



# HerbClip™

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**File: ■ Dentistry**  
**■ Plaque**  
**■ Gingivitis**

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**RE: Review of Herbal Preparations Used in Dentistry**

Kumar G, Jalaluddin M, Rout P, Mohanty R, Dileep CL. Emerging trends of herbal care in dentistry. *J Clin Diagn Res.* 2013;7(8):1827-1829.

Medicinal plants are an integral part of many traditional and ancient healthcare systems used around the world. Recently, there is a renewed interest in herbal medicine, which is the therapeutic or prophylactic use of plant parts or their extracts. In addition, herbal dentistry, a form of herbal medicine, is also gaining popularity.

More broadly speaking, several botanical products have been used to maintain oral hygiene. Natural toothbrushes have been made from tree twigs of Australian oak (*Eucalyptus obliqua*), oak (*Quercus* spp.), fir (*Abies* spp.), juniper (*Juniperus* spp.), and neem (*Azadirachta indica*). The Natural Dentist® Healthy Gums Daily Oral Rinse (The Natural Dentist; Medford, Massachusetts) has been shown to reduce gingival bleeding and gingivitis, as well as inhibit the growth of aerobic, micro-aerophilic, and anaerobic bacteria. This mouthwash consists of the anti-inflammatory plants aloe (*Aloe vera*) and pot marigold (*Calendula officinalis*), as well as the antimicrobial plants goldenseal (*Hydrastis canadensis*) and grapefruit (*Citrus x paradisi*) seeds.

Historical documentation and laboratory research have indicated many herbal medicines are potentially valuable for dental care. Also, herbs that are commonly used in dental treatment are summarized in Figure 1. However, more randomized, controlled, clinical trials are needed to verify the value of these herbs for dentistry. Moreover, although much of the general public considers herbal medicines as safe, consumers should be aware that there are certain herbal products that may be toxic (e.g., particular herbs have been found to have potentially cardiotoxic and pulmonary toxic effects).

It has been reported that several chewing sticks from Indian gum arabic tree (kikar; *Acacia nilotica* syn. *A. arabica*) and peelu (arak; *Salvadora persica*) produced an antimicrobial effect on *Streptococcus fecalis*. Moreover, the previously described herbal mouth rinse inhibited the growth of several periodontal pathogens and a dental caries pathogen. The antimicrobial effects were primarily attributed to the goldenseal in this product. Aloe also has antibacterial effects, as well as antifungal and antiviral properties.

For example, aloe tooth gel and toothpastes have exhibited antimicrobial and antifungal activities. These effects are attributed to the anthraquinone compounds found in aloe.

Studies have indicated that the Ayurvedic herbal mixture Triphala, which is made of equal parts of chebulic myrobalan (*Terminalia chebula*), belleric myrobalan (*Terminalia bellerica*), and amla (Indian gooseberry; *Phyllanthus emblica* syn. *Embllica officinalis*), may be an effective anti-plaque agent. Extracts of Triphala effectively inhibited bio-film formation and exhibited antioxidant effects. In addition, a dental gel that consisted of barberry (*Berberis vulgaris*) has been shown to control gingivitis and microbial plaque formation in children. It was also found that extracts from the leaves of African border tree (*Newbouldia laevis*) had antimicrobial effects against bacteria that are implicated in dental caries. Additionally, it has been well documented that an extract of chamomile (*Matricaria recutita*), used in mouthwashes, reduces gingival inflammation and plaque formation, as well as functions as a disinfectant for root canal procedures.

This review indicates there is a wide array of herbal medicines/preparations that may be effective for dental procedures, treatments, and prophylaxes. However, according to the authors, there is limited data available that confirm the benefits of many herbs or botanical products used in dentistry. Thus, more studies are warranted, especially if the interest and demand for herbal dentistry continues to grow.

—Laura M. Bystrom, PhD

Myrrh ( <i>Commiphora myrrha</i> )	For gum inflammation and bad breath.
Prickly ash ( <i>Zanthoxylum</i> spp.)	To increase saliva flow and relieve pain in toothache.
Peppermint ( <i>Mentha × piperita</i> )	For toothache and mouthwash for gum inflammation.
Red clover ( <i>Trifolium pratense</i> )	Used as mouthwash for irritated and diseased gums.
Rosemary ( <i>Rosmarinus officinalis</i> )	Used as mouthwash for gum disease and bad breath.
European sanicle ( <i>Sanicula europaea</i> )	Used as a powerful antioxidant or to heal septic wounds.
Shepherd's purse ( <i>Capsella bursa-pastoris</i> )	Used to help stop bleeding after tooth extraction.
Tea tree ( <i>Melaleuca alternifolia</i> )	For temporary relief of inflamed gums and oral inflammation. May be useful for root canal treatments (dissolve necrotic pulp tissue).
Thyme ( <i>Thymus vulgaris</i> )	Used with myrrh and goldenseal to treat oral herpes. Used as a source of fluorine for toothpaste and as an antimicrobial.
Wintergreen ( <i>Gaultheria procumbens</i> )	Used as an astringent and antiseptic. Used to temporarily relieve inflamed gums.
Yarrow ( <i>Achillea millefolium</i> )	Used to treat hemorrhages, ulcers, and to improve blood clotting. Used as mouthwash to promote healing of cuts in mouth.

**[Figure1]:** Common herbs used in preparations for dental treatments.

Referenced article can be found at [www.ncbi.nlm.nih.gov/pmc/articles/PMC3782986](http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3782986).

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