

Seeds, Direct Seeding and Transplanting

Seeds, God's gift to man.

- Genesis 1:29,30. And God said, "Behold, I have given you every plant yielding seed that is on the face of all the earth, and every tree with seed in it's fruit. You shall have them for food. And to every beast of the earth and to every bird of the heavens and to everything that creeps on the earth, everything that has the breath of life, I have given every green plant for food." And it was so.
- What is the difference between what God gave man and what God gave the rest of the creatures? The plants are the same. The parts of the plants they eat are the same. Only man saves and plants seeds.
- Isaiah 55:10. For as the rain and the snow come down from heaven and do not return there but water the earth, making it bring forth and sprout, giving seed to the sower and bread to the eater,
- For eating and sowing. Both give us life.
- Genesis 1:28. And God blessed them. And God said to them, "Be fruitful and multiply...."
- God's purpose for us (as mankind) is to bear fruit. This is the first thing that God said to us. It is both a command and a blessing.
- God blessed Abraham along a similar vein.
- We bear fruit in many different ways. There is the fruit of the womb, and the fruit of the garden. They represent the fruit that results from any labor, any achievement or success, of any effort that we undertake. It could be the fruit of the Spirit, or souls for the kingdom.
- Good seed, or fruit, is always the result of relationships and labor. Male and Female. It is the result of thoughtful intimacy in relationships, of "knowing". It is the result of thoughtful labor and effort.
- John 15:8 By this is my Father glorified, that you bear much fruit and so prove to be my disciples.

Practical Application - Seeds, Direct Seeding and Transplanting

- Seeds - GMO, Hybrid, Open Pollinated, Heirloom. What's the difference?
 - *GMO*. Gene material from a foreign source (plant or animal of a different species) inserted into seeds in a lab. It could never happen in nature. Common GMO seeds - Soybeans, Corn, Sugar Beets, Canola, Cotton, Alfalfa, Hawaiian Papaya, Summer Squash, Sweet Corn. There is NO GMO Wheat on the market.
 - *Hybrid*. Not GMO. Natural fertilization under controlled conditions using material from two different plants of the same species. F1 generation. Saved seed will most likely not breed true to the parent.
 - *Open Pollinated*. Natural fertilization under natural conditions. Saved seed will breed true to the parents.
 - *Heirloom*. Open pollinated seed passed down from one generation to the next. Heirloom by definition are always Open Pollinated. Open Pollinated are not always Heirloom (in other words, there are new varieties of open pollinated seeds being developed all the time).
- *Seed saving*. Specific for each kind of vegetable. Get a good book.

- Direct Seeding
 - What is direct seeded? Tap-rooted crops (carrots, turnips, etc.). High density crops (carrots, crops for baby greens). Fast growing crops (radishes, baby greens). Legumes (peas and beans).
 - Germination % for direct seeding are less than what is written on the package. Give yourself a fudge factor of 50-100%.
 - Seed depth should be 3-4 times the thickness of the seed. 1/16" seed put at 1/4" deep.
- We prefer transplanting. Why?
 - Transplanting is more reliable. Protected environment gives better control over germination period. Even stand of plants.
 - Protected environment gives a head start.
 - Better plant care and cost efficiency. Fewer seeds. Can more efficiently care for many in a small space.
 - An almost sure harvest. Germination and seedling stage most vulnerable.
 - Increases garden efficiency with succession planting and green manures.
 - It gives starts a head start on weeds.
- Ellen White Tree Planting
 - 3'x3'x3' pit.
 - Layer 1: 2-4 Clay Drainage or Inverted Roofing Tiles stopped with stones & 1 foot of equal parts topsoil, peat moss, compost & 5 lbs Rock Phosphate
 - Layer 2: Single layer of small rocks
 - Layer 3: 1 foot of pure rich topsoil
 - Layer 4: Large rock over which roots of tree are spread out & equal parts of wet peat moss, leaf mold, topsoil, compost & 5 lbs of Colloidal Rock Phosphate
 - Layer 5: 1 inch compost
 - Layer 6: 3 inches leaf mulch
 - Layer 7: optional - single layer of small rock.

Cover roots with at least 6" of Layer 4. But, if you are planting a grafted tree, make sure that the graft is above the soil. One rule of thumb is to make the new planted soil line (on the trunk) about 2" below where the soil line before transplanting was. For ungrafted trees, the new soil line can be about 2" above the old soil line.

Put a coffee (or other large) can around the base of the tree to protect from chewing insects, mice, etc. You can also protect the young trunk by painting with white latex paint and/or wrapping it with tree wrap.