

growing potatoes - a case study

In our trials, we have found that growing potatoes in a Grow Bed is much easier than growing in the ground - and the harvest was bigger. We have harvested 53 pounds (24 Kg) from just one bed! Overall we have averaged 46 pounds (21 Kg) of potatoes per bed. Here is our simple guide to growing success.

1. use certified seed potatoes

You will get best results if you use certified seed potatoes, available at garden centres or mail order suppliers. There are hundreds of varieties of potatoes available, varying greatly in flavour, shape and length of growing season. Most potato plants require 65 - 100 days to grow, mature and develop into full size spuds. Early varieties that thrive in cool weather can be planted in the Spring about two weeks before the last hard frost.

2. preparing the seed bed

Loosen the ground and make it as weed free as possible - weeds rob potato plants of needed moisture and nutrients. Potatoes prefer a rich loam soil with a pH of about 6.0. If you are not sure of your soil's fertility, take a soil test - soil test kits are available from good garden centres or mail order companies. If your soil needs fertiliser, follow the application instructions provided.

3. planting seed potatoes

Avoid planting potatoes too early in cold, wet soil. Let the soil warm to above 8 degrees Centigrade.

4. watering and irrigation

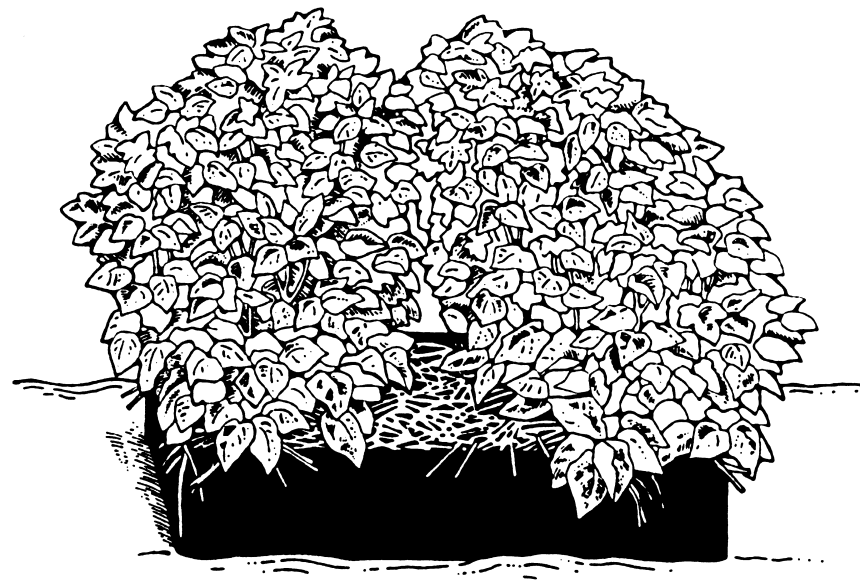
Potatoes need regular and consistent watering. We recommend that each Grow Bed receives 5 litres of water per day. If you use a rain gauge to check on the rainfall, this equates to 4 cm of water per week. The amount of rainfall will affect how often you need to water. It is important that you do not over water the Grow Bed as this can cause the plants to rot. However not watering enough will reduce your crop yield. When cooler weather settles in and the foliage has died back, stop watering completely about two weeks prior to harvest.

5. mulch

As previously explained, mulch helps retain moisture, keeps the soil cool and suppresses weeds. It also prevents light from reaching exposed potatoes which could then turn green and become inedible. Once the plants are established, we recommend covering the soil with a 5 cm layer of straw. Continue to add straw (up to 30 cm or more) as the plants grow.

6. pests and diseases

Most pests and diseases can be prevented with healthy soil and consistent watering. If your plants do become infected, replace the soil in the bed before planting the following year. Identify the insects in your garden - not all are pests, some are beneficial. Fast moving insects are usually beneficial while slow movers usually spell trouble. Pests can be removed by hand or controlled with the repeated use of insecticidal soap. Don't forget to check the undersides of leaves. Regular observation and removal are the keys to pest control.



introduction

With this Grow Bed you can grow delicious vegetables in a small space with very little effort. Our in house testing has found that Grow Beds can produce bigger, faster and healthier crops than the conventional growing methods.

“ Grow Beds can produce bigger, faster and healthier crops. ”

This Grow Bed benefits from sturdy black side panels which absorb heat, boosting the soil temperature, thereby allowing crops to develop quicker. The isolated growing environment makes it easier to protect against pests and disease as well as weeds which compete with your plants for essential nutrients. Grow Beds are ideal for gardeners with otherwise poor soil condition, as it is easier to control the condition

of the soil within the confined area of the four panels. Grow Beds also prevent soil compaction. Conventional vegetable patches are subject to considerable foot traffic which compacts the soil, reducing crop yields. The confined area also allows for efficient, less wasteful watering.

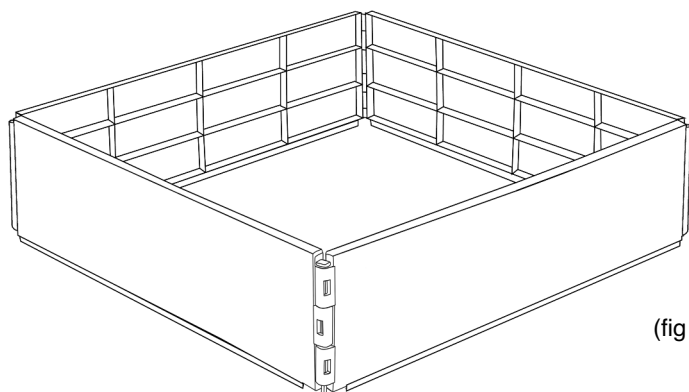
The Grow Bed takes only a few minutes to assemble using four side panels and corner pins. If you are growing root vegetables such as potatoes, harvesting could not be easier - simply pull out the corner pins, open up the sides, gently agitate the soil and pick out your crop - no heavy digging is required! At the end of the season, you can simply disassemble and store for next year! The plastic panels can easily be disinfected to prevent the chance of disease being passed on through contaminated soil.

grow bed assembly instructions

The four side panels are smooth on one side and ribbed on the other. Assemble the bed with the smooth side facing out.

step 1. (fig 1)

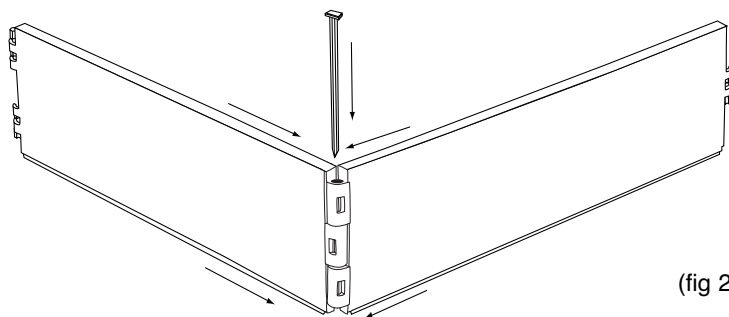
Place four panels upright on the ground so that the lip of each panel faces down and the hinges interlock at each corner.



(fig 1)

step 2. (fig 2)

Slide a Corner Pin into each hinge.



(fig 2)

step 3.

Place the Grow Bed in an area that receives full sun. To reduce pest and disease problems, the bed should not be placed in an area where a similar crop has recently grown.

fill the grow bed

Prior to filling, loosen the soil under the Grow Bed so that the plants' roots can penetrate below the surface. To fill the Grow Bed, combine soil with organic amendments such as compost, aged manure or peat to create fluffy loose soil. Before you plant or add mulch, consider installing a drip irrigation system to conserve water and save time. You are now ready to plant.

watering and irrigation

Whether you use an irrigation system or water by hand, remember to water generously and often, particularly for crops such as potatoes and tomatoes. Always take account of the weather conditions and act accordingly. Consider using a rain gauge to measure rainfall. Recording rainfall can help to ensure that you do not over water your plants.

using mulch

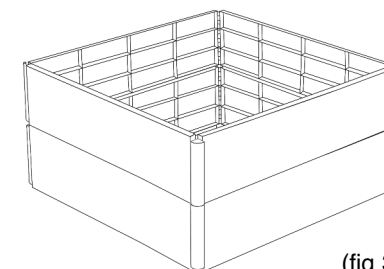
Mulch helps control weeds and reduces the spread of soil-borne diseases. Mulch also conserves moisture by decreasing water evaporation. There are many mulch materials such as plastic sheet, straw, bark chip and shredded leaves. Many plastic mulches are impermeable to water so if you use an irrigation system, it's best to install it underneath the mulch.

further advice and user suggestions

By buying additional units, you can increase the height of this Grow Bed. The system is designed so that one unit will interlock on top of another (fig 3). This can be useful for less able bodied gardeners as the working height is increased, requiring less bending and stooping. Multiple units stacked one on top of another can also make a useful large capacity compost bin - a three tier Grow Bed has a capacity of 690 Litres.

plant support

You can create more growing space in your Grow Bed if you provide growing supports for some crops. By enabling the plant to grow vertically, supports allow more sunlight to reach the leaves and the fruits. Most tomatoes, peppers, runner beans and cucumbers benefit from some form of support. Simple supports can be fashioned from bamboo cane while trellis and plastic coated steel cages can also be used. Be sure to have your support in place well before the plants require it - preferably even before you plant the crop. Anchor the support in the ground or tie it to a fence or post. Avoid using growing supports in a very windy spot. Strong winds can lift supports right out of the ground and your plants along with it!



(fig 3)