

# Corn Harvest Growing Guide

Adapted from [Garden sPOTS' Corn Harvest Science Kit](#) that includes this guide, experiments, activities, seeds, planter, soil, and fertilizer.

## Things You Will Need to Grow Corn in a Planter

- A 16 to 20-inch diameter plastic pot. Pot should be at least 14 inches deep and have drainage holes.
- Seed corn kernels (10 for 16-inch pot, 14 for 20 inches)
- Potting mix with added compost: 2 parts potting mix to 1 part compost
- Slow-release fertilizer (you may want to use organic fertilizer), read package carefully
- Water-soluble fertilizer (you may want to use organic fertilizer), read package carefully
- Small clippers or scissors

## Corn Plant Identification

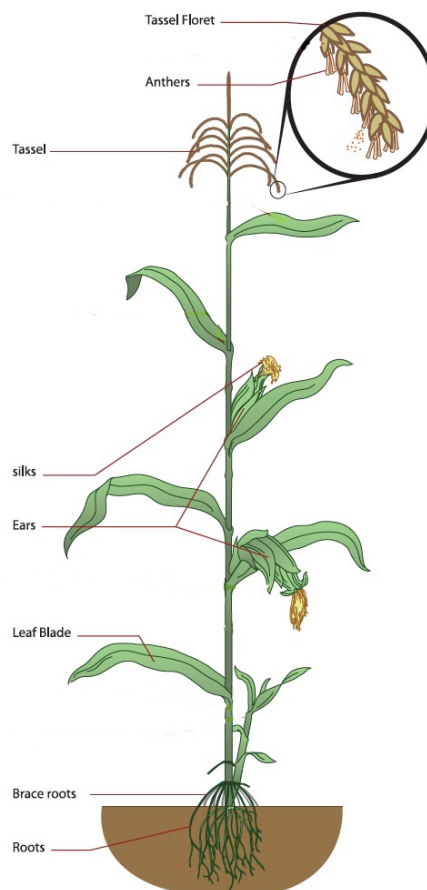


Figure 1

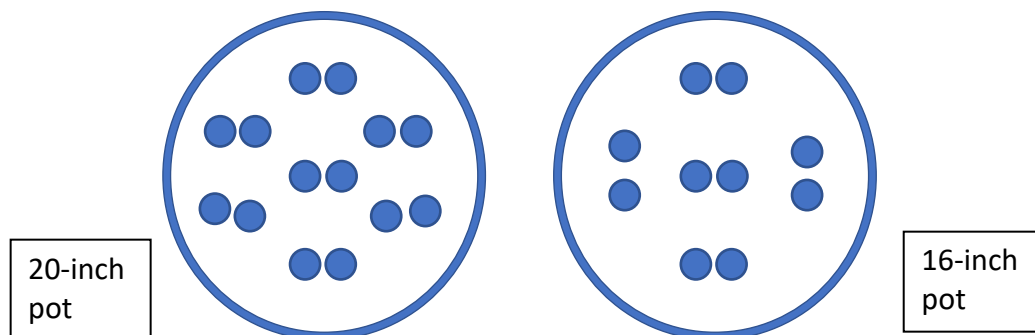


## Planting Your Corn

You will need:

- 14 Corn kernels
- 20-inch pot
- Potting mix with compost (use 2 parts potting mix with 1 part compost)
- Ruler
- Organic slow-release fertilizer, read package carefully
- Water-soluble organic fertilizer, read package carefully
- Calendar
- Small scissors or garden clippers

1. Make a note on the calendar on the day you plant. Count 10 days and note that this is when you should see your first sprouts. Then count 60 days from the planting date and put another note on the calendar. This is when you are going to start checking to see if the corn is ready to eat!
2. Fill your pot with potting mix and compost until you are about 4 inches from the top of the pot. Read the instructions on your slow-release fertilizer to determine the right amount for your planter. Sprinkle the slow-release fertilizer evenly over the top and gently mix into the top inch of potting mix. Use a disposable spoon or wear gloves and use your fingers.
3. Finish filling the pot with potting mix. Pat the mix down lightly in the pot as you fill it.
4. Take your ruler and measure one-inch from the tip of your finger. Make a mark on your finger so you know how far to push it into the soil to make a one-inch-deep hole. In a 20 inch pot of soil, make 14 holes in a pattern like the circle on the left.



Your one-inch deep holes should be in sets of two. In a smaller pot, use fewer sets of holes – a 16 inch pot should have 10 holes (see the circle on the right). The two holes in each set can be almost touching, but make sure that each set has space before the next group. Also make sure the holes aren't right up against the wall of the pot - each group needs potting mix all the way around it. Once the sprouts get big, you are going to **thin** them (see step 9).

5. Drop a kernel into each hole and gently fill all the holes with the remaining cup of soil. Pat down lightly all over the top of the pot.

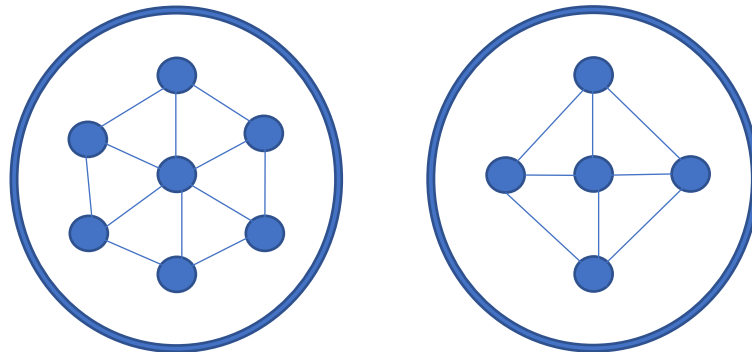


## Watering

6. Water the pot SLOWLY and gently the first time to avoid pushing the soil around too much. Water until all the soil looks wet and some water runs out of the bottom of the pot. You will need at least a gallon of water to wet all the new potting mix.
7. Keep the pot outside in an area where it will get full sun. That means the sun needs to shine directly on the pot for AT LEAST 6 HOURS every day. Check your pot each day. Make sure the soil in the pot stays damp until the sprouts emerge. The seeds need to stay moist until they sprout.
8. In 7-10 days, the sprouts will push out of the soil. Keep checking your plants every day to see if they need water, but now change *how* you water. Corn will use LOTS of water, especially as it gets taller and as the weather gets hotter. But let the soil surface dry between watering times. After the plants have sprouted, check the pot each day by pushing your finger into the soil about ½ inch. If it is dry, give it a slow drink of water. If it still feels cool and moist, you can wait before you water again. Add about an inch of water over the whole surface of the pot. You may need to check the soil twice a day if the air temperature goes above 90 degrees. It's best if you don't water after 4 PM– you want the surface of the soil to have time to dry again before the sun goes down.

## Thinning the Plants

9. Not every kernal of corn is going to sprout. Usually ½ to ¾ of the seeds will germinate – this is why you made a double set of holes for planting. When your sprouts reach about 4-6 inches high, it is time to thin them. Wherever more than one seed sprouted, carefully cut the smaller plant off right at the soil level. When you are done, the remaining plants should be about 6-8 inches away from each other and they will have lots of room to grow.



## Fertilizing The Plants

10. After you thin the plants, it's time to give them some fertilizer. Read the instructions on your water-soluble fertilizer to determine the right amount for your planter. The next time you water, add the water-soluble fertilizer to a gallon of water. Stir to dissolve. Gently water all around the plants. Try not to get the fertilizer water on the leaves and stalks.
11. When the sprouts reach 10 inches tall, it is time to give them the next dose of fertilizer. Follow the same method as in step 10.



12. When you first see silks sprouting at the sides of the stalk (about 30 days after planting), add the last dose of fertilizer. Follow the same method as in step 10.

### Pollinating Your Corn

You will need:

- Clean, dry hands
- Scissors or small plant clippers

Once the anthers (yellow-brown pollen structures hanging from the tassel) and silks appear, it is time to pollinate your plants. Out in a large field, the wind does a good job of spreading the pollen from the tassels to the silks on other plants, although often the stalks around the edges of a field don't get fully pollinated. You have a tiny field so you will have to give your plants a little help. Remember, every strand of silk needs to get some pollen or there will be missing kernels on your cob! Here's a video that shows how to pollinate by hand

<https://www.youtube.com/watch?v=Tj4aW-TiD3M&feature=youtu.be>

(short link: <http://bit.ly/pollinating-corn>)

### Hand Pollinating

1. You will pollinate your corn every day for about 1 week after the anthers and silks are fully out. So, don't try to gather all of the pollen in one day. The best time to gather pollen is in the morning – but not if it is raining or if the plants are wet.
2. Make sure your hands are clean and DRY before starting or the pollen will stick to you!
3. Snip off one "arm" of a tassel – be very gentle to avoid knocking off the pollen.
4. Use the tassel piece like a feather duster to sprinkle the pollen onto the silks of a different plant in the pot. You are doing this all week, so don't snip all the arms at once!
5. Repeat with each plant. For best results, make sure each of the plants gets some pollen on its silks from a different plant. A good way to mix it up is to work your way around the pot – take part of a tassel from one plant, go to the next plant to sprinkle the pollen on the silks. Then snip a tassel from that plant and shake it on the silks of the next plant. Don't forget the plant in the middle!
6. **Remember: Do this every day for one week except on days it is raining.** The silks turn brown after they are pollinated, so you will be able to see if most of the silks have been pollinated.





## Harvesting Your Own Corn

It takes 61-63 days after sprouting for Garden sPOTS' seeds to be ready to eat. This should be about 3 weeks after you pollinate the ears. If it has been very hot (over 90 degrees) during the month, the corn may be ready before then, but not much earlier. If you are using different corn seeds, check the package for days to maturity.





## When To Harvest

Here are signs your corn is ready to harvest:

1. Ear: Feel the ear through the husk – the top should feel full, firm and rounded, not sharp and pointy.
2. Silks: The silks are brown, dry, and have curled up. They break easily when touched.
3. Kernels: The final test is to peel open the top of the husk and check to see if the kernels are yellow, plump, and juicy – but don't do this too early! Once opened, it is easier for insects, birds, and other animals to sample the corn, too. Plus, if it rains, water gets into the ear and it might start to rot! If you do have to check inside, use a rubber band to close the husk again if the corn isn't ready to harvest.
4. Top to bottom: The ear that is highest on the stalk will **ripen** first. After you harvest that one, any lower ears may need another week or so to ripen.

Try to harvest corn in the morning before it gets hot. Sugars in the kernel turn to starch quickly in the heat. For more information see [gardeningwizards.com](https://gardeningwizards.com/when-to-harvest-corn/) “[How to determine the right time to harvest corn? - Perfect moment for the perfect taste](https://gardeningwizards.com/when-to-harvest-corn/)” <https://gardeningwizards.com/when-to-harvest-corn/>

## How To Harvest

It's easy to harvest corn – just bend the ear down so the silks are pointing at the ground. Then twist and snap the ear off where it meets the stalk. If the stalk has more than one ear, be careful not to break the rest of the stalk when you harvest the first one. The smaller ears need some more time to ripen. You can see a harvesting video here, <https://www.youtube.com/watch?v=65FrZLyFVMI> (short link: <http://bit.ly/pick-corn>).

Store the fresh corn in the refrigerator until dinner time – but don't keep it too long. The longer you keep it, the less sweet it will be. The best advice is to eat it the day you pick it!

