



Fruit Care Guide : Avocado



Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
				Irrigation							
Amend Soil											
			Prune as needed								
			Fertilize Young Trees		Fertilize Young Trees			Fertilize Young Trees			
			Fertilize Mature Trees					Fertilize Mature Trees			

PLANTING

Avocados are best planted in spring, but can be planted anytime if potential weather extremes are taken into consideration. Plant your avocado in a fully raised planting area that is 100% higher than grade to ensure your roots have good drainage.

In Ground Planting

- 1 - 2 bags **G&B Acid Planting Mix**
- 1 - 2 bags **G&B Organic Soil Building Conditioner**
- original soil from the planting hole
- 2 cups **G&B Starter Fertilizer** or **Bone Meal**
- 1 cup **Azomite**
- Water in with **Superthrive**
- 2 - 4" **Mulch** on top

Container Planting

Only advised for Dwarf Lil Cado long term, or temporary potting for full sized varieties.

Minimum long term container size advised should be at least a ½ wine barrel equivalent

- ½ **G&B Potting Soil**
- ½ **Acid Planting Mix**
- 2 cups **G&B Starter Fertilizer** or **Bone Meal**
- 1 cup **Azomite**
- Water in with **Superthrive**

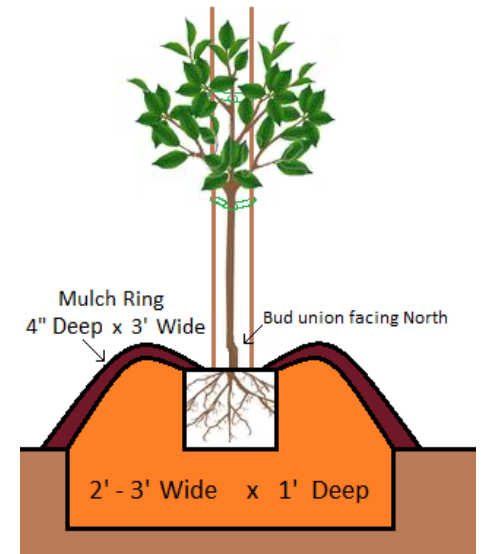
SENSITIVE ROOTS: Transplant Carefully!

- Only transplant avocados when the roots are well developed and the trunk is firmly anchored in the pot. If the trunk is well anchored that's a good sign that the root ball is likely well rooted and you can plant right away.
- If the trunk is not well anchored and wobbles a lot, the roots may be underdeveloped and the avo may not be ready to transplant. In this scenario, consider waiting 6 - 12 months to give the roots more time to develop before transplant. Fertilize with a handful of bone meal to encourage faster root growth.
- Well developed roots hold together better and experience less transplant shock. If the roots fall apart during transplant the tree can develop transplant shock and die, or have an alarming amount of branch dieback.
- Watering with superthrive at planting time is strongly recommended to prevent transplant shock.



Planting Instructions

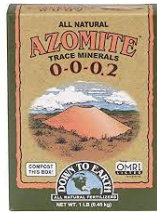
1. Dig hole equal to the height of the pot and 2x - 3x the width of the rootball
2. Prepare a mixture of your original soil from the hole, **acid planting mix**, **organic soil building conditioner**, **bone meal**, and **azomite** in the planting hole.
3. Backfill the entire planting hole with your amended soil, filling it back up to the top.
4. Settle the avocado root ball with the graft union facing north on top of your freshly amended soil.
5. Surround and completely cover the root ball with your amended soil mixture in a raised mound that is higher than needed, as it will settle. Your mound dimensions should be 2 - 3 ft wide at the top and 3 ft - 4 ft wide at the base.
6. Form a thick water berm at the top edge of the root ball.
7. Water in with **superthrive**.
8. Check for any settled soil, add more soil if needed.
9. Cover your root ball with a 2 - 4" thick **mulch** layer three ft wide, starting 2 inches from the trunk.



FERTILIZER AND AMENDMENTS

- Yearly Amendments
 - **Worm Castings** and **Compost** and **Azomite** applied November - January time frame
 - Optional : Add **Langbeinite** for improved branch strength and increased fruit size and quality
 - Mix and spread amendments in a donut shape as wide as the canopy
- In Ground: Cover with four inches of mulch. Start mulch ring 1" away from the trunk to prevent rot
- Mulch Options
 - ★ Bark, rock, **G&B Soil Building Conditioner** or **G&B Harvest Supreme**
 - Increases moisture retention
 - Suppress weeds
 - Encourage earthworms and beneficial soil organisms
 - Prevent soil crusting and new compaction
 - Insulate soil from extreme temperatures

- First 3 years fertilize with **G&B Citrus and Fruit Tree** fertilizer in spring, summer, fall
- Year 4+ change to **G&B All Purpose** fertilizer in spring, summer, fall



PESTS AND DISEASES

When pests are present, check that you are watering correctly, as overwatering can stress the plants and cause most pest and disease problems



Aphid



Whitefly



Scale



Lace Bug



Anthracnose Fungus



Verticillium Wilt



Preventative Methods

- For avocado, prevention is the best tool against pests and disease.
 - Maintain a 4" thick mulch layer as wide as the canopy. This will create a habitat for earthworms and beneficial soil organisms to thrive, which will support a healthy tree.
 - Add compost, earth worm castings and micronutrients such as azomite yearly. Many micronutrient deficiency symptoms show on the foliage and are misidentified as fungal problems.
 - Water deeply and infrequently to reduce chances of fungal diseases.
- Pests: Spray any active infestations of aphid, whitefly, lace bug or scale with an oil based spray such as Neem Oil or Organicide Bee Safe 3-in-1

Summer Watering Frequency Year 1 1x every week Year 2 1x every 2 week Year 3 1x every 3 weeks Year 4 - 8 1x monthly Year 9 - 10 1x every 2 months Year 10+ 1x every 3 - 4 months Watering Quantity At planting time: 1 - 2x container volume OR 10 gallons per 1 inch of trunk diameter. Example 1" = 10 gallons	Seasonal Adjustments Water less frequently fall through spring Heat Waves Water extra on first day of heat waves (95* + for over 3 days)
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PRUNING

- Up to 30% of the canopy can be removed in a single pruning session without stressing the tree
 - More than 30% reduction may stress the tree
 - Stress response = Vertical water spout growth that doesn't fruit for several years

How to Prune

- Young avocado trees do not recover well from pruning cuts on the central leading branch.
 - Do not prune until the tree is older and showing a hard, woody trunk 3-4 feet tall at least.
- Prune as needed after new growth starts to flush, or any time during warm season for light pruning
- Remove dead, diseased, and damaged branches
- Remove or shorten disoriented, crossing, rubbing branches
- Tip prune shoots to encourage branching
- Check for rootstock suckers at the base and remove

FRUIT MANAGEMENT

- Your tree needs to develop a strong canopy before it will be able to support fruit production.
- **Fruit production starts when the tree is 4-8 years old, often longer for the dwarf varieties.**
- Remove any flower buds first 2 - 3 years, if it flowers too much when young it will defoliate in an effort to make fruit it cannot support yet

FLOWERING : A AND B TYPES

A types tend to be self fruitful in our area, and will make larger crops with a B type nearby.
Some B types can be self fruitful, but most need an A type around to make any fruit.

TROUBLESHOOTING: NUTRIENT DEFICIENCIES AND OTHER PROBLEMS

Salt Burn



Cause: Can be caused by summer watering in drought years when water supply is depleted and salt is concentrated. Also caused by fertilizers containing high levels of chloride, particularly chicken manure and potash.

Identification: Marginal burn is even and extends in towards the veins.

Solution: Change the watering schedule to be a larger volume of water and less frequent application.

Shallow Frequent Watering



Identification: The leaf tips and sides will be dry and brown, possibly with black spots if the damage is old. Leaves will be drooping.

Solution: Change the watering schedule to be a larger volume of water and less frequent application.



Manganese Deficiency



Identification: Affected leaves are slightly pale green with most of the color loss between the veins.

Solution: Fertilize with azomite 1x per year

Magnesium Deficiency



Solution: Fertilize with azomite 1x per year

Nitrogen Deficiency



Solution: Fertilize with an all purpose or fruit tree fertilizer 1-3x per year and / or fertilize with azomite 1x per year

Zinc Deficiency



Often caused by high soil pH or high levels of soil phosphorus.

Solution: Fertilize with azomite 1x per year and/or add sulfur to lower pH of soil

Potassium Deficiency



Cause: Imbalance of potassium, calcium and magnesium in soil.
Identification: Marginal burn with some interveinal yellowing.

Solution: Fertilize with azomite and / or Langbeinite fertilizer

Iron Deficiency



Cause: highly alkaline soils (pH > 7.5), or high doses of phosphorus fertilizer have been applied.

Solution: Fertilize with azomite 1x per year

Boron Deficiency



Identification: Yellow and stunted

Solution: Fertilize with azomite 1x per year

Manganese Toxicity



Cause: High uptake of manganese from the soil. Occurs in soils with high manganese levels or when pH falls below 6.5. Made worse by waterlogging and over-use of ammonium-type fertilizers.

Herbicide Damage



Cause: Root uptake of soil-applied persistent herbicides.

Identification: Leaves show irregular yellow blotches. The distribution of yellow leaves on the tree is also uneven.