Yunnan Avocado Grower Guide

Growing World-Class Avocados in Yunnan — with a focus on the ideal hot-dry valley conditions of the Jinsha River (金沙江), Taoyuan • Yongsheng • Lijiang

English (source) version — July 2026 *Prepared for Yunnan Avocado Co. (云南牛油果公司) — China's leading avocado seedling nursery and grower resource* **Seedlings & grower support: 138-8726-4012**

> **Units used throughout:** Land area is given per **Mu** first, with **Hectares (Ha)** in brackets (1 Ha = 15 Mu; 1 Mu = 666.7 m^2). All other measurements are metric (g, kg, mL, L, m, °C).

Why This Guide Exists

Avocado is a young crop in China, and good, trustworthy, locally-relevant growing information is scarce and incomplete. Too many Chinese growers have learned the hard way — years of poor yields, disease losses, and disappointing fruit — simply because no one gave them the right information for the right growing area.

This guide fixes that. **It is written for anyone growing avocados in Yunnan.** Wherever you are in the province, you will find practical, science-based guidance here.

At the same time, be clear on one point from the start: **most of our recommendations are written for the *ideal* growing conditions — the hot-dry valleys of Yunnan**, where avocado performs best. Yunnan is a land of many microclimates, and not all of them suit avocado equally. We aim our advice at the conditions where a grower can truly succeed, and we tell you honestly which conditions those are.

Our own location — the **hot-dry Jinsha River (金沙江) valley around Taoyuan (涛源), Yongsheng County, Lijiang** — has become a **premier avocado site in China**, and much of the region-specific detail in this guide reflects that. Growers elsewhere in Yunnan can still use the principles throughout; where your site differs, we tell you how to adjust, and you can always reach us directly for site-specific advice at **138-8726-4012**.

The recommendations here are guided by **Dr. Jonathan Teichroew (江子渊博士 / 江博士)**, a U.S. avocado specialist who leads Yunnan Avocado Co.'s horticultural program.

> *"China's problem has never been whether avocados can grow here — it's that most growers are in the wrong climate, on the wrong rootstock, using the wrong information. Put a good tree in the Jinsha valley and manage it properly, and you can grow fruit that competes with California."* — **Dr. Jonathan Teichroew (江博士)**

The quality benchmark is the world's best, not current local practice. Most avocados grown in China today are not yet professional, export-quality fruit — the industry is young and most growers are still learning. This guide does not treat current Chinese practice as the standard to copy. The standard we aim for is set by the world's leading regions — California, Israel, and South Africa — and Yunnan Avocado Co. exists to bring Chinese growers up to that level.

> *"I don't want a Yunnan grower to match the farm next door. I want them to match Israel and California. That's the whole point — aim at the best in the world, and build the orchard backwards from there."* — **Dr. Jonathan Teichroew (江博士)**

The Single Most Important Decision: Grow in a Hot-Dry Climate

Avocado grows best in a **hot, dry climate** — plenty of sun and heat for the fruit, and low humidity that starves fungal diseases. The world's best avocado regions (California, Israel, central Chile) are all hot-dry Mediterranean or semi-arid climates. This is not an accident. It is the number-one reason some regions produce beautiful, healthy, high-value fruit and others fight disease every season.

Hot-WET areas are the wrong choice — and this is where most Chinese growers go wrong

Hot, **wet** and humid regions are **not ideal for quality avocado production**, for three connected reasons:

1. **Disease.** Warm, humid, wet conditions are perfect for the avocado tree's worst enemies: **Phytophthora root rot** (the number-one killer of avocado orchards worldwide) and fruit-rot fungi like **anthracnose and stem-end rot**. Heavy, sustained rain on the roots and constant leaf wetness give these diseases exactly what they need.
2. **Pests.** Humid, warm conditions sustain higher year-round pest pressure.
3. **Fruit quality and cost.** Constant humidity and cloud cover reduce fruit dry matter and oil, while the disease pressure forces more spraying, more losses, and lower pack-out. Growers in these areas spend more and earn less per kilogram.

> Yunnan Avocado Co. deliberately does **not** base its recommendations on hot, wet growing conditions. We build our program around the conditions where avocado can truly thrive in Yunnan — the hot-dry valleys.

Why the Jinsha River (金沙江) dry-hot valley is a premier avocado region

The **Jinsha River dry-hot valley (金沙江干热河谷)** — the upper Yangtze — runs through **Yongsheng County in Lijiang**, and the area around **Taoyuan (涛源)** sits right in it. This is a genuine **hot-dry valley climate** (the same kind of climate that makes nearby Panzhihua one of China's best subtropical-fruit regions), and it is close to ideal for avocado:

- **Hot and sunny** — abundant heat and strong sunshine drive high fruit dry matter and oil content (the qualities that make an avocado taste premium).
- **Dry** — low humidity and low rainfall dramatically **reduce Phytophthora, anthracnose, and pest pressure** compared to hot, humid regions. Cleaner fruit, healthier trees, less spraying.
- **River water available** — the Jinsha River and local irrigation let growers *add* water precisely when the tree needs it, instead of being at the mercy of monsoon rains. **This is the key advantage of a dry region: you control the water, the water doesn't control you.**
- **Elevation** in the valley moderates night temperatures, helping quality while keeping frost risk manageable with good site selection.

> *"A dry climate with irrigation is the professional's choice. You decide when the tree drinks. In a wet climate, the rain decides — and the rain doesn't care about your root health."* — **Dr. Jonathan Teichroew (江博士)**

With gratitude to our local leadership: special thanks to the **Lijiang, Yongsheng, and Taoyuan governments** for their visionary leadership and forward-looking embrace of modern ideas — such as growing export-quality avocados and helping the region become a leader of avocado production in Asia. This supportive environment makes it easier and better-supported to establish a professional orchard here. Encouraged by that vision, **many pomegranate and citrus growers across the region are now replacing their old trees with avocados**, recognizing the far higher long-term returns.

> **This guide serves all of Yunnan, but its region-specific detail is written for the Taoyuan • Yongsheng • Lijiang Jinsha valley.** Conditions vary across Yunnan's many microclimates — elevation, valley aspect, and water access all change the right approach. **For advice tailored to your specific site, contact Dr. Jonathan Teichroew and the Yunnan Avocado Co. team directly at 138-8726-4012.**

---

1. Site Selection

- **Drainage first.** Even in a dry region, plant where water drains freely. Avoid low spots where irrigation or rain water can pool around roots.
- **Slope and air flow.** Valley slopes shed water well (good) and let cold air drain away downhill at night. Avoid frost pockets at the very bottom of side-gullies.
- **Sun exposure.** Full sun drives dry matter and yield — an advantage of an open, sunny valley.
- **Water access.** Confirm a reliable irrigation source (Jinsha River system, reservoir, or well) before planting. In a dry climate, irrigation is not optional — it is the foundation of the whole orchard.
- **Wind.** The valley can be windy; plan windbreaks before planting on exposed sites (Section 10).

Growing somewhere else in Yunnan? The same priorities apply, but the balance shifts — wetter sites need far more attention to drainage and disease, cooler/higher sites to frost. Call us at 138-8726-4012 to talk through your specific site.

---

2. Varieties & Rootstocks

2.1 Scion (fruit) varieties

Plant **85–90% Hass** — best price, easy ripeness cue (skin blackens), and a hot, sunny, dry climate is excellent for Hass dry matter. Interplant **10–15% B-type pollinizers** (Section 8).

Variety	Flower type	Role
Hass	A	Main commercial crop
Zutano	B	Hardy, cold- and wind-tolerant pollinizer
Fuerte	B	Pollinizer; more cold-tolerant than Hass

Bacon, Ettinger	B	Alternative pollinizers

2.2 Rootstock — where most Chinese growers lose their crop before it starts

This is the single most under-appreciated decision in Chinese avocado growing, and it is quietly limiting yields across Yunnan. Most growers in Yunnan (and China generally) plant on **cheap, unimproved seedling rootstock of unknown quality** — often whatever was easiest to obtain. The result is uneven orchards, weak root systems, poor disease tolerance, and yields far below what the tree is capable of. Growers often blame the weather or the variety, when the real problem is underneath the ground: **a poor rootstock caps production no matter how well the rest of the orchard is managed.**

Rootstock	Notes
Zutano (seedling)	Common, cheap, and hardy — but as a seedling it produces **highly variable** trees (every seed is genetically different), with only moderate, inconsistent disease tolerance. Acceptable only as a low-cost baseline, not a professional choice.
Duke 7	An older California standard rootstock with more uniform, reliable trees and moderate root-rot tolerance — a step up from random seedlings, but now surpassed by improved modern selections.
Yunnan Avocado Co. Improved Rootstock	**Our proprietary, improved rootstock**, selected for strong root-rot tolerance, salinity tolerance, uniformity, and earlier, heavier bearing — so trees perform consistently across the orchard. This is the professional standard used in the world's best regions, and the rootstock we recommend for any grower serious about long-term yield and fruit quality. **Order at 138-8726-4012.**

> *"If you buy one thing from a professional nursery, buy the rootstock. A good scion on a poor root is a wasted decade. A good scion on an improved root is an orchard that pays you back."* — **Dr. Jonathan Teichroew (江博士)**

The case for improved rootstock, plainly: an improved rootstock costs a little more per tree at planting, but it (1) resists root rot far better — protecting your entire investment, (2) produces a uniform orchard that's easier to manage and harvest, (3) bears earlier and heavier, shortening the wait to profit, and (4) tolerates salinity and stress better. Over a 20–30 year orchard life, this is the highest-return decision a grower makes. **Contact Yunnan Avocado Co. at 138-8726-4012 to secure improved rootstock trees.**

Note: even the best rootstock is only tolerant to root rot, not immune — pair it with good drainage and the phosphonate program in Section 5.

---

3. Planting Density & Orchard Layout

3.1 Why we do NOT recommend ultra-high-density in Yunnan

Ultra-high-density planting (very tight spacing, hundreds of trees per Mu) can raise early yields, but it comes with a demand most Yunnan orchards cannot meet: **relentless, skilled, precise pruning, several times a year, forever.** Miss it, and the trees crowd, shade each other out, and production collapses.

Yunnan has a **real and worsening farm-labor shortage**, and skilled pruning labor especially is hard to find and expensive. An orchard design that depends on constant expert pruning is a design that will fail here. **We therefore do not recommend ultra-high-density planting for most Yunnan growers.**

> *"Ultra-high-density looks impressive on paper and punishes you in practice — it only works if you have a disciplined pruning crew every month of the year. Most growers don't. Plant at a spacing you can actually manage."* — **Dr. Jonathan Teichroew (江博士)**

3.2 Recommended spacing

Choose a spacing you can realistically manage with available labor. For most growers we recommend:

Spacing	Trees / Mu	Trees / Ha	Best for
3 × 4 m	56	833	Higher early yields; needs regular (not extreme) pruning
4 × 4 m	42	625	Balanced, manageable — a strong default
4 × 6 m	28	417	Lower labor, vigorous trees / larger equipment, easiest to manage

Match spacing to the vigor of the tree and the labor you have. When in doubt, **choose the wider, more manageable spacing** — an orchard you can maintain well beats a crowded one you cannot.

3.3 Layout

Plant on contour on sloping ground, align rows so water and cold air drain away, and leave room for irrigation lines and access.

---

4. Young Tree Establishment

- **Buy certified, improved rootstock trees** (Section 2.2) — the foundation of the whole orchard. Order at **138-8726-4012**.
- **Mound if drainage is any concern:** a 40–60 cm mound keeps upper roots safe from any standing water.
- **Mulch:** 5–8 cm composted mulch in a ~1 m ring, kept **15 cm clear of the trunk**.
- **Protect young trees from sun AND wind** with 35% shade cloth for the first 1–2 years (Section 10).
- **Irrigate frequently and lightly** from day one — young roots are small and, in a dry climate, drought stress kills young trees fast.
- **Timeline:** first fruit year 3–4, real income around year 6. Plan for the ramp.

---

5. Soil Health & Root Rot Management

A dry climate is your biggest ally against root rot — but you still manage it, because irrigation water can create the same wet-root conditions rain does in the south.

5.1 Target soil

Freely draining · pH 6.0–6.5 · organic matter ⩾2% · biologically active.

5.2 Preparation

- Mound on heavier ground; rip/subsoil compacted soil before planting.
- Gypsum improves structure and aeration in heavy or sodic soil.

5.3 Active root-rot program

1. **Improved rootstock** (Section 2.2).
2. **Phosphonate (phosphorous acid)** trunk injection/spray — annually on healthy trees after the spring flush hardens, **twice yearly** for heavy-bearing or affected trees (~15 mL per meter of canopy diameter, 20% solution, evenly spaced). Budget it like fertilizer.
3. **Regular mulching** — feeds beneficial microbes that suppress the pathogen.
4. **Irrigation discipline** — do not over-water. In a dry climate this is fully in your control.
5. **Sanitation** — disinfect tools between trees; never move soil/plants from a sick block to a clean one.

5.4 Salinity

Check irrigation water; chloride above ~120–150 ppm burns leaf tips on Mexican-race rootstocks. Choose low-salt fertilizers on marginal water and leach periodically.

---

6. Irrigation for a Dry-Hot Valley

In a hot-dry valley, **you control the water — this is your advantage over wet regions.** The goal is steady, sufficient moisture without waterlogging.

- Use **drip or micro-sprinkler**; keep water off the trunk.
- **Most critical period: flowering and early fruit set** — water stress here directly cuts yield. Never let trees go dry at bloom/set.
- **Peak demand** (hot, dry months): a mature full-canopy tree may need on the order of **150–200 L/tree/week** — refine with local data.
- **Do not over-irrigate.** Waterlogged roots invite root rot even in a dry region. Enough, not excess.
- Separate irrigation valves for young vs. mature trees.
- Where possible schedule by **evapotranspiration (ET)** data plus soil-moisture sensors, not a fixed calendar. **Managed deficit irrigation** can save water and control vigor — but never during bloom, fruit set, or rapid fruit growth.
- Test irrigation water yearly for salinity and chloride.

---

7. Fertility Management

7.1 Nitrogen — timed to the tree's cycle

Apply nitrogen at two precise windows (this beats the old late-winter/mid-summer split): 1. **Autumn flush** — feeds the shoots carrying next year's flowers. 2. **Early fruit set (spring)** — supports fruit retention and sizing.

Tie these to your **own** trees' observed flush and bloom timing.

N rates by tree age (starting points — adjust with leaf/soil tests):

Tree age	N / tree / year	≈ per Mu (56 trees @ 3×4 m)	≈ per Ha
Year 1	30–40 g	~2 kg/Mu	~30 kg/Ha
Year 2	~80 g	~4.5 kg/Mu	~67 kg/Ha
Year 3	~160 g	~9 kg/Mu	~133 kg/Ha
Year 4	~200 g	~11 kg/Mu	~167 kg/Ha
Mature	~0.5–1.0 kg	~28–56 kg/Mu	~420–830 kg/Ha

Avocado uses only ~50% of applied N; a mature orchard removes ~60–70 kg N/Ha in fruit, so ~120–180 kg N/Ha total applied per year is the normal professional range, tuned by testing. Split into 2–4 doses; no winter feeding; **avoid excess fast-release N** (it drives persea mite outbreaks).

7.2 Other nutrients

K (small fruit → K shortage), Ca (leaf-tip scorch; also helps soil structure/root health), Mg (interveinal chlorosis; ~2 kg $MgSO_4$/tree where deficient), Zn (small round fruit; foliar sprays), Fe (orange/red leaves — check drainage first), B (Mexican-race stocks forage poorly — supplement if low). P is rarely limiting; test first.

7.3 Leaf & soil testing

Sample recently matured spring-flush leaves near shoot tips once a year; test soil at the same time. Reference optimum leaf band: N 1.7%, P 0.26%, K 1.3%, Ca 1.14%, Mg 0.28%, Zn 31 ppm, Fe 100 ppm, B 40 ppm. *(Yunnan Avocado Co. can provide this testing service — 138-8726-4012.)*

7.4 Drone sprayers — useful, with cautions

Agricultural drones are increasingly used in Yunnan for foliar feeding and crop protection, and they can be genuinely valuable on sloping, terraced valley ground where ground rigs struggle. Before relying on them, consider:

- **Coverage of leaf undersides is limited.** Key avocado pests (persea mite, thrips) live on the **underside** of leaves, and drone spray falls mostly on the **top** surfaces. For these pests, drone application is often less effective than a well-directed ground sprayer.
- **Canopy penetration.** Dense avocado canopies are hard for drone downwash to penetrate; the inner and lower canopy may be under-treated.
- **Drift in valley wind.** The valley can be windy — spray drift wastes product and can harm neighbors, pollinators, and watercourses. Only spray in calm conditions.
- **Rate and water volume.** Drones use low water volumes; make sure the product label and rate are suitable, and calibrate carefully.
- **Best uses:** foliar nutrients, and even coverage over large or hard-to-access blocks. **Less suitable:** targeting underside-dwelling mites/thrips or dense mature canopies, where ground application still wins.

> *"A drone is a tool, not a magic wand. It's excellent for feeding the canopy across a big slope, and weak for the mites hiding under the leaves. Know which job you're doing."* — **Dr. Jonathan Teichroew (江博士)**

8. Pollination

- Interplant **10–15% B-type pollinizers** (Zutano, Fuerte, Bacon, Ettinger), spread **evenly** through the orchard.
- Ideal pollination weather: **18–30°C, >50% humidity** — a warm, sunny spring is generally favorable; guard against dry wind at bloom (windbreaks help).
- **Bees:** 1–2 hives per 2 Mu (≈15–30 hives/Ha) at bloom.
- Wild pollinators (flies, wasps, native bees) matter too — protect hedgerows and keep spray buffers.
- Strong autumn nutrition and adequate water going into bloom lift next year's set.

9. Pruning & Canopy Management

Prune every year, immediately after you finish harvesting the fruit — this is the most important pruning rule. Pruning right after harvest lets the tree pour its new-season energy into healthy growth and next year's crop, keeps the canopy open to light and air (healthier trees, less disease), and controls tree height so both the fruit and the harvest crew stay within easy reach. A tree left unpruned simply grows tall, shades itself, and gives you less fruit.

- **When is that?** Hass harvest timing in Yunnan varies with elevation and local micro-climate. In our river valley — and across most of Yunnan — the harvest window is roughly **October to December**, so that is when pruning should happen. **Prune each block as soon as it is picked.**
- Keep tree height to about **80% of the row spacing** so trees never crowd or shade each other.
- Disinfect pruning tools between trees to avoid spreading disease.
- With the recommended 3×4 to 4×6 m spacings you need **regular but manageable** pruning — open the canopy and control height — **not** the constant intensive pruning that ultra-high-density demands. This is exactly why we chose these spacings for a labor-short region.

> *"Prune the moment the fruit comes off. A tree pruned right after harvest rewards you next season; a tree left unpruned just grows tall, shades itself, and gives you less."* — **Dr. Jonathan Teichroew (江博士)**

---

10. Heat, Sun & Wind Protection

A hot-dry valley is hot, bright, and can be windy — all three stress trees, especially young ones. Protection here is a **worthwhile investment**, not an optional extra.

- **Shade cloth (35%) on young trees for the first 1–2 years protects against BOTH sun and wind.** It cuts sunburn on bright valley slopes and shelters young trees from drying, damaging wind. This one measure addresses two of the valley's main stresses at once — well worth the cost.
- **Hedgerows / windbreaks** — living hedgerows (or mesh) around and through the orchard give lasting wind protection, reduce fruit drop from wind, and cut water stress. Where the site allows, establish them; they pay for themselves over the orchard's life.
- **Reflective particle films** (calcium-carbonate type) sharply reduce sunburn fruit loss (one trial: 30% → 4% unmarketable) while allowing photosynthesis — cheap, effective protection for exposed blocks.
- **Whitewash** trunks/limbs after heavy leaf drop to prevent bark sunburn.

> *"In a hot, windy valley, shade cloth and a good hedgerow are not luxuries — they're insurance on your young trees. The growers who skip them replant the most."* — **Dr. Jonathan Teichroew (江博士)**

---

11. Frost Protection

- Risk begins below about **−2°C** sustained — in the valley this is mainly a **cold-pocket / low-ground** issue, so **site selection is the main defense.**
- Cold air flows downhill like water — design layout and keep clear air-drainage paths so it flows out.
- Keep lower canopy skirted to preserve those paths.
- After frost, **wait until summer** to prune dead wood.

---

12. Pest & Disease Management (IPM)

The dry climate keeps pressure lower than in wet regions, but stay vigilant.

Pest	Watch for	Manage
Persea mite	Leaf-underside feeding, every 7–10 days spring–autumn	Predatory mites; avoid excess fast-release N; water-spray undersides on small plantings; note drone limits (7.4)
Avocado thrips	Same season — manage with mites	Coordinate spray timing to protect predators
Caterpillars	Chewed leaves/fruit	Healthy trees tolerate some loss; biological control usually enough

Disease	Cause	Manage

Phytophthora root rot	Wet roots	Section 5.3 — rootstock + drainage + phosphonate + sanitation. Lower risk here than in hot, humid regions, but never ignored.
Anthracnose / stem-end rot	Fungi, mainly post-harvest after wet conditions	The dry climate is a big advantage; still prune deadwood, improve airflow, harvest dry, cool fruit fast

Principles: monitor co-managed pests together; rotate chemical classes; favor natural-enemy-safe materials; use cultural levers first, chemicals last.

---

13. Harvest — and a Strong Warning About Picking Too Early

- A hot, sunny, dry climate can produce excellent, rich fruit — but only if you **let the fruit mature on the tree.** In our river valley and most of Yunnan, the Hass harvest window is roughly **October to December** (it shifts with elevation and micro-climate).

What is "dry matter"? (the simple version)

Think of an avocado as filled with two things: **oil — the tasty, creamy part — and water.** As the fruit ripens *on the tree*, it slowly fills up with **more oil and less water.** "Dry matter" is simply a number that tells you how much of that good, oily, non-water part is inside. **More oil = higher dry matter = richer, creamier, better-tasting fruit.** A low number means a watery, hard, bad-tasting avocado; a high number means premium fruit. A cheap handheld meter reads this number in a few seconds. In short: **you are waiting for the fruit to fill up with oil before you pick it.**

> **⚠ DO NOT PICK TOO EARLY**
>
> **Picking avocados before they are mature is the most damaging mistake a grower can make — and it is unfortunately common among growers rushing to sell.** An avocado picked too early will **never ripen properly**: it shrivels, turns rubbery, and tastes bad. **In recent years, early-picked fruit has badly damaged Chinese consumers' confidence in home-grown avocados** — dragging down prices for every grower. One early-picked load can also lose a grower their own buyer for years.
>
> **Wait until the fruit has filled with oil — measured as DRY MATTER (see above), not by size or the calendar.** The premium-market minimum for Hass is about **23% dry matter**; a good hot-dry valley can readily reach 30%+ when you wait. Use an affordable handheld **NIR dry-matter meter** to check before you pick. If you are unsure, **do not guess — contact us at 138-8726-4012 and we will help you test.**
>
> *"The fastest way to destroy the price of Chinese avocados is to pick them green. One bad, rubbery fruit and the buyer never trusts the region again. Patience at harvest is worth more than any fertilizer."* — **Dr. Jonathan Teichroew (江博士)**
>
> **For the best prices, sell through Yunnan Avocado Co. (云南牛油果公司).** We help our growers time the harvest to maturity and to the market, verify quality, and reach buyers who pay premium prices for properly-matured fruit. **Contact us before you harvest: 138-8726-4012.**

- Harvest in dry conditions; empty picking bags into bins (never pile fruit on the ground); shade fruit within minutes of picking.

---

14. Post-Harvest

- **Cool fruit within 6 hours** of harvest — delays sharply increase decay.
- Store around **5°C**; do not go below (chilling injury).
- Ethylene treatment triggers uniform ripening before retail.
- No post-harvest fungicides are registered in most markets — quality is won *before* harvest plus correct cooling.

---

15. Annual Task Calendar (adapt to your site)

Task	Timing	Section
Major pruning	**Immediately after harvest** (≈Oct–Dec in our valley)	9
N fertilizer — fruit-set dose	Spring, at early fruit set	7.1
Pollination / bee hives	Spring bloom	8
Irrigation — peak demand	Hot, dry months	6
Manage irrigation through the monsoon rainy season	Rainy months (reduce water, ensure drainage)	6
N fertilizer — autumn-flush dose	Autumn flush	7.1

Phosphonate (root-rot)	After spring flush hardens (2× if bearing heavily)	5.3
Pest monitoring (mites/thrips)	Every 7–10 days, spring–autumn	12
Leaf & soil testing	Once yearly	7.3
Harvest	≈Oct–Dec; by verified dry matter — never rush	13

*Timing shifts with elevation and site across Yunnan. For a calendar tuned to your exact orchard, contact Dr. Jonathan Teichroew and Yunnan Avocado Co. at 138-8726-4012.***

---

16. Expected Yields (planning figures)

Level	Per Ha	Per Mu	Notes
Baseline / early years	6–8 t	400–530 kg	Realistic first productive years and off-years
Well-managed target	**8–15 t**	**530–1,000 kg**	Plan the business around this for mature Hass on improved rootstock
Optimal	20–23 t	1,330–1,530 kg	Everything right: improved rootstock, no root-rot loss, precise water/nutrition, good management

A mature tree yields ~70–80 kg/year in a good orchard. **Warn growers about two realities:** (1) **alternate bearing** — Hass swings heavy/light year to year, so quote a *two-year average*; (2) the **year-6 income ramp** — meaningful profit arrives around year 6, so plan finances accordingly. Improved rootstock and a dry-valley climate are what move growers toward the upper end of these ranges.

> *"Good rootstock, a dry valley, and patience at harvest — that's the difference between 500 kg a Mu and 1,000. The tree is the same. The decisions around it are not."* — **Dr. Jonathan Teichroew (江博士)**

---

17. Quick Reference — The Key Steps at a Glance

This is a short summary of the whole guide: the essential steps to establishing and running a healthy, productive avocado orchard in Yunnan. It is meant to be simple enough to post in the field, share at a village meeting, or hand to a grower who wants the key points on a single page. Each step is explained in full in the section noted.

1. **Choose the right site — hot and dry.** Avocado thrives in hot-dry valleys with good drainage; hot, wet conditions bring disease. *(Climate; Section 1)*
2. **Start with strong, improved rootstock trees.** The rootstock beneath the ground sets the ceiling for the whole orchard's health and yield. *(Section 2)*
3. **Give trees room you can manage — 3×4, 4×4, or 4×6 m.** Match spacing to your available labor; avoid ultra-high density. *(Section 3)*
4. **Plant on a mound and keep roots draining.** Never let roots sit in water. *(Sections 4–5)*
5. **Mulch around each tree — but keep it 15 cm clear of the trunk.** *(Sections 4–5)*
6. **Protect young trees from sun and wind** — 35% shade cloth for the first 1–2 years, plus windbreaks or hedgerows. *(Section 10)*
7. **Water in the dry season; never waterlog in the rains.** Water is most critical at flowering and fruit set. *(Section 6)*
8. **Feed at the right times, and test leaves and soil.** Two nitrogen windows: autumn flush and early fruit set. *(Section 7)*
9. **Check leaf undersides for mites every 7–10 days.** Act before pests build up. *(Section 12)*
10. **Prune every year, right after harvest,** keeping tree height to about 80% of the row spacing. *(Section 9)*
11. **Never pick too early — wait until the fruit fills with oil (dry matter).** Early picking ruins both fruit quality and buyer confidence. *(Section 13)*
12. **Cool and handle the fruit carefully after harvest.** *(Section 14)*

Scan to visit growyunnan.verdantagsolutions.com

For the complete guide, practical tools, and updates, scan the code above or visit growyunnan.verdantagsolutions.com

18. In Summary

Growing world-class avocados in Yunnan is not a mystery — it is the result of a series of sound decisions made in the right order: the right hot-dry site, strong rootstock, a manageable planting density, careful water and soil management, timely pruning and feeding, watchful pest control, and — above all — the patience to let the fruit mature before harvest. Each of these is within reach of any committed grower, and together they are what separate an average orchard from a truly excellent one.

Yunnan has the climate, the land, and increasingly the support to become a leading avocado region. With sound practices like those in this guide, growers here can produce fruit that stands alongside the best in the world — building lasting value for farming families and for the region as a whole.

The complete, up-to-date guide, along with practical tools and further support for growers, is available online at growyunnan.verdantagsolutions.com.

Compiled July 2026 by Yunnan Avocado Co. Growing science adapted from UC (California), Israel, South Africa (SAAGA), Australia, Chile, and established avocado research; regional guidance for the Jinsha River (金沙江) dry-hot valley, Taoyuan · Yongsheng · Lijiang. Full guide online: growyunnan.verdantagsolutions.com · Seedlings & grower support: 138-8726-4012.