

PLANTING THE SEEDS FOR A BOUNTIFUL HARVEST Event Q&A

We received so many great questions during the event and didn't have time to answer them all. Below are answers to the questions directly from Gretel Anspach, Lifetime Master Gardener.

1. Is Miracle-Gro organic potting mix a good soil to start with?

Miracle-gro organic potting mix is a good soil to start with in containers or small raised beds. Its fertilizer is designed to last 2 months; after that supplemental fertilizer may be desirable, depending on what you're growing.

2. What is a recommended place to buy soil to fill beds?

Any landscape supply company that has been around for a few years should be ok. Go look at their soil and their compost. It should be dark in color and smell good (or at least not smell vinegary). Ask if you could see the soil test; if they stare at you blankly, go somewhere else.

3. Where are some of the best places to buy plants, soil and fertilizer?

It depends how standard a product you are after. If you want a relatively common product (parsley, potting mix, etc.), shop around at the big box stores or local hardware stores for a good price. If you want something unusual, go to a nursery for any of those or a local farm stand for the plants. The main nurseries in eastern Mass are Russell's, Weston, and Mahoney's, but they are not the only good places to go.

4. I started some seeds in my house in a grow station. They are getting very leggy, but do not seem strong enough to plant. What should I do to keep them from getting more straggly?

Seedlings need lots and lots of light. When I start my seedlings inside, I put in enough shop lights that there is a shop light directly over every plant -- two trays of plants has 2 shop lights / 4 bulbs. The lights should be directly over the plants and no more than an inch away - that way all the light put out by the shop lights gets to the plants.

5. Are there any at home PH testing tools/options that you would recommend as opposed to sending to UMass?

No. Sadly good pH test kits are very expensive and require calibration, etc. Uconn will do pH tests only for \$8, but you still need to wait for the answer to come back. Also consider looking around to see if any nursery or farmers' markets are offering soil tests - they may have the expensive equipment required.

6. I started plants indoors in little burpee pods about 1.5 square inches. Do I need to move them to larger containers before I start hardening them off?

That depends. If there is more than one plant per pot and they seem really crowded, for example if they are getting leggy trying to outcompete each other for light, you should separate and re-pot them. If there are a lot of roots coming out the side, you should re-pot them into something larger. If they still seem to fit in the pot, there is no reason to re-pot them.

7. How do I get rid of tomato/hornworms?

Your best options are:

- Scout for them. The easiest way to spot a plant with hornworms on it before it's completely defoliated is to look for their droppings under it - little brown pellets. Once you spot it, cut it in half, crush it, or offer it to the chickens.

- But leave some. If there are hornworms in the garden, pretty soon there will be hornworm parasites, which are much better at spotting them than we are. You know there are parasites if you see little white rice-like things on the back of the hornworm. Don't kill those hornworms - let the parasites hatch out and kill more hornworms.

- Bt is a bacteria that is available in a powder or solution form, and it kills caterpillars that ingest it. If the options above don't work (or don't appeal to you), you can spray your plants with Bt (but READ THE LABEL).

8. What do you think about using town compost in your vegetable garden? My town composts leaves, but I'm always a bit leery of using it.

The things that can go wrong with compost are (1) residual pesticides, (2) disease spores, and (3) weed seeds. It is likely town compost has all three. But, if it's mostly leaves there shouldn't be many pesticides or relevant disease spores. If you already have a lot of weeds, adding more in the composts probably won't matter, and adding organic matter is important. One option is to get the town compost and bury it under at least 4 inches of your soil; weed seeds generally only germinate when exposed to the light, so this should give you the benefit of the additional organic matter without adding a lot of weeding.

9. My friend said that "Proven Winners" are not good for pollination. Do you know about any brands we should avoid?

"Proven Winners" don't make edibles, so your friend was probably talking about ornamentals for a pollinator garden. In general, we know that the species (e.g. Ageratum) is good for pollinators. We don't know whether the cultivars (e.g. Ageratum 'Artist Blue') are or not. Generally double flowers (if the "normal" one isn't double) have less pollen and nectar. Other than that, we really can't predict pollinator preferences. Some Proven Winners are not good for pollinators, others are. One way to check is to go to the nursery on a warm sunny day and observe the plant. If you see bees on or around it, the pollinators probably like it.

10. What plants would recommend for a beginner gardener?

If you are talking vegetables, grow something you like to eat. If you like everything, I'd suggest tomatoes, particularly small tomatoes (cherry or salad, not beefsteak). Also, radishes and maybe lettuce (if you grow lettuce, you'll find out quickly if you have rabbits).

If you're talking ornamentals, grow something you like to look at that is suited for your spot. If you buy from a hardware store, it's almost guaranteed to be an easy-ish plant. If you buy from a nursery, talk to the people there. Observe the sun requirements carefully - don't start with trying to grow a plant that needs full sun in part shade, for example. The plant tag will tell you how much sun the plant needs.

11. Can you talk about composting? Besides turning it, what can I do to help it break down?

Compost is broken down by bacteria and fungus that like a certain temperature range and moisture level. Keep the compost heap warm and about as moist as good cake. Chop the stuff going into it as finely as you have time for - smaller stuff breaks down faster than larger stuff. Keep a good mix of almost half "brown" stuff (paper, dried leaves, hay, straw, etc.) and "green" stuff (grass clippings, coffee grounds, fresh weeds without seeds, veg scraps, etc.). Add some rich soil every few inches of the stack - this adds more bacteria and fungus.

The fastest way to make compost, having done all this, is in one of those tumbler bins. But these are low capacity and don't give you any place to put additional material while the bin contents are processing.

12. Regarding established raised beds, if I didn't cover the soil last year, can I use it again, or should I replace it with new soil?

If your soil is non-toxic, you can certainly use last year's soil over and over. I recommend either top-dressing with a little compost (half an inch) or else mulching with some organic matter (chopped leaves, hay, straw) that will supplement the organic matter in the soil over time.

13. Can I adjust soil pH around existing plants?

Yes. When you send in your soil test, most places let you indicate whether you have stuff planted there already (maintenance) or you have bare ground (establishment). They will not tell you to add more than 5 pounds of lime per 100 square feet if there are already plants growing there; that level of lime will not shock the plants too much. When you add the lime, try to spread it uniformly across the whole area rather than just adding it around the plants - the plant roots extend a-ways from the plant so they need the whole area treated.

14. What are the pro's and con's of salt hay for winter mulching?

Pro's: Salt marsh hay is a great source of organic matter. Since the salt marsh hay is from a very different environment than your garden, any seeds in it won't germinate.

One con is that it's more expensive than regular hay. Another may be that it's harvested from an ecologically fragile area - the salt marsh. People differ on whether this is good or bad. On the one hand, the salt marsh would probably be better off if we left it alone. On the other, when we

find a way of making money off an ecosystem, we're more likely to preserve that ecosystem. Salt marsh hay farmers are strong advocates for not filling or otherwise developing salt marshes.

15. If I am growing herbs in containers on my deck, does each one need their own pot?

Not really. The issue in general with growing different plants together in a pot is that some are more vigorous than others, and the vigorous ones tend to crowd out the less vigorous ones. You can control that to some extent with harvesting. Also, if you grow them together, you probably have a larger pot than if you grew them all separately - less watering, more healthy soil system. But if you see one or more herbs being crowded out, consider separating it from the other herbs.

16. My daughter has 6 strawberry plants. Each year she gets several berries that start to grow. Right before we are about to pick them, some insect eats them. What should we use to protect them? Also, we have not done a soil test but they always produce some fruit. Should we still add lime to add to the soil?

Do not add lime unless you get a soil test. Your soil may not need it, and the plants can suffer from too much lime in the soil.

Consider covering the plants with floating row cover as soon as the berries start forming. Rustle the plants first to make sure there are no bugs hiding in them, then make a frame over the plants with wire, then cover the plants and tuck the cover in all around; this will prevent flying and crawling insects from getting to your fruit. It may not prevent tunneling insects like ants though - we'll see. You need to wait for the flower to go before doing this because you need insects in there pollinating the flower for the fruit to form.

17. I used Neem oil last year on my kale that had some bugs, do you recommend Neem oil for pests on plans?

Neem oil is labeled for use against insects, mites and fungal diseases on various plants, including edibles. It is toxic to bees and other pollinators so applying Neem when bees are active is not recommended. Using Neem on cole crops (kale, cabbage, broccoli, etc) is ok since it works against leaf beetles and cabbage moths, and since we don't tend to let those plants flower, so they are not attractive to pollinators. I recommend considering using Neem as part of a pest program - but only if there are enough pests to make it worth using a pesticide at all.

18. Is there a benefit to growing 2-3 seedlings in a pot and then only planting the strongest one? How can you tell which is the strongest?

Seed germination is rarely 100%. You plant 10 seeds and 9 come up (or 8 or 6). It is recommended that you plant more seeds than you need plants for that reason. A lot of the time, space is a limitation, so we plant multiple seeds in a pot and then kill most of them, rather than planting one seed in a pot and then throwing some pots out. The strongest is the largest with the biggest leaves; if there's a tie, you can be arbitrary. Kill the weaker ones by cutting them off at the base with scissors rather than pulling them up; that way the stronger plant's roots won't be disturbed.

19. I have raised beds and use my own compost every year but have not added more soil. Should I add more soil every year?

You should not need to add soil every year. The mineral content of soil doesn't deteriorate that fast (centuries, not years). The nutrients that the plants absorb and that wash out of the beds come from the organic matter so adding compost is a good idea; it sounds like you're already doing that!