

# GROW MORE BASIL FASTER WITH CUTTINGS

Haijie Dou<sup>1</sup>, Mengmeng Gu<sup>2</sup>, and Genhua Niu<sup>3</sup>

If you'd like to bring your basil to the table about 2 weeks earlier than usual, try growing new plants from cuttings instead of from seeds. You could also harvest 50 to 70 percent more (Fig. 1), according to research conducted by Texas A&M AgriLife.

Although basil seeds are usually inexpensive and readily available, not all of them will sprout (or *germinate*). Those that do germinate will develop more slowly than plants grown from cuttings (Fig. 2).

Another problem with seeds is that the harvested leaves may have varied flavors, as the seeds in the packets are genetically different and may sometimes even sprout out different types of basil.

The study found that:

- ▶ Basil plants from cuttings grew to a transplantable stage in 14 days, those from seedlings required 21 days.
- ▶ Rooting occurred in 100 percent of the cuttings, but only 90 percent of the seeds sprouted.
- ▶ Growing one basil cutting per pot produced significantly stronger roots than growing two seedlings per pot.

## GROWTH AND YIELD

Basil plants are ready for harvest when they are about 10 inches tall. The study found that plants grown from cuttings reached harvestable height 25 percent earlier than plants grown from seeds. Cutting-propagated plants reached about 10 inches tall in 38 days, twice as big as the seedlings. The plants grown from seeds were not ready for harvest until almost 2 weeks (13 days) later.

In addition to the length of time until harvest, the researchers also compared the amount of harvestable material—the weight of the leaves, buds, and stems—produced by seeds and cuttings.



**Figure 1.** Basil plants 2 weeks after transplanting and 38 days after sowing. The plants were ready for harvest at about 10 inches tall.

<sup>1</sup>Graduate Assistant, Department of Horticultural Sciences, Texas A&M University

<sup>2</sup>Associate Professor and Extension Horticulturist, Texas A&M AgriLife Extension Service;

<sup>3</sup>Professor, Texas A&M AgriLife Research; All of The Texas A&M University System



**Figure 2.** Root formation of basil plants grown from cuttings (top) and seeds (bottom) on 14 days after plugging or sowing.

Basil plants from cuttings produced 49 percent more fresh harvestable material than did seedlings. The cutting plants also produced 71 percent more dry matter.

Impressively, even one basil cutting plant per pot produced more harvestable material than did 20 seedlings per pot.

## CONCLUSION

Gardeners can easily increase and speed up their basil harvest if they start with cuttings instead of with seeds.

## Propagating basil from cuttings

What you'll need for each new plant

- ▶ A 1- or 2-node cutting from a basil plant or from fresh (the key!) basil from a grocery store
- ▶ Rooting hormone (sold at garden centers)
- ▶ A 6-inch pot with potting mix

1. Fill the pot 3/4 full with potting mix

2. Dip the base of the cutting in rooting hormone

3. Plant the cutting in the pot. To increase your chances of success, include more than one cutting in the pot.

4. Enclose the pot and cutting in a produce plastic bag. Tie a knot at the end of the bag to prevent moisture from escaping and create high humidity for the cutting.

5. Put the plant in a sunny window and keep the soil moist

6. When the rooted cutting produces more than 3 new nodes, begin harvest by pinching off a few leaves

**Figure 3.** Steps for propagating basil plants from cuttings