

Weeding Stand for Plant Nurseries

Problem:

When plants are kept on the ground, workers must bend completely forward to weed them, risking low-back problems.



- Newly propagated plants are often kept in plastic flats on the ground for initial growth before “potting.”
- Worker must stoop and stay in bent position to weed trays on ground.
- Worker fatigue and pain can lead to lower work quality.

One Solution:

Use a movable table to elevate trays while weeding.



- Worker can stand while weeding, relieving prolonged stress on back.
- Worker must still stoop to pick up and replace trays, but change of position is better than prolonged position.
- Tray is closer to worker, reducing strain from reaching.
- Strain reduction will improve worker performance.

Weeding Stand

Why Bother With a Table?

You can help prevent chronic back injuries among weeders and should see improved work quality.

Won't Moving the Table Slow the Worker Down?

Probably not, if you calculate productivity over the work shift. Use of the table may result in slightly slower progress while workers are fresh. By mid-day, however, when back fatigue is setting in, workers using the table will be less tired and likely to move faster.

Should I Make or Buy a Table?

Either approach is fine provided that the table is the right size to fit the workers. As pictured, the ideal table will give workers a platform for the trays at just above their waist height. It should be light enough to move easily, but sturdy enough to be stable in use.

What If Weeding Flats Is Only a Part-Time Job in My Nursery?

The weeding table is still a good investment. Lots of nursery tasks other than weeding involve stooped posture. Relief, even in a part-time job, will help prevent long-term injury and will improve worker performance.

How Can I Make a Weeding Table?

With simple materials from your facility's shop or a home improvement store. The recommended material is light-duty steel, which will hold up under wet conditions, will not be too heavy to move around, and can be welded with typical shop equipment.

The drawing on this page shows 3/4"x 3/4" x 1/8" angle iron used for the table's legs, bottom bracing, and top bracing. The tabletop could be a

piece of metal grating welded to the frame in a number of spots or a metal plate welded or bolted to the top. Cost for materials would be about \$25.

Another possibility would be to make the table of aluminum, which is lighter in weight, and bolt the parts together rather than welding them. This would require a hacksaw, drill motor, wrenches, and some additional diagonal bracing. In any case, the key elements of the stand are height and portability.



An existing table could be retrofitted, if you have access to a shop and a welder. Two of the legs could be shortened and fitted with a steel rod, two lawnmower wheels (about \$7.50 each), and push-on retaining caps, all of which are available at hardware stores.

A collapsible four-wheeled table is available ready-made for \$227.99. This table has a push handle and is 24" long x 19-3/4" wide x 30" high. Contact, for example, Materials Handling Equipment, 7433 US 30 East, Fort Wayne, IN 46803. 219-749-0475. <http://63.87.5.30/mhec/catalog.shtml>

Contact Information:

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