



GENERAL
HYDROPONICS®

PRO FEEDCHART USAGE GUIDE

This explains how to interpret and use General Hydroponics Pro Feedcharts. It is intended as a companion piece to General Hydroponics Pro feedcharts for FloraPro, Flora Series, Cocotek and Maxi Series.

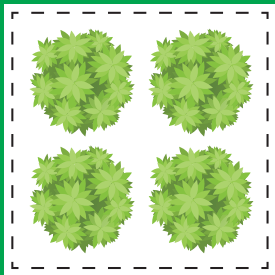
PROFESSIONAL FEED-CHART KEY

Aggressive / Medium / Light Feed – each set of professional feedcharts outlines three feed strengths:



AGGRESSIVE FEED

Best for larger, multi-topped plants, where planting density is low and crops are irrigated less frequently.

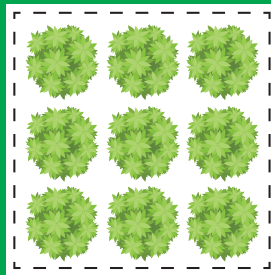


Plant density 0.25-4 per 16 sq ft



MEDIUM FEED

Suitable for most modern production systems. Best for medium-sized plants and medium planting density, where crops are irrigated frequently.

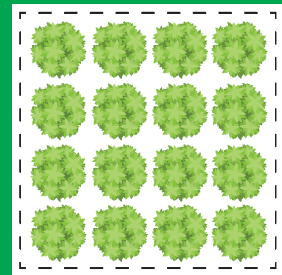


Plant density 4-10 per 16 sq ft



LIGHT FEED

Best for smaller plants, grown in high-density layouts and using pulse feed or very high-frequency, low-volume irrigation events.



Plant density 11-20 per 16 sq ft

RECIPES

GENERAL HYDROPONICS® FLORA SERIES	
Professional 6-Part Nutrient System	
GROW (18H PHOTOPERIOD)	
FEED	
Growth stage	Early Growth
Total Nitrogen (ppm)	140
EC range (mS/cm)	1.3-1.6
PPM range (500 scale)	600-800
Phosphorus (mg/L)	1.8 mg/L
Potassium (mg/L)	5.2 mg/L
Calcium (mg/L)	2.8 mg/L
Magnesium (mg/L)	2.0 mg/L
Iron (mg/L)	1.0 mg/L
Copper (mg/L)	0.5 mg/L
Zinc (mg/L)	0.5 mg/L
Boron (mg/L)	0.5 mg/L
Molybdenum (mg/L)	0.5 mg/L
Silica (mg/L)	0.5 mg/L
Chlorophyll (mg/L)	0.5 mg/L
Carotenoids (mg/L)	0.5 mg/L
Protein (mg/L)	0.5 mg/L
Enzymes (mg/L)	0.5 mg/L
Antioxidants (mg/L)	0.5 mg/L
Flavonoids (mg/L)	0.5 mg/L
Terpenes (mg/L)	0.5 mg/L
Alkaloids (mg/L)	0.5 mg/L
Stressors (mg/L)	0.5 mg/L
Pathogens (mg/L)	0.5 mg/L
Parasites (mg/L)	0.5 mg/L
Viruses (mg/L)	0.5 mg/L
Bacteria (mg/L)	0.5 mg/L
Fungi (mg/L)	0.5 mg/L
Insects (mg/L)	0.5 mg/L
Mites (mg/L)	0.5 mg/L
Nematodes (mg/L)	0.5 mg/L
Other (mg/L)	0.5 mg/L

The Growth Stage: This row calls out both the stage of growth (Seedling, Early Growth, Early Bloom, etc.) as well as the fertilizer recipe that is most suitable to support the needs of the crop at a given growth stage. "Recipe" refers to a unique fertilizer composition or concentration. For example, Late Growth refers to a full-strength, high-nitrogen vegetative recipe, while Late Bloom refers to a low-nitrogen, high-phosphorus and high-potassium recipe.

Total Nitrogen: Should peak during the Late Growth phase and slowly drop over the duration of the Bloom phase. Use Total Nitrogen to assess how suitable a recipe is for vegetative or generative production within a given feed strength.

EC/PPM ranges: These values are intended for use as a quick check to ensure the fertilizers have been diluted accurately. Results will vary slightly depending on starting water quality. The low value of each range represents the fertilizer conductivity alone, while the high value of each range represents medium-hardness water.

GENERAL HYDROPONICS® FLORA SERIES	
Professional 6-Part Nutrient System	
GROW (18H PHOTOPERIOD)	
FEED	
Growth stage	Seedling
Total Nitrogen (ppm)	60
EC range (mS/cm)	0.6-0.8
PPM range (500 scale)	300-400
Phosphorus (mg/L)	2.5
Potassium (mg/L)	2.5
Calcium (mg/L)	2.5
Magnesium (mg/L)	2.5
Iron (mg/L)	2.5
Copper (mg/L)	2.5
Zinc (mg/L)	2.5
Boron (mg/L)	2.5
Molybdenum (mg/L)	2.5
Silica (mg/L)	2.5
Chlorophyll (mg/L)	2.5
Carotenoids (mg/L)	2.5
Protein (mg/L)	2.5
Enzymes (mg/L)	2.5
Antioxidants (mg/L)	2.5
Flavonoids (mg/L)	2.5
Terpenes (mg/L)	2.5
Alkaloids (mg/L)	2.5
Stressors (mg/L)	2.5
Pathogens (mg/L)	2.5
Parasites (mg/L)	2.5
Viruses (mg/L)	2.5
Bacteria (mg/L)	2.5
Fungi (mg/L)	2.5
Insects (mg/L)	2.5
Mites (mg/L)	2.5
Nematodes (mg/L)	2.5
Other (mg/L)	2.5

Weekly vs Condensed Feed-Charts: Each set of professional feedcharts features a long-form version, which divides each fertilizer recipe by week from the Seedling/Cuttings stage through Harvest. There are also condensed charts, with fewer recipes, geared toward key growth stages. These are intended for large-scale commercial operators who require simplified fertilizer recipe counts for complex fertigation systems.

CULTIVATION GUIDE



GROW (18H Photoperiod)

Seedling/Clone

Recipe Description: Low strength fertilizer charge for propagation

When to use: Initial drench of nursery plugs and flats for seed or cutting production

Tips and Tricks: Best used to prepare or "prime" plugs or seedling mixes. Once roots or true leaves have emerged, transition to the Early Growth recipe



Early Growth

Recipe Description: Low- to medium-strength. High-nitrogen fertilizer builds leaves, stems and roots

When to use: The first few feedings once roots or true leaves have emerged

Tips and Tricks: Move onto the higher rate of Early Growth (week 3, only on weekly charts) or skip directly to the Late Growth recipe once crops have acclimated and begin to root through substrate



Late Growth

Recipe Description: Full-strength, high-nitrogen vegetative recipe. Builds leaves, stems and roots

When to use: On fast-growing, established crops with a developed root system

Tips and Tricks: Not appropriate for freshly rooted seedlings/cuttings. Allow crops to acclimate, harden off, and put on some growth before switching to the Late Growth recipe



BLOOM (12H Photoperiod)

Early Bloom

Recipe Description: Intermediate nitrogen levels. Balances crops' transitional growth and development needs

When to use: From the first day of flower initiation (12:12 photoperiod) through the second week of flower, on a standard 9-week flower cycle

Tips and Tricks: For 8-week strains: subtract one week of Early Bloom recipe from feed program



Mid Bloom

Recipe Description: High phosphorus and potassium levels, reduced levels of nitrogen. Encourages crop to set flowers

When to use: Weeks 3 through 5 of flower

Tips and Tricks: For 10+ week strains: add additional weeks of Mid Bloom recipe as needed, following Early Bloom in feed program



Late Bloom

Recipe Description: Further reduction in nitrogen levels encourages crops to remobilize nutrients from source to sink tissues (leaves to flowers), encouraging flower bulking and maturation

When to use: Weeks 6 and 7 of the flower cycle

Tips and tricks: Consider further decreasing nitrogen levels at week 6 (moving down from the aggressive to medium Late Bloom recipe, for example) if foliage is overly dark green. This is especially important for nitrogen-sensitive strains



RIPEN

Recipe Description: Final reduction in nitrogen levels. Drives crops to remobilize nutrients from leaves to flowers, encouraging flower bulking and maturation

When to use: Week 8 of flowering

Tips and tricks: Noticeable leaf senescence should be observed at this cropping stage. If foliage is still dark green, consider reducing rates of fertilization on future cropping cycles



FLUSH

Recipe Description: Clear, pH-adjusted water. Flushing agent recommended. See FloraKleen

When to use: The final week of flowering

Tips and tricks: Flushing becomes more important if fertilizers have been chronically overapplied. If your crops are finishing dark green, and flower quality is not acceptable, consider lowering rates of fertilization, especially during Late Bloom. Periodic flushes earlier in the cropping cycle can be used to correct overapplication of fertilizers. See fine-tuning below

HAWTHORNE™



Guaranteed By: General Hydroponics
2877 Giffen Ave., Santa Rosa, CA 95407 (866) 839-8518.
©2020 General Hydroponics. World rights reserved.

Feeding charts are recommendations only. Adjustments may be needed based upon environmental conditions, individual grow structure, and use of additional products. Actual results may vary.

GH_FeedChartUsageGuide_200908