

**Unveiling the Anticariogenic Properties of Medicinal Plants
and Development of a Polyherbal Dentifrice**

Thesis submitted in partial fulfillment of the degree of
Doctor of Philosophy in Botany

By

Gaayathiri Devi E
(19PHBOF001)

Supervisor

Dr. M. K. Nisha
Assistant Professor
Department of Botany

**Avinashilingam Institute for Home Science and Higher Education
for Women, Coimbatore- 641043**

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80_RECOMMENDATION

- *In vitro* studies, including enzyme inhibition assays, cell line studies, and gene expression profiling, can be conducted to assess the interactions between PHDF's bioactive compounds and targets associated with various diseases beyond dental caries.
- Preclinical trials can be assessed to evaluate the efficacy and safety of the PHDF in animal models for diseases other than dental caries.
- Clinical trials can be undertaken to evaluate the therapeutic potential, efficacy, and safety of PHDF in human subjects for diseases beyond dental caries.
- Development of different dentifrice formulations based on the proposed PHDF formula, investigating variations in composition and delivery methods, textures, and sensory characteristics.