



INDEPENDENT UNIVERSITY TRIAL
2024 RESULTS REPORT

More Peanuts From One Pass of Calcium

Advanced-Cal liquid calcium in the University of Florida's replicated peanut trial — Jay, Florida, 2024 season

+866 lb/ac

vs. untreated check

6,300 lb/ac

top yield in the trial

\$5.50

back per \$1 spent*

Full results, methods, and the honest fine print inside.

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*At 3 gal/ac, 275-gal tote pricing, \$500/ton farmer stock — worked example on page 4.

More Peanuts From One Pass of Calcium

Advanced-Cal liquid calcium vs. gypsum — University of Florida trial, Jay, FL, 2024

+866 lb/ac

over the untreated check

at 3 gal/ac, one pass at pegging

6,300 lb/ac

top yield in the trial

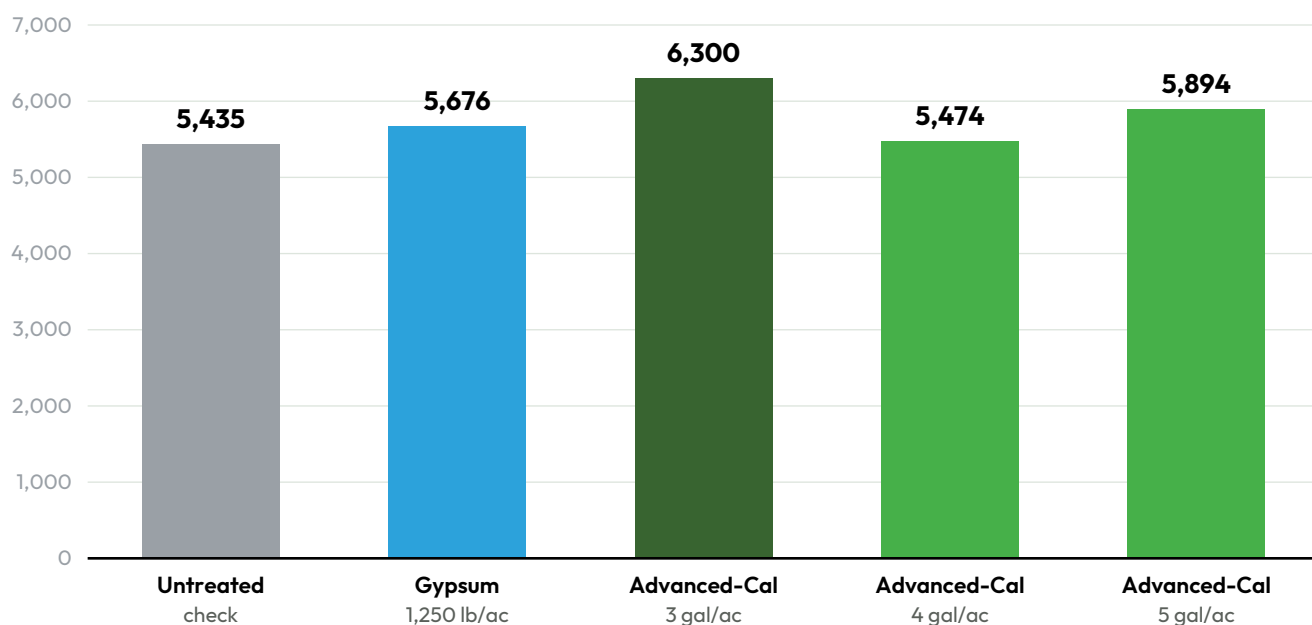
3.15 tons/ac at 10.5% moisture

+624 lb/ac

over 1,250 lb/ac of gypsum

3 gallons vs. well over half a ton

Pod yield by treatment (lb/ac at 10.5% moisture)



Source: University of Florida / IFAS West Florida Research and Education Center, Jay, FL — Study 113-24, led by Dr. Hardeep Singh. Each bar is the average of 4 replicated plots, hand-harvested and weighed by university staff.

What the trial showed

- Advanced-Cal at 3 gal/ac was the top treatment in the trial: 6,300 lb/ac, 866 lb/ac more than the untreated check (+16%).
- Three gallons of liquid calcium out-yielded 1,250 lb/ac of dry gypsum by 624 lb/ac — one sprayer pass instead of spreading well over half a ton of product.
- Every Advanced-Cal rate matched or beat the untreated check, and grade quality (TSMK) held steady or improved across all calcium treatments.

Full results

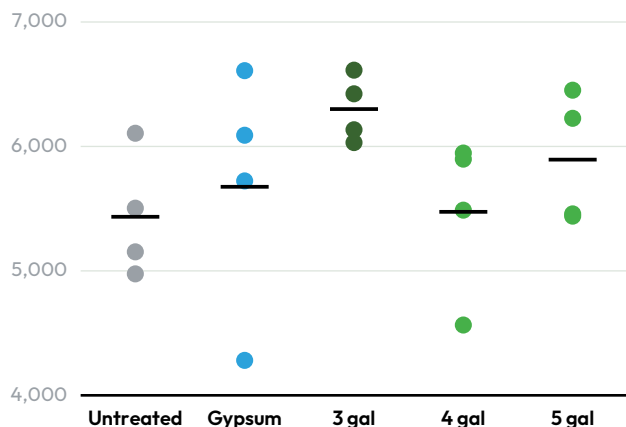
Treatment	Rate	Yield (lb/ac)	vs. untreated	Tons/ac	TSMK (%)
Untreated check	—	5,435	—	2.72	72.3*
Gypsum	1,250 lb/ac	5,676	+241 lb	2.84	73.7
Advanced-Cal	3 gal/ac	6,300	+866 lb	3.15	73.7
Advanced-Cal	4 gal/ac	5,474	+40 lb	2.74	72.9
Advanced-Cal	5 gal/ac	5,894	+459 lb	2.95	73.1

* Untreated grade is a 3-plot average — one check plot's grading sample was not available. TSMK (total sound mature kernels) is the percentage of the sample that grades as sound, mature kernels: the number your price is built on.

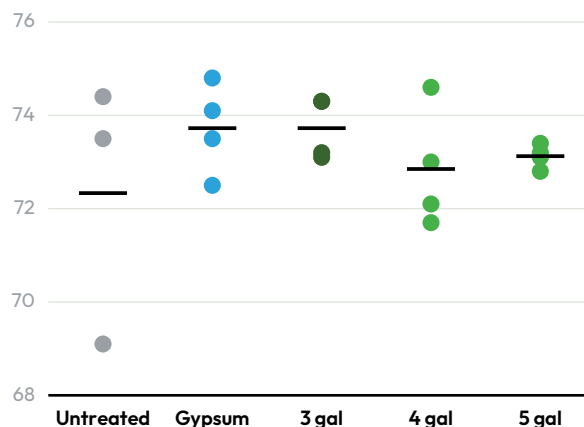
Behind the averages

Averages can hide a lucky plot. These show every individual plot in the trial — Advanced-Cal at 3 gal/ac finished 1st or 2nd out of five treatments in all four replication blocks.

Plot-by-plot yield (lb/ac)



Grade quality (TSMK, %)

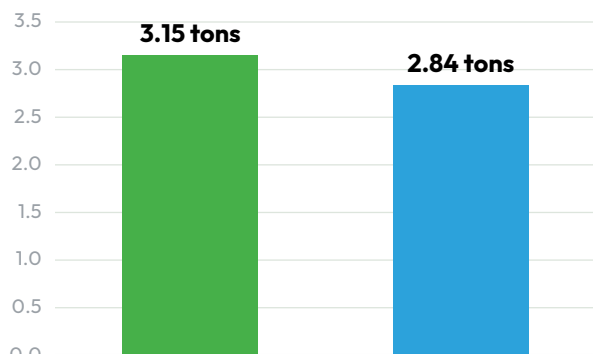


Dots are individual plots; the black dash is the treatment average. Yield axis starts at 4,000 lb/ac and the grade axis at 68% so the spread is visible.

Head-to-Head: 3 Gallons vs. 1,250 Pounds

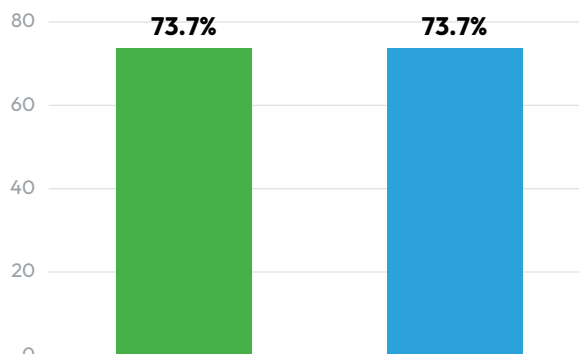
The comparison growers ask about most — Advanced-Cal at its winning rate against a full 1,250 lb/ac gypsum program, same field, same season.

Peanut production (tons/ac)



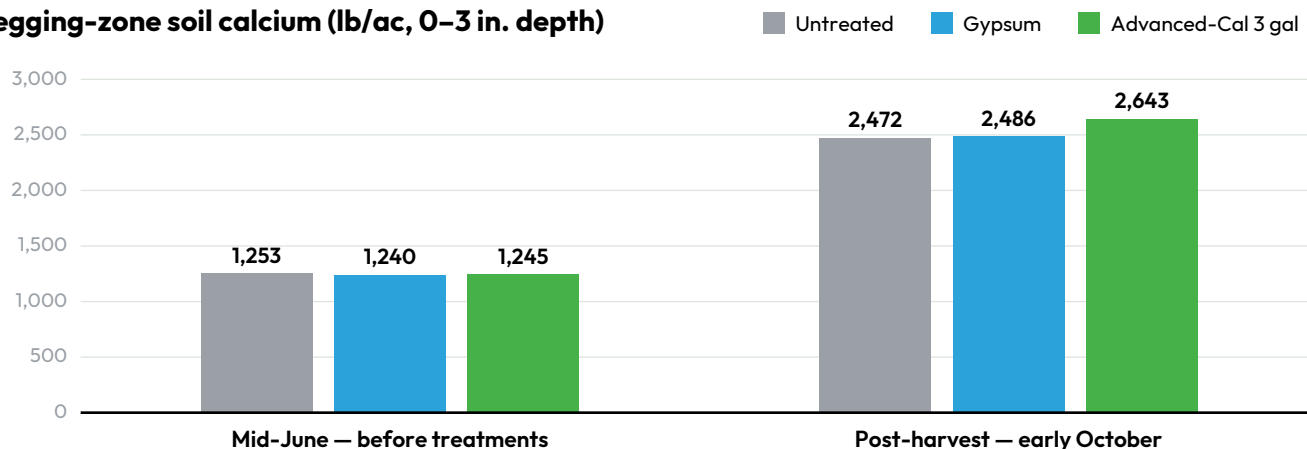
+0.31 tons/ac (+624 lb) from 3 gallons in the spray tank instead of 1,250 pounds through a spreader.

Grade quality (TSMK, %)



Identical grade — the liquid program gave up nothing in kernel quality against the dry standard.

Pegging-zone soil calcium (lb/ac, 0–3 in. depth)



- By harvest, one 3-gal pass of Advanced-Cal left more plant-available calcium in the pegging zone than the 1,250 lb/ac gypsum program (2,643 vs. 2,486 lb/ac) — from roughly 1/40th the product weight.
- We show the untreated check on purpose: soil calcium readings rose across the whole field as the season progressed. The honest comparison is where each program finished relative to check — and the liquid pass led the field.

June samples reported by the lab in ppm and converted to lb/ac ($\times 2$); post-harvest samples reported directly in lb/ac by the same lab. Both are Mehlich-3 extractions from the top 3 inches, averaged across 4 plots.



How the trial was run

Where	UF/IFAS West Florida Research and Education Center, Jay, FL — sandy soil, pH 6.2–6.5
Design	5 treatments × 4 replicated plots, randomized; university staff ran every operation
Crop	Georgia-12Y runner peanuts, planted May 1 at 7 seed/ft; harvested October 3, 2024
Application	Advanced-Cal sprayed once at early pegging (June 27) in 10 gal/ac of water; gypsum spread June 20
Everything else equal	All plots received the identical UF herbicide, fungicide, and insecticide program

What the winning rate costs

Advanced-Cal at 3 gal/ac runs about \$39/ac at 275-gal tote pricing (\$13.09/gal). At a \$500/ton farmer-stock price, the 866 lb/ac gain in this trial is worth about \$217/ac — roughly \$5.50 back for every dollar spent, from a single pass that goes out with equipment you already run.

The same gain at three peanut prices

Farmer-stock price	Value of +866 lb/ac	Applied cost	Return per \$1
\$450 / ton	+\$195 / ac	\$39 / ac	\$5.00
\$500 / ton	+\$217 / ac	\$39 / ac	\$5.50
\$550 / ton	+\$238 / ac	\$39 / ac	\$6.10

The honest fine print: these are one year of results from one site, from small replicated plots. Yield differences of this size can sit within normal field-to-field variability, and your soil, weather, and starting calcium level will shape what you see. That's exactly why we start with a soil test instead of a blanket rate.

Find out what your soil actually needs

Request a soil analysis and we'll read it with you — then build the calcium program to fit your field, not the other way around. agritecint.com