



Where Chemistry Meets Nature!

Neem

- Antibacterial properties against *S.mutans*, *E.faecalis*, *Candida albicans*.
- Presence of flavonoids and acid metabolites.
- Highest amount of smear layer removal.

Indian mulberry (Noni)

- Irrigating efficacy similar to sodium hypochlorite.
- Effective chelating agent.
- Used with 6% concentration with pH of 3.5.

Tea tree oil

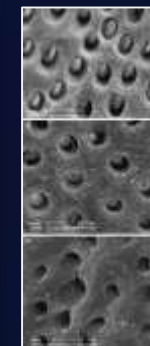
- Solvent action.
- Dissolves necrotic tissue.

Conclusion: Herbal products appear promising in vitro, but need more preclinical and clinical research before they can be definitively suggested to be used in endodontics.



Triphala

- Anti oxidant property.
- Inhibit biofilm formation.
- More effective in the removal of smear layer compared to normal saline.



Indian soapberry (Ritha)

- Contains saponins which act as natural detergent and surfactant.
- Antibacterial and antifungal properties

Green tea extract

- Broad spectrum action and chelating agent.

ADVANTAGES:

- ✓ Less cytotoxic
- ✓ Economical
- ✓ Easily available
- ✓ biocompatibility

DISADVANTAGES :

- ✓ Fresh preparation needed
- ✓ Less shelf life