BountiGel

Soil Aquamer® for Young Fruit Trees

Product Data Sheet — Newly Transplanted & Young Orchards

ABSORBS
Up to 250×
LASTS
Up to 3 years

Product Overview

BountiGel is a non-toxic super-absorbent soil amendment—an "Aquamer"—designed to store water and nutrients in the root zone and release them back to the plant as needed. For young and newly transplanted fruit trees, it directly addresses the single biggest cause of failure during establishment: inconsistent root-zone moisture.

Product	BountiGel® — Aquamer® soil amendment (Carbon Neutral Ag Sciences)
Forms available	BountiGel-G (granular, 1–2 mm) — for tree transplants and root-zone placement. BountiGel-P (powdered) — mixes with water or liquid fertilizer for delivery as a liquid suspension. BountiGel-M is also referenced by the manufacturer for specific applications; contact the manufacturer for details.
Active ingredient	100% potassium polyacrylate (propionic acid, crosslinked potassium salt)
Water absorption	Up to 250× its weight in water; repeatedly absorbs and releases
Longevity	Up to 3 years in tree applications before reapplication
Safety	Non-toxic; safe for soil and food crops; biodegrades safely. Contains NO polyacrylamide.
Certifications	Approved by the Compost Manufacturing Alliance. Manufacturer offers a money-back guarantee — contact for details.

+20%	**-25%**	**$0.70**
Transplant survival rate improvement	Water usage reduction (UC Davis study)	Cost per tree at transplant

How BountiGel Works

BountiGel's potassium-polyacrylate polymer absorbs water on irrigation or rainfall and slowly releases it back to the root system between watering events. Its double cross-linked structure keeps it intact through repeated wet/dry cycles, so a single application keeps working through the critical establishment years.

Mechanism	Function
Water reservoir	Crosslinked polymer absorbs irrigation or rainfall, stores water at the root zone, and releases it back as the tree draws moisture from the soil.
Double cross-linked structure	Maintains mechanical strength through repeated absorption/release cycles—remains effective for up to 3 years on trees.
Nutrient retention	Holds applied fertilizer in the root zone alongside water, extending fertilizer effectiveness and reducing leaching.
Stress buffering	Stabilizes soil moisture between irrigations; reduces heat stress and softens the impact of saline irrigation water on young roots.

Importantly, BountiGel does not contain polyacrylamide, the material commonly used in older hydrogel products and viewed as hazardous.

Benefits for Young & Newly Transplanted Fruit Trees

The 1–3 year window after transplanting is the highest-risk and highest-cost phase in any orchard's life. Root systems are small, water demand is highly sensitive to irrigation timing, and a single dry-down or heat event can mean replacement. BountiGel is positioned specifically for this window.

Benefit	Reported Result	Why It Matters for Young Trees
Higher transplant survival	**Up to +20% (reseller)**	Newly planted citrus, avocado, almond, and olive trees are vulnerable to dry-down events in the first season; consistent root-zone moisture protects the establishing root system.
Reduced water use	**Up to -25%**	Young trees with smaller root systems can't reach deep moisture; BountiGel keeps water available between irrigation cycles, allowing wider intervals.
Yield improvement	**+9% (mfr tomato study)** • **up to +70% (avocado, MX, reseller)**	Better moisture and fertilizer retention through the establishment years accelerates time-to-production.
Heat stress reduction	**Significant**	Less fruit drop and leaf scorch during summer heat events while the tree is still establishing.
Salinity buffering	**Documented**	Reduces the impact of saline irrigation water—particularly relevant for avocado, which is highly chloride-sensitive.
Reapplication frequency	**Every 2–3 years**	A single application at transplant covers the critical 2–3 year establishment window.

Why this matters for young trees

Replanting a failed tree typically costs $30–$80+ per tree once you factor in the tree, labor, water for catch-up establishment, and the lost production year. At roughly $0.70 per tree for BountiGel, even a modest improvement in survival pays back the application many times over — before counting any water savings or yield benefit.

Application Guide — Transplant

BountiGel-G (granular, 1–2 mm) is the form used for fruit trees. There are four practical placement methods at or around transplant:

Method	How to Apply	When to Use
Pre-plant shank/knife-in	Shank or knife-in granular product (BountiGel-G) into the planting line before transplant, placing material at root-ball depth — typically 3–6" at the root zone.	Best for new orchard blocks where planting lines can be prepared in a single pass.
Pre-plant liquid suspension	Mix BountiGel-P (powdered form) with water — or with liquid fertilizer — and apply as a liquid suspension into the planting line.	Useful when equipment for granular shanking isn't practical, or when co-applying liquid fertilizer.
At-planting (in-hole)	Place granular product into the planting hole and mix lightly with backfill at the 3–6" root-zone depth so material is in contact with the root zone, not against the trunk.	Practical for individual transplants and replants in established orchards.
Post-plant slurry	Mix granular product with water to form a slurry and apply at the base of each tree. Subsequent irrigations rehydrate the gel.	Useful when the trees are already in the ground and you want to add BountiGel without disturbing roots.
Post-plant side-dress	Side-dress granules or liquid suspension close to the transplant line, at the 3–6" root-zone depth.	Alternative post-plant approach using conventional dry or liquid equipment.

Key tip: Place BountiGel in contact with where the root system will grow into—at the depth of the root ball or just below. Avoid concentrating it against the trunk.

Suitable Tree Crops

BountiGel-G is positioned by the manufacturer for the following tree and perennial crops at transplant:

Crop	Typical Rate at Transplant	Notes for Young Trees
Avocado	~50 g/tree at transplant; ~$0.70/tree	Chloride-sensitive — salinity-buffering benefit is particularly valuable in arid-irrigation regions.
Citrus (orange, lemon, mandarin)	~50 g/tree at transplant; ~$0.70/tree	Heat and dry-down events during the establishment year are the leading cause of replants—BountiGel directly mitigates this.
Almond	~50 g/tree at transplant; ~$0.70/tree	Extends effective fertilizer use during the high-investment establishment years.
Olive	~50 g/tree at transplant; ~$0.70/tree	Supports establishment in low-rainfall and rocky soils where moisture-holding capacity is naturally limited.
Grape (vine)	Confirm rate with distributor	Granular BountiGel-G is suited to vines; useful at vineyard establishment and replant sites.

Cost, Coverage & ROI

Cost per new tree	Approximately $0.70 per transplant for almond, citrus, avocado, and olive (reseller field experience — confirm with current quote)
Coverage per acre	1–2 bags (22–44 lbs) of BountiGel treats one acre. The manufacturer's agronomist creates the specific application rate for your site.
Application interval	A single 50 g/tree application is good for 2–3 years on trees before reapplication
Manufacturer ROI methodology	Net benefit = (yield uplift × crop price) + water savings − BountiGel cost. Published tomato example (CA 2022): +9% yield, $473/ac revenue + $200/ac water savings − $100/ac product cost = $573/ac net, ≈573% ROI (before fertilizer savings).

Simple payback math: On a 100-tree replant block at $0.70/tree, the total BountiGel cost is approximately $70. A 20% improvement in transplant survival saves 20 replants. At a conservative $40 per replant tree, that's roughly $800 in avoided losses, before counting water savings or yield uplift.

Handling, Storage & Registration

Storage	Store dry. Avoid moisture in storage — the product will absorb and swell on contact with water.

Co-application	Granular form blends with fertilizer for single-pass application. Powdered form can be mixed with water or liquid fertilizer for liquid-suspension delivery.
Equipment	Conventional shanking/knife-in equipment for granular; standard liquid-application equipment for liquid suspension. The manufacturer's agronomist creates the application strategy for your specific site.
Registration	California Reg. BL-264456 • Arizona Reg. 6833 BG-G 03252015. Compost Manufacturing Alliance approved. Confirm current registration in your state before commercial use.
Safety	Non-toxic, approved for use with food crops. Refer to manufacturer SDS for full handling, PPE, and disposal guidance.
Manufacturer contact	Carbon Neutral Ag Sciences • carbonneutralagsciences.com • info@globalcnas.com • +1 (732) 294-1979

Disclaimer

This data sheet is a grower-facing reference compiled from publicly available materials at carbonneutralagsciences.com (manufacturer) and authorized reseller channels including Maskell Growers, plus cited third-party studies. Performance figures attributed to the manufacturer come from the carbonneutralagsciences.com product, ROI, and crop-data pages; per-tree pricing and the +20% transplant survival figure are based on reseller field experience and the manufacturer should confirm rates for your specific site. This reference does not replace the official manufacturer Technical Data Sheet, label, or Safety Data Sheet. Results vary by site, soil, irrigation method, and crop. Always follow the current product label, confirm registration status in your state, and consult Carbon Neutral Ag Sciences or an authorized distributor for current technical guidance.

Sources: carbonneutralagsciences.com (product, ROI, and crop-data pages) • maskell-growers.com (BountiGel FAQ and reseller field experience).