



Ratio & Recipe

**NPK**



## Disclaimer :

The information provided in this document about NPK fertilizers, nutrient ratios, application methods, and usage schedules is based on personal experience, practical trials, and observational results under specific growing conditions. While these methods have worked successfully in my cases, results may vary depending on factors such as climate, soil composition, plant variety, water quality, seasonal changes, and individual cultivation practices.

This document is intended for educational and informational purposes only. Readers are encouraged to conduct their own trials on a small scale before applying any fertilizer program broadly, and to adjust practices according to their local conditions and plant responses.

I have no responsibility or liability for any loss, damage, plant injury, soil imbalance, or reduced yield resulting from the use or misuse of the information presented here. Always follow manufacturer instructions and safety guidelines when handling and applying fertilizers and related products.

By using this guide, you acknowledge that you are doing so at your own discretion and risk.



# NPK

NPK stands for **N**itrogen, **P**hosphorus, and **P**otassium(**K**) – the three key nutrients plants need most. Fertilizer labels show these as three numbers that indicate the percentage of each nutrient in the mix. Nitrogen supports leafy growth, phosphorus helps roots and flowering, and potassium improves overall plant strength and bloom or fruit quality. Choosing the right NPK ratio helps match fertilizer to the plant's growth stage and needs.



## Natural Sources of NPK:

Natural and organic NPK sources come from plant- or mineral-based materials and release nutrients more gradually than synthetic fertilizers. Common examples include compost, vermicompost, well-rotted manure, bone meal, oilseed cakes, **seaweed** extracts, and **banana peel** compost. These not only provide nitrogen, phosphorus, and potassium but also improve soil structure, microbial life, and long-term fertility. For flowering plants like roses, organic sources help support steady growth and sustained blooming without harsh nutrient spikes.

## Organic Food

<p><b>Banana Peel</b> Slow potassium source for blooms</p>	<p><b>Tea leaf Extract</b> Mildly acidic; gentle, slow nutrient release</p>
<p><b>Groundnut Cake</b> Nutrient-rich; strong organic NPK boost</p>	<p><b>Neem Cake</b> Soil health support; mild nutrients + pest suppression</p>
<p><b>Mustard Cake</b> Powerful N feed; best used in cooler weather</p>	<p><b>Egg Cells</b> Slow calcium source; supports stem strength</p>
<p><b>Vermi Compost</b> Balanced nutrition; improves soil life and texture</p>	<p><b>Fish Extract</b> Micronutrients &amp; vitamins; growth stimulator</p>

## Pesticides & Fungicides

<p><b>Confidor</b> Thrips</p>	<p><b>Kaka</b> For Red mites, Mealybugs, and insects</p>	<p><b>Neem Oil</b> True Bio Insecticide, Great overall</p>
<p><b>SAAF</b> Systemic, Stem, Root, Foliage</p>	<p><b>KAVACH</b> On Spot Infection, Black Spot</p>	<p><b>REDOMIL GOLD</b> Stem, Root, Dieback, Stem Borer</p>

## Tonics & Micronutrients

<p><b>Seaweed Base</b> Flower, root, health, growth tonic. Overall plant health maintain</p>	<p><b>Micronutrients</b> Fix EDTA deficiency Active growth &amp; Flowering</p>	<p><b>PGR</b> Plant Growth Regulator Booster for plants</p>
<p>BiovitaX, Takat</p>	<p>Rexolin CXK, Utkarsh EDTA</p>	<p>Miraculan, SuperSonata</p>

# Chemical NPK

<p>NPK 19.19.19 Balanced Nutrition. General food Best between bloom cycles</p>	<p>MAP 12.61.0 Rooting and buds initiation After repot, transplant</p>
<p>NPK 13.40.13 Flowering &amp; root development Pre blooming &amp; blooming phase Post rainy season</p>	<p>NPK 13.0.45 Flowering &amp; root development Pre blooming &amp; blooming phase Post rainy season</p>
<p>NPK 21.0.0 Foliage growth Post pruning for green comeback Avoid in rainy season</p>	<p>HUMIC ACID Soil conditioner, Root development Best with 12:61:0 Only on soil drench</p>
<p>SOP 0.0.50 Bloom quality, color and bloom health Active blooming</p>	<p>MKP 0.52.34 Bloom quality and flowering Early blooming/ just before flowering</p>
<p>Zinc Sulphate (ZnSO4) Zinc deficiency Hormone balance Leaf and shoot fix</p>	<p>Magnesium Sulphate (Epsom Salt) Foliage health Green foliage &amp; chlorophyll deficiency</p>
<p>SSP (Single Super Phosphate) Root growth and flowering , Slow release P Only on soil drench</p>	<p>CN \ BCN Stem development strengthens Active buds &amp; bloom time</p>

## Note:

- All mentioned BRANDS are not for any promotional purpose, recommendations are based on personal use.
- Be mindful for Chemical Feeding, recommended dose 0.5-1gm/Ltr water, don't overdose.
- Application of Pesticide & Insecticide must be done in EVENING times only.
- All Chemical NPK applications are recommended to be applied before sunrise.
- Always remember all these foods are secondary, while main is WATER or Moisture maintain, even though roses are considered as heavy feeders.