

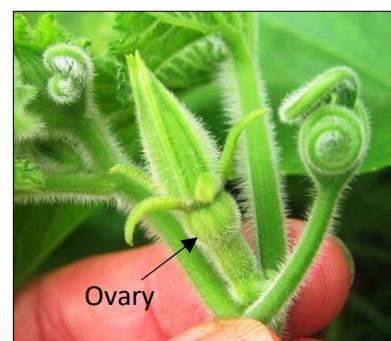
# HOW TO HAND POLLINATE FRUIT & VEGETABLES GUIDE

**Materials:** Scissors; small clean dry artist paint brush; or new cotton buds.

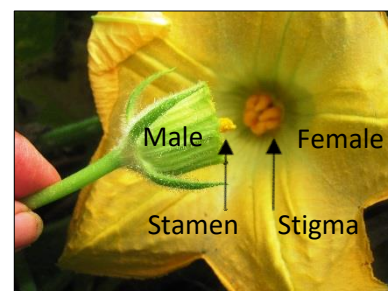
## METHOD 1:

Follow these steps to hand pollinate **pumpkin, zucchini, squash & watermelon**.

1. Identify the male and female flowers. Look for a long plain stem under the flower for a MALE. A FEMALE has a tiny immature swollen fruit (ovary) underneath the flower petal(s). After the female flower has been pollinated and fertilized, this ovary will develop into a fruit or vegetable.
2. Using scissors, cut the male flower off the plant, leaving the stem on so you can use this as a 'handle' later.
3. If the centre stamen that contains the pollen in the male flower is easily accessible, leave the flower intact. If the stamen is down deep inside the throat of the flower and difficult to access, gently snip the flower petals off the male flower. It will end up looking like a sort of natural 'paint brush'!
4. Avoid touching the stamen on the male flower and removing any pollen with your fingers. Use the stem 'handle' instead.
5. Find a female flower with the petals fully open. Hold the male flower stem and gently push the stamen into the centre of the female flower (stigma).
6. Roll and twist the stamen against the stigma to transfer pollen. Use a new male flower to pollinate the next female flower. Hand pollination completed!



Female pumpkin flower with swollen fruit (ovary) below blossom



Male pumpkin flower with petals trimmed & pollen covered stamen inside

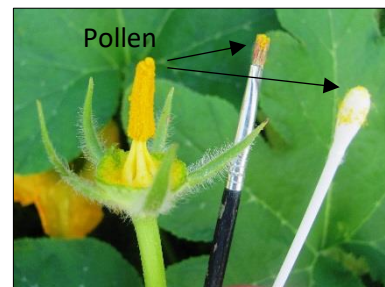
## METHOD 2:

Follow these steps to hand pollinate **fruit and vegetables with small flowers** e.g. **cucumber and rock melon**.

1. Identify the male and female flowers.
2. Using either the fine artist paint brush or cotton bud, gently gather some pollen from the male flower on your brush or bud tip.
3. Find a female flower with the petals fully open. Swirl the pollen into the centre of the female flower (stigma) to ensure good contact, making sure you touch all surfaces thoroughly.
4. Dab the brush or cotton bud around the female stigma to transfer pollen.
5. After successful pollination and fertilization, the ovary will swell and fruit will start to develop.

## TIPS:

- ☼ Only female flowers develop fruit but male flowers tend to develop first.
- ☼ Vegetable plants tend to have more male flowers than females.
- ☼ Aim to hand pollinate your crops early morning when the flowers are open, on a dry day. Pollen can be affected by heat later in the day.
- ☼ Collect pollen from a number of different male flowers for each female flower you want to pollinate.
- ☼ If fertilization is unsuccessful, the ovary will wither and die.



Male pumpkin flower trimmed to expose stamen, artist brush & cotton bud with pollen



Successfully pollinated female pumpkin flower with ovary (fruit) developing

LEARN MORE: [4 Steps to Improve Pollination & Your Harvests Part 1](#) and [Part 2](#).

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