

# Nutrients

## Guide to using CityGreen's nutrients



*Pak Choi grown using Greens & Nutes in a soilless mix of Cocopeat and Gravel*

## Understanding Plant Nutrition

Like humans, plants need food too. With the right nutrients, your plants will grow better, and produce more yield.

For wholesome growth, plants need a balanced mix of various different kind of nutrients. The nutrients required in maximum quantity are Nitrogen (N), Phosphorus (P), and Potassium (K), commonly referred to as NPK. Apart from NPK, plants may also need other macro nutrients like Sulphur, Calcium, Magnesium, and trace amount of micro nutrients like Iron, Zinc, Copper, Manganese, Boron, Molybdenum, and Chlorine.

**N**

### NITROGEN

Promotes vegetative growth. Use for larger leaves, lush green plants.

**P**

### PHOSPHORUS

Promotes reproductive growth. Use for more and bigger fruits and flowers.

**K**

### POTASSIUM

Promotes overall health. Needed during all phases of plant's lifecycle.

**NPK**

### NPK Combo Pack

Use it if you are a beginner or if you are growing a mix of different plants.

**Symphony**

### Symphony Combo Pack

Use it if you are an expert or if you are growing a particular variety of crops.

**Nutes**

### Nutes (Micronutrients)

Use in case of micronutrient deficiency signs in your plants.

## Why did my plant die?

Nutrient is only one part of the equation. There are other factors too that you should care about.

**Nutrients:** Unlike humans, plants cannot emit food. If they take in extra nutrient, it will start showing as brown colour at the edges of leaf. If the concentration is too high, the plant may die.

**pH:** Plants survive in slightly acidic pH. If the pH is not in the right zone, no matter how much nutrient you provide, plant roots may not be able to absorb it.

**Oxygen:** Plants roots need Oxygen. Root rot is a sign of lack of dissolved oxygen in the Nutrient tank.

**Light:** All plants need light. Some more, some less. Excessive light and heat leads to drying of leaves. Lack of light reduces photosynthesis rate.

**Temperature:** Plants generally survive in temperature that is similar to the region they are native of. The exotics need a colder climate whereas the Indian ones need a slightly warmer climate. Generally, all plants thrive well between 16°C to 25°C.



## “Which of the CityGreens nutrient is right for my plants”

CityGreens offer two kind of nutrient packs.

For Mixed use/Beginners: NPK Combo pack - NPK provides all 6 macro nutrients and majority of micro nutrients to plants in a ratio that commonly works for all plants. With NPK, you don't need to worry about adjusting nutrients.

For Specific Crops/Advanced: Greens Combo or Blooms Combo or Symphony Combo pack - These combo packs provide macro nutrients (Greens or Blooms) separately and micro nutrients (Nutes) separately. Depending upon your specific use, you can create targeted nutrient recipes specific to your plants.

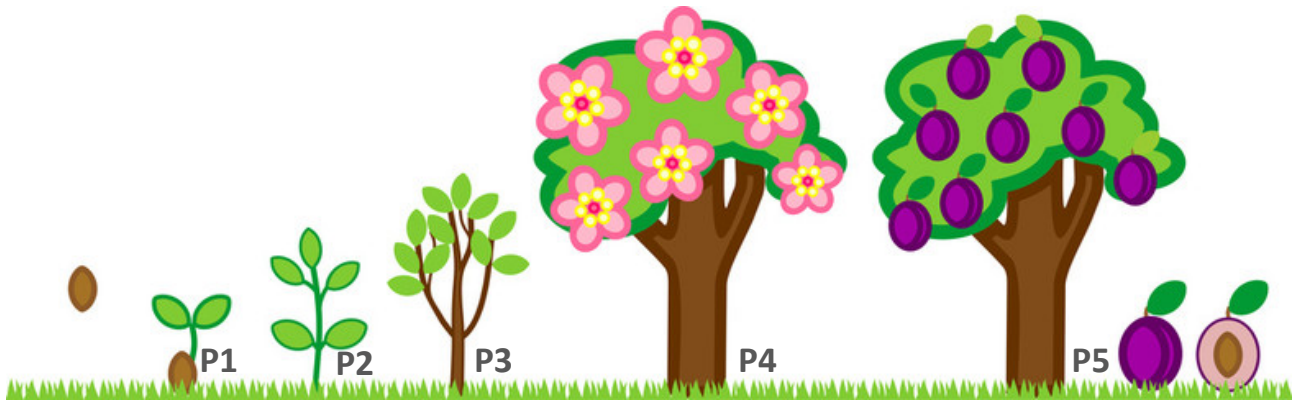
## What To Do if I Am Still Finding It Difficult To Grow?

Don't fret. We are here to help.

Team CityGreens has a dedicated help desk to support the efforts of growing community. It doesn't matter if you are using our products or someone's else. If you are facing trouble in growing, just shoot a query to us by writing to [support@CityGreens.in](mailto:support@CityGreens.in), and we will try to help you to the best of our ability and knowledge.

Make sure to use the right channel so that your query reaches the right team and gets addressed promptly.





**Phases of Plant’s Lifecycle: P1 - Germination to Transplant/Sapling | P2 - Vegetative Growth Beginning | P3 - Vegetative Growth Advanced | P4 - Reproductive Growth Beginning (onset of flowering) | P5 - Reproductive Growth Advanced (fruit formation)**

## Understanding CityGreens Feed Charts

Plant Group - specifies different plants that can be grown together using the same nutrient.

pH Zone - the tolerance zone for the plant group as a whole.

P1/P2/P3/P4/P5 - Amount of nutrient to be added to 1 litre of water to create nutrient solution depending upon plant life phase. For example - for growing lettuce, add 1.5ml each of N, K, and P to 1 Litre of water for creating diluted nutrient solution during the vegetative growth phase.

Feed Chart (NPK Combo)	pH Zone	CityGreens Nutrient	P1	P2	P3	P4	P5
Anthurium, Endive, Potato, Taro	5.0 - 6.0	N,K,P (ml/L)	0.5	1	1.5	2	3
Asparagus, Carrots, Cauliflower, Coriander, Leek, Onions, Oregano, Pea, Watercress	6.0 - 7.0	N,K,P (ml/L)	0.5	1	1.5	2	2.5
Basil, Rosemary, Sage, Thyme	5.5 - 6.5	N,K,P (ml/L)	0.5	1	1.5	2	2.5
Beans, Beetroot, Tomato	5.5 - 6.5	N,K,P (ml/L)	1	2	3	4	5.5
Begonia, Cucumber, Eggplant, Gerbera, Melon, Mint, Peppers, Roses, Strawberry, Sweet Corn, Sweet Potato, Watermelon	5.5 - 6.5	N,K,P (ml/L)	0.5	1	2	2.5	3
Bell peppers, Capsicum, Kale, Lady Finger, Marrow, Okra, Turnip, Zucchini	6.0 - 7.0	N,K,P (ml/L)	0.5	1	2	2.5	3
Broad Bean, Celery, Chard, Chives, Chrysanthemum, Radish, Spinach, Squash, Swiss Chard	6.0 - 7.0	N,K,P (ml/L)	0.5	1	1.5	2	3
Broccoli, Brussels Sprout, Cabbage, Carnation, Hot Peppers	6.0 - 7.0	N,K,P (ml/L)	1	2	3	4	5
Dill, Fennel, Garlic, Lemon Balm, Lettuce, Pak-choi, Parsley	5.5 - 6.5	N,K,P (ml/L)	0.5	1	1.5	2	2.5

Feed Chart (Greens Combo)	pH Zone	CityGreens Nutrient	P1	P2	P3
Endive, Potato, Taro	5.0 - 6.0	Greens (ml/L)	1	3	7
		Nutes (ml/L)	0.5	1.5	3.5
Asparagus, Coriander, Leek, Onions, Oregano, Watercress	6.0 - 7.0	Greens (ml/L)	1	3	5
		Nutes (ml/L)	0.5	1.5	2.5
Basil, Rosemary, Sage, Thyme	5.5 - 6.5	Greens (ml/L)	1	3	5
		Nutes (ml/L)	0.5	1.5	2.5
Mint	5.5 - 6.5	Greens (ml/L)	1	4	8
		Nutes (ml/L)	0.5	2	4
Kale	6.0 - 7.0	Greens (ml/L)	1	4	8
		Nutes (ml/L)	0.5	2	4
Celery, Chard, Chives, Radish, Spinach, Swiss Chard	6.0 - 7.0	Greens (ml/L)	1	3	7
		Nutes (ml/L)	0.5	1.5	3.5
Brussels Sprout	6.0 - 7.0	Greens (ml/L)	1	5	10
		Nutes (ml/L)	0.5	2.5	5
Dill, Fennel, Garlic, Lemon Balm, Lettuce, Pak-choi, Parsley	5.5 - 6.5	Greens (ml/L)	1	3	4
		Nutes (ml/L)	0.5	1.5	2

Feed Chart (Blooms Combo)	pH Zone	CityGreens Nutrient	P1	P2	P3	P4	P5
Anthurium	5.0 - 6.0	Blooms (ml/L)	1	2	4	7	
		Nutes (ml/L)	0.5	1	2	3.5	
Carrots, Cauliflower, Pea	6.0 - 7.0	Blooms (ml/L)	1	2	3	4	5
		Nutes (ml/L)	0.5	1	1.5	2	2.5
Beans, Beetroot, Tomato	5.5 - 6.5	Blooms (ml/L)	2	4	8	11	14
		Nutes (ml/L)	1	2	4	5.5	7
Begonia, Cucumber, Eggplant, Gerbera, Melon, Peppers, Roses, Strawberry, Sweet Corn, Sweet Potato, Watermelon	5.5 - 6.5	Blooms (ml/L)	1	2	4	6	8
		Nutes (ml/L)	0.5	1	2	3	4
Bell peppers, Capsicum, Lady Finger, Marrow, Okra, Turnip, Zucchini	6.0 - 7.0	Blooms (ml/L)	1	2	4	6	8
		Nutes (ml/L)	0.5	1	2	3	4
Broad Bean, Chrysanthemum, Radish, Squash	6.0 - 7.0	Blooms (ml/L)	1	2	4	6	8
		Nutes (ml/L)	0.5	1	2	3	4
Broccoli, Cabbage, Carnation, Hot Peppers	6.0 - 7.0	Blooms (ml/L)	1	3	6	8	10
		Nutes (ml/L)	0.5	1.5	3	4	5

Feed Chart (Symphony Combo)	pH Zone	CityGreens Nutrient	P1	P2	P3	P4	P5
Anthurium, Endive, Potato, Taro	5.0 - 6.0	Greens (ml/L)	1	2	2	3	
		Blooms (ml/L)	0	0	2	4	
		Nutes (ml/L)	0.5	1	2	3.5	
Asparagus, Carrots, Cauliflower, Coriander, Leek, Onions, Oregano, Pea, Watercress	6.0 - 7.0	Greens (ml/L)	1	2	1.5	2	2
		Blooms (ml/L)	0	0	1.5	2	3
		Nutes (ml/L)	0.5	1	1.5	2	2.5
Basil, Rosemary, Sage, Thyme	5.5 - 6.5	Greens (ml/L)	1	3	5		
		Nutes (ml/L)	0.5	1.5	2.5		
Beans, Beetroot, Tomato	5.5 - 6.5	Blooms (ml/L)	2	4	8	11	14
		Nutes (ml/L)	1	2	4	5.5	7
Begonia, Cucumber, Eggplant, Gerbera, Melon, Mint, Peppers, Roses, Strawberry, Sweet Corn, Sweet Potato, Watermelon	5.5 - 6.5	Greens (ml/L)	1	2	1	2	2
		Blooms (ml/L)	0	0	3	4	6
		Nutes (ml/L)	0.5	1	2	3	4
Bell peppers, Capsicum, Kale, Lady Finger, Marrow, Okra, Turnip, Zucchini	6.0 - 7.0	Greens (ml/L)	1	2	1	2	2
		Blooms (ml/L)	0	0	3	4	6
		Nutes (ml/L)	0.5	1	2	3	4
Broad Bean, Celery, Chard, Chives, Chrysanthemum, Radish, Spinach, Squash, Swiss Chard	6.0 - 7.0	Greens (ml/L)	1	2	1	2	2
		Blooms (ml/L)	0	0	3	4	6
		Nutes (ml/L)	0.5	1	2	3	4
Broccoli, Brussels Sprout, Cabbage, Carnation, Hot Peppers	6.0 - 7.0	Greens (ml/L)	1	3	2	3	4
		Blooms (ml/L)	0	0	4	5	6
		Nutes (ml/L)	0.5	1.5	3	4	5
Dill, Fennel, Garlic, Lemon Balm, Lettuce, Pak-choi, Parsley	5.5 - 6.5	Greens (ml/L)	1	3	4		
		Nutes (ml/L)	0.5	1.5	2		

## Please Note

1. If you are using NPK, for preparing the nutrient solution, first add N, then add K, and then add P.
2. If you are using only Nutes (for micro nutrient deficiency in plants), refer to Symphony Combo feed chart to prepare the nutrient solution.
3. If you are using in Hydroponics, you can use the diluted nutrient solution that you have prepared by following the feed chart as is.
4. If using in soil or Cocopeat, give between 100 ml to 200 ml of diluted nutrient solution to each plant bi-weekly.