

An Overview of the most Important Medicinal Plants with Anti-Toothache Property based on Ethnobotanical Sources in Iran

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Abstract.

Tooth is an organ exposed to pain with infection and other factors. Today toothache has great widespread. With the advancement of science, tendency of people to return the environment has increased so that environment orientation by increasing acceleration has become to the global phenomenon. Medicinal plants in the treatment of dental pain have been shown to be useful so in this study we tried to identify and report the medicinal plants used in traditional medicine resources to treat toothache. In this review, search for articles by keyword of toothache, Ethnobotanical, Iran and medicinal plants was carried out. Search was done in databases such as Scopus, ISC, SID, Magiran, and a number of the other data base. Based on results obtained from the review of Iran ethnobotanical texts, it was found that Iran's 28 native medicinal plants are used to treat toothache. The present of the compounds in presented plants (Iran's 28 native medicinal plants) may indicate that the pain relief of these plants might be due to flavonoids.

Keywords: teeth, toothache, Iran, Ethnobotanical, medicinal plants

INTRODUCTION

Teeth are white structures within the jaw or mouth of many vertebrate that are used to eat and chew and shred the feedstock [1,2]. Cleansing teeth is part of mouth hygiene that isolates plaques from tooth surface and prevents the tooth decay, gingivitis and infections around the teeth [3-5]. One of the main causes of toothache is tooth decay. Mouth bacteria feed from the sugars and starches remained on teeth, and produce acids that destroy tooth enamel gradually [6-8]. Pain is a sensory experience and unpleasant emotion that is result of actual or potential tissue damage, and all the people, experience it in their lifetime somehow. However, the cause of pain are varied [9,10]. The traditional view of Medicine believed that pain intensity has direct relationship with severity of tissue damage entered. In fact, tissue destruction is induced by various chemicals which also cause pain [11-14]. With the advancement of science, tendency of people to return the environment has increased so that environment orientation by increasing acceleration has become to the global phenomenon [15-33]. Plants from the past days have had used to health consumption, also it have for control of poisoning and medical and pharmaceutical errors by pharmaceutical companies [34-45]. Medicinal plants are especially useful in the treatment of toothache so in this study has been tried to use and identify the medicinal plants that are used in traditional medicine to treat toothache.

METHODOLOGY

In this review, search of articles was carried out by keywords of toothache, Ethnobotanical, Iran and medicinal plants. Search from databases, such as databases, included

Scopus, ISC, SID, Magiran, and a number of the other data base.

RESULTS

Based on results obtained from the review of Iran ethnobotanical texts, it was found that Iran's 28 native medicinal plants are used to treat toothache. Medicinal plants of anti-toothache based on Ethnobotanical sources of Iran are specified in Table 1.

DISCUSSION

Sudden severe dental pain and the discomfort is usually all at least once experienced. Going to the dentist is a good way to cure it but you can see a dentist until the pain temporarily pacified by using natural materials.

The use of natural products, especially medicinal plants, for seeking treatment and relief of pain, prevention and treatment of various diseases has been the oldest forms of medical practice in the world and attracted the attention of researchers [46-55]. For example, in the past putting a clove of garlic on the teeth and chewing to reduce tooth pain was very common. Use of wheat grass was also popular to prevent tooth decay and toothache. Copies of traditional Iranian medicine have a lot of usage. Low side effects of natural products also have reinforced the importance of medicinal plants as a reliable source of herbal drugs [56-60]. This encouraged us to focus on presenting medicinal plants effective on toothache,

Table 1: Medicinal plants of anti-toothache based on Ethnobotanical sources of Iran

Sl.No	Scientific name	Family name	Persian name	Organs used	Therapeutic effects	Region
1	<i>Dianthus crinitus</i>	Caryophyllaceae	Mikhak	Seed	Toothache	Abadeh shiraz
2	<i>Hypericum perforatum</i>	Hypericaceae	Alafe chay	Flowering shoot	Toothache	Arasbaran
3	<i>Origanum vulgare</i>	Labiatae	Marzanjoush	Flowering shoot	Toothache	Arasbaran
4	<i>Hyoscyamus niger</i>	Solanaceae	bangdaneh	Leaf and seed	Toothache	Arasbaran
5	<i>Achillea biebersteinii</i>	Asteraceae	Boumadaran	Leaf	Toothache	Ilam
6	<i>Capparis spinosa</i>	Capparidaceae	Shefleak	Stem and Fruit	Toothache	Ilam
7	<i>Sanguisorba minor</i> Scop	Rosaceae	Gheitaran	Stem	Toothache	South of iran
8	<i>Beta vulgaris</i> L.	Amaranthaceae	Choghondar	Leaf	Toothache	Khuzistan
9	<i>Dianthus crinitus</i> Sm.	Caryophyllaceae	Mikhak	Flower	Toothache	Khuzistan
10	<i>Teucrium polium</i> L.	Lamiaceae	Maryam nokhodi	Aerial parts	Toothache	Khuzistan
11	<i>Fritillaria imperialis</i> L.	Liliaceae	Laleh vazhgoun	Fruits and onion	Toothache	Khuzistan
12	<i>Lycopersicum esculentum</i>	Solanaceae	Gojeh	Fruit, leaves and flowers	Toothache	Khuzistan
13	<i>Solanum nigrum</i> L.	Solanaceae	Tajrizi	Aerial parts and Fruit	Toothache	Khuzistan
14	<i>Dianthus crinitus</i>	Caryophyllaceae	Mikhak korki	Seed	Toothache	Sirjan kerman
15	<i>Dianthus orientalis</i>	Caryophyllaceae	Mikhak sharghi	Seed	Toothache	Sirjan kerman
16	<i>Sanguisorba minor</i>	Rosaceae	Touteh siah	Leaf and Flowering shoot	Toothache	Sirjan kerman
17	<i>Solanumnigrum</i> L.	Solanaceae	Tajrizi siah	Leaf and seed	Toothache	sistan
18	<i>Biebersteinia multifida</i>	Biebersteiniaceae	shirshirou	Leaf and Stem	Toothache	Kohghilouyeh
19	<i>Daphne mucronata</i>		Khoushak	Leaf and Stem	Toothache	Kohghilouyeh
20	<i>Rhamnus persica</i>	Rhamnaceae	Arzan	Fruit	Toothache	Kohghilouyeh
21	<i>Stachys pilifera</i>	Lamiaceae	Oulileh	Leaf	Toothache	Kohghilouyeh
22	<i>Allium cepa</i> L.	Alliaceae	Piaz	پیاز	Toothache	Mobarakeye isfahan
23	<i>Peganum harmala</i> L.	Zygophyllaceae	Esfand	Seed	Toothache	Mobarakeye isfahan
24	<i>Astragalus verus</i> Oliv.	Papilionaceae	Gavan	Resin	Toothache	Mobarakeye isfahan
25	<i>Dianthus crinitus</i> Sm.	Caryophyllaceae	Mikhak	Flower and Leaf	Toothache	Natanz kashan
26	<i>Erodium cicutarium</i>	Geraniaceae	Sikhe shabgard	Aerial parts	Toothache	Hormozgan
27	<i>Gailonia Aucheri</i>	Rubiaceae	Khargol	Leaf and Flower	Toothache	Hormozgan
28	<i>Hyoscyamus muticus</i>	Solanaceae	Bazrolbanj	Seed	Toothache	Hormozgan

Developments of therapeutic and preventive agents which are based on natural products represent a promising source for prepatation of new drugs. Tooth pain has many different causes, such as tooth decay, cracked teeth, inflammation of the gums and so on. Flavonoids are a group of naturally occurring polyphenols which are found ubiquitously in a lot of plants, including the plants presented here. There agents are pharmacologically very active compounds in various plants [61-64].

Flavonoids are important secondary metabolites effective on pain and inflammation. Cancer-preventive component, antiageing, antioxidant, anti-inflammatory and analgesic [65]. Medicinal plants can be used for the prevention, control and treatment of infectious and noninfectious [66-79]. In fact, flavonoid compounds exhibit their biological activities mainly through their antioxidant activities. These compounds can reduce pain through their antioxidant activities. The present of these compounds in presented plants may indicate that the pain relief of these plants might be due to flavonoids.

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