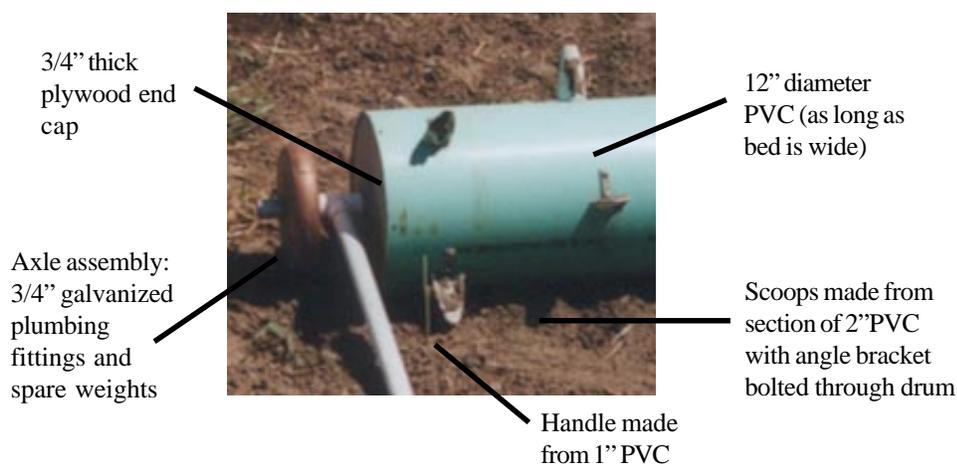
- (1) 1" x 10' PVC pipe, cut into 4 sections (42", 24", 25", 13").
- (2) 1" PVC "T", to slip over each axle.
- (1) 1" PVC 90° elbow to connect the 13" handle section to the 42" section.
- (2) 1" PVC 45° elbow.

Glue the 42" section and 24" section each into an axle "T". Glue a 90° elbow to the 42" section and a 45° elbow to the 24" section. Glue the 13" section to the 25" section with a 45° elbow. Attach the other end of the 13" section to the 90° elbow, and the other end of the 25" section to the other 45° elbow.

### Misc:

(48) 1/4" x 1" machine screws, (56) 1/4" lock washers, (56) 1/4" nuts, (16) 1/4x1" wood screws, (8) 1/4" x 2" pan head machine screws.

- PVC glue.
- Exterior wood varnish or paint



*This material was developed by the Healthy Farmers, Healthy Profits Project, whose goal is to find and share work efficiency tips that maintain farmers' health and safety and also increase profits. For more information, call (608) 265-9451 or visit our website at <http://bse.wisc.edu/hfhp/>*

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