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Lime Paste Treatment for Mango Trees: A Complete Guide

*Simran[1], Aditya Kumar Giri[1], Dr. Ankit Singh Bhadauria[2] and Shivam Dixit[3]
[1]M.Sc. Ag. (Hort.) Vegetable Science, C.S.J.M. University, Kanpur (U.P.), India
[2]Subject Matter Specialist (Horticulture), Krishi Vigyan Kendra, Kasganj (U.P.), India
[3]Ph.D. Horticulture, C.S.J.M. University, Kanpur (U.P.), India
*Corresponding Author's email: vsimran18112@gmail.com

Applying lime—usually in the form of lime paste (a mixture of slaked lime/calcium hydroxide with some copper-based fungicide)—on the trunk or stem of mango trees is a very common and traditional practice in many mango-growing regions.

Main Purposes of Applying Lime on Mango Stems

a. Protection Against Stem Borers and Bark-Eating Insects

- The bitter, alkaline taste and texture of lime deter bark-eating caterpillars and other insects from laying eggs or boring into the trunk
- It creates a physical barrier that many insects avoid

b. Prevention and Control of Fungal Diseases

Lime paste mixed with copper fungicide (Bordeaux paste or Blitox) helps prevent:

- Gummosis (Botryodiplodia spp.)
- Stem-end rot
- Die-back
- Anthracnose

The high pH of lime also inhibits many fungal spores.

c. Protection from Sunscald and Cracking

- White lime reflects sunlight and prevents the trunk from overheating and cracking
- Reduces bark splitting caused by sudden temperature changes

d. Healing of Wounds and Pruning Cuts

- Lime pastes with fungicide seals pruning wounds and prevents infection

e. Discourages Ants and Termites

- Ants that farm mealybugs or scale insects avoid walking on fresh lime

Standard Lime Paste Recipe (Traditional "Chaal")

- Slaked lime (Chuna): 1 kg
- Copper sulphate (Neela thotha): 100–150 g
- Linseed oil or castor oil: 50–100 ml
- Water: Enough to make a thick, paint-like paste

(Optional: A little Fevicol or gum for better sticking)

How to Apply

1. Clean the trunk up to 1–1.5 m height (remove loose bark, moss, lichen, old paste).
2. Lightly clean wounds or gum-oozing areas.
3. Apply the lime paste with a brush from just above soil level up to 1–1.5 m, covering the trunk and main branches.

Best Time to Apply

- After pruning (October–November)
- Before summer (February–March)
- After monsoon (October–November) if previous coating is washed off

Modern Alternatives

- Ready-made Bordeaux paste
- Copper oxychloride paste
- White acrylic exterior emulsion paint (lasts 2–3 years and reflects heat very well)

Important Notes

- Do not apply the paste right up to the soil—leave 5–10 cm to prevent collar rot.
- Do not use raw quicklime (unslaked lime) because it can burn the bark.
- Reapply after heavy rains.

Conclusion

Applying lime paste is a simple, inexpensive, and eco-friendly practice that protects mango trees from pests, diseases, sunscald, and bark damage. It supports better tree health, longevity, and productivity in mango orchards

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