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# An Overview of the most important Medicinal Plants used as Mouth Freshener

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# Abstract.

Bad odor, is unpleasant odor that going out along the expiration from the nose or mouth. Halitosis or bad odor is a common and distressing symptom for patients and their families or freinds, and its effects on social, job and family relationships are difficult. Since the medicinal plants are used the treat variety of diseases, in this study, it was tried to identify and report medicinal plants that are used in Iran Ethnobotanical foe bad odor of the mouth. In this review, search for articles by keywords of Mouth, teeth, mouth freshener, Ethnobotanical, Iran and medicinal plants was carried out. Search from databasesincluding Scopus, ISC, SID, magiran, and a number of the other data base wer done. According to the documents for Iran ethnobotany, 13 important medicinal plants are used to eliminate bad odor. Medicinal plants such as frankincense, oregano, clove East fluffy clove, ephedra, parsley, rosemary and other are the most important medicinal plants to eliminate halitosis. Probably these medicinal plants have the essence and aromatic oil and effective medicinal materials to eliminate halitosis. **Keywords**: diseases of the mouth, halitosis, Ethnobotanical, medicinal plants

### INTRODUCTION

In normal mode and under normal conditions, breath is odor-free and mouth should not have odor. Of course, naturally the mouth of anyone has particular smell that is called Human Odor [1]. Bad odor, is unpleasant odor that expiration going out from the nose or mouth [2]. The prevalence of bad odor sometimes has been reported up to fifty percent [3]. Halitosis or bad odor is a common and distressing symptom for patients and their families and its effects on social, job and family relationships is dificult [4]. Decay of proteins, mucin and peptides by microorganisms of surface of the tongue and dental plaque as well as anaerobic gram-negative bacteria can create volatile sulfur compounds that are responsible for bad odor [5,6]. Since the people with bad odor breathe from the mouth, undoubtedly dentists are of the first group that can help these people. Islam considers the mouth sweet odor the sign of good health of mouth [7]. Inflammation and halitosis is the main pathologic element for periodontal and oral mucosa. There are about 400 microorganisms in the mouth [8]. The smell which is emitted of mouth can be derived from the oral cavity or respiratory tract. The causes of oral malodor are reduced by closing the mouth, but breath smell is not decreased by non-oral causes with closing the mouth [9]. Mouth smell changes during the different days, even during different times of a day are vary, and the degree of mouth smell depends on the flow rate of saliva, food residues, accumulation and proliferation of bacteria and perhaps metabolic changes [10-12]. People of escaping from bad breath are encouraged to repeat in brushing, chewing gum, having chocolate, use freshener and mouthwashes and to keep a distance from others while talking [13]. Medicinal plants are a healthy and natural source of medicines [14-19]. These medicinal sources have had traditionally medicinal used [20-25]. Phytochemical analysis results of medicinal plants show that they contain active materials [26-29]. Medicinal plants have many medicinal properties due to the antioxidant materials and used for control of poisoning and medical and pharmaceutical errors by pharmaceutical companies and used for any disorders etc. [33-47]. Since the medicinal plants are used to treat a variety of diseases, in this study, it was tried to identify and report the medicinal plants in Iran used as ethnobotanical of bad breath.

### METHODOLOGY

In this study, it was tried to identify and report medicinal plants that are used in Iran Ethnobotanical of bad odor. in this review, search for articles by keyword of Mouth, teeth, mouth freshenerEthnobotanical, Iran and medicinal plants was carried out.Search from databases, such as databases, included Scopus, ISC, SID, magiran, and a number of the other data base.

## RESULTS

According to the documents for Iran ethnobotanical 13 important medicinal plants are used to eliminate bad odor. Medicinal plants such as frankincense, oregano, clove East fluffy clove, ephedra, parsley, rosemary and others are the most important medicinal plants to eliminate halitosis. Probably these medicinal plants have the essence and aromatic oils and are effective medicinal materials to eliminate halitosis. Additional information on this subject is specified in Table 1.

Sl.No	Scientific name	Family name	Persian name	Organs use	Therapeutic effect	Region
1	Boswellia papyrifera	Burseraceae	Kondor	Resin	Breath freshener	Khuzistan [48]
2	Nepeta persica Boiss.	Lamiaceae	Pouneh kouhi	Aerial parts	Breath freshener	Khuzistan [48]
3	Dianthus crinitus	Caryophyllaceae	Mikhak korki	Seed	Breath freshener	Sirjan [49]
4	Dianthus orientalis	Caryophyllaceae	Mikhak sharghi	Seed	Breath freshener	Sirjan [50]
5	Ephedra foliata	Ephedraceae	Efedra	Leaf and Stem	Breath freshener	East of Persian golf [51]
6	Biebersteinia Multifida	Biebersteiniaceae	Shirshirou	Leaf and Stem	Breath freshener	Kohgilouyeh [52]
7	Daphne mucronata		Khoushak	Leaf and Stem	Breath freshener	Kohgilouyeh [52]
8	Rhamnus persica	Rhamnaceae	Arzan	Fruit	Breath freshener	Kohgilouyeh [52]
9	Stachys pilifera	Lamiaceae	Oulileh	Leaf	Breath freshener	Kohgilouyeh [52]
10	Petroselinum crispum Mill	Apiaceae	Jafari	Aerial parts	Breath freshener	Mobarakeye isfahan [53]
1	Rosmarinus officinalis L	Lamiaceae	Rozmari	Leaf and Flowering shoot	Breath freshener	Mobarakeye isfahan [53]
12	Gailonia Aucheri	Rubiaceae	Khargol	Leaf and Flower	Breath freshener	Hormozgan [54]
13	Hyoscyamus muticus	Solanaceae	Bazralbanj	Seed	Breath freshener	Hormozgan [54]

Table 1: native medicinal plants to eliminate halitosis

### DISCUSSION

Halitosis is an unpleasant odor that when some people speaking or breathing which can be a sign of systemic oral disorders and diseases. Poor oral hygiene and dental, disorders in saliva secretion or cessation of salivation and decayed teeth infections, dental abnormalities and not being row of the teeth in jaws and jams and being kept the foods between the teeth, as well as gum and tongue diseases, surgery of the mouth and teeth and ignoring the advice of a dentist, malignant lesions and cancer, diseases of the nose, upper respiratory tract, lung and gastrointestinal disorders and hormonal changes during puberty or pregnancy, diabetes and other systemic diseases, alcohol and tobacco products are the most important factors of production bad breath. These can be inconvenient for someone in terms of social. Eating fibrous fruits and vegetables and drinking water can help rosy mouth.

Eating fibrous vegetables and fruits is a good way to remove the mouth bacteria. Fruits such as apples also helps moisten the mouth. Oral rinses or mouthwashes are also effective products in preventing the mouth bad odor. The mouthwashes which have alcohol should not be used based because alcohol makes the mouth dry and worsens the problem. The plant remedies such as black and green teas due to having polyphenols can eliminate or reduce the sulfur compounds and decrease the oral bacteria [55]. The plants presented in this article are also rich in polyphenols which their actions are, at least in part, due to the present of these compounds. Most of polyphenols also have antimicrobial activities and enhance immune activites [56,57]. Therefore, other plants which have these agents [58-64], might benefit resolving this problem. These kinds of plants have a variety of other properties [65-70]. Medicinal plants can be used for the treatment of infectious and noninfectious [71-85]. Hence, the patients how have bad mouth odor may also get benefit in this regard.

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