

Peppers Galore • Myth vs. Fact Cheat Sheet

John Story · 500+ varieties
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Every ✓ below is cited – numbers in gold point to the reference list at the bottom. Keep this with your take-home seeds.

✗ "The seeds are the hottest part."

✓ Capsaicinoids are made and stored in the **placenta and white ribs**; seeds are only hot by contact. Milder sauce? De-rib, don't just de-seed. [1]

✗ "The name tells you where a pepper is from."

✓ Almost never. *C. chinense* ("from China") is **Amazonian** – a 1776 naming error. The ghost pepper's superhot lineage traces to **Trinidad's Caribbean aji**, carried to India in the 1840s and renamed for 170 years since (devil's pepper → Scorpion → Jolokia → Reaper → Pepper X). [1,2,3]

✗ "Peppers appreciate afternoon shade."

✓ Light is yield: **1% more light ≈ 0.7-1% more harvest** in fruiting vegetables. Target full sun (DLI 20-30+ mol·m⁻²·d⁻¹). Shade cloth (30-40%) is a **heat-wave tool only** – sustained days above ~91°F kill fruit set, not the plant. [6,7,8]

✗ "A 5-gallon bucket is plenty."

✓ Across 65 studies, **doubling root volume added ~43% biomass**. Pepper roots are fibrous and shallow – go **wide, 15 gallons and up**, in compost-rich, fluffy, free-draining mix. [1,9]

✗ "Peppers are light feeders – big dose every 2 weeks."

✓ Feed **dilute, every watering**. Plants take up N-P-K near a **3-1-2 label ratio**; anything from 3-1-2 to 1-1-1 works – only dosage changes. Start seedlings ~1/10 strength. [10]

✗ "Switch to a bloom booster when flowers show."

✓ Phosphorus is a mineral, **not a growth regulator** – extra P can't force flowers, garden soils are rarely P-deficient, and excess P **shuts down mycorrhizae** and pollutes the Bay. (Same logic applies to Epsom salts as a cure-all.) [11,12]

✗ "My climate can't grow superhots."

✓ The genus evolved at **65-95°F year-round**. Give plants ~**3 months in that window** and you get full-size, loaded plants. Cool Alameda summers are an advantage – heat kills fruit set, mild 70s never did. [1,5,8]

✗ "Peppers grow slow – start seeds in December."

✓ **4-6 weeks indoors is enough** with good conditions. Germinate at **85°F** (8 days at 86°F vs. 25 days at 59°F); keep mix at field capacity (squeeze test: 1-2 drops); blast seedlings with light from cotyledon emergence. [5,13]

✗ "Top your peppers for double the yield."

✓ No extension service recommends it – trials are split (some show **lower yield**), effects are cultivar- and season-dependent, and topping reliably **delays first harvest**. Peppers already branch at every fork. [14,15]

✗ "My habanero made this year's bells hot!"

✓ Impossible – this year's flesh is the **mother plant's own tissue**; a cross changes the **seeds** (next year's plants). But crossing is real: bees drive **2-90% outcrossing, avg 42%**. Saving seed? Bag or isolate flowers – and sow extras. [1,16,17]

≈ "Stress your plants – suffering makes them hotter."

✓ **Partly true**. Moderate water deficit raised capsaicinoids in habanero trials, but the response is cultivar-dependent (stress **lowered** heat yield in Bhut Jolokia), and severe stress loses both yield and heat. Genetics dominates – pick the variety for the heat. [18,19]

85°F

germination sweet spot
(heat mat + probe)

30-40

DLI (mol·m⁻²·d⁻¹) for
seedlings, matching plant-
out sun

65-95°F

× 3 months = all the climate
you need

15 gal+

wide containers, compost-
rich mix

3-1-2 → 1-1-1

dilute fertilizer, every
watering

91°F+

sustained = flower drop;
30-40% shade cloth, heat
waves only

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Grow the plant well. Pick the variety for the heat. Pay attention – to the plant, not the lore.

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