Plants used in traditional phytotherapy for hair care by tribals in Sabarkantha district, Gujarat, India

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Received 9 January 2002

During ethnobotanical field trips in different villages of Sabarkantha district, the information about utilization of natural plant resources for hair care was gathered from tribal informants and Bhagats/Vaidya. Information on 21 plant species belonging to 18 families of angiosperms are reported along with plant parts and some formulations of plant parts used medicinally for the treatment of hair ailments and hair care, such as hair fall, hair growth, baldness (Tal), lice (Ju) problems, dandruff (Khodo), itching (Khanjvad), hair tonic, hair dye and hair washing.

**Keywords:** Hair care, Traditional phytotherapy, Skin diseases, Sabarkantha.

Under the wide spread influence of modernization, people not only in the cities but also in the villages, use different synthetic soaps, dandruff shampoos and dyes for hair care. The cosmetic and personal-care industry is a large economic force in the world today. After using all available synthetic materials for health of the hair, people do not get satisfactory results and sometimes, these synthetic materials may create side effects or may cause allergic reactions, eye irritation, etc. Under this situation people are diverted towards traditional herbal therapy for the hair care. Beauty parlours and various cosmetic companies also use herbal soaps, shampoos and other cosmetic products made from various plants to treat the hair and scalp problems, because the use of herbal products is considered safe and free from allergic reactions/effects. Thus, sources of natural plant drugs are required to be studied/exploited in detail. In India the literature on diverse native floras and medicinal utilities of plants is voluminous1-4. In Gujarat the literature on the ethnobotany and folklore medicinal utilities of plants is limited5-11.

The district Sabarkantha is situated in the northeastern part of Gujarat State between 23.03°N and 24.30°N latitudes, and 72.43°E and 73.39°E longitudes. The predominant scheduled tribe in the area is Bhil, including Bhil Garasia, Dungri Bhil, Dungri Garasia, Chokhla Garasia, etc.
The tribal people who live in 3 talukas, viz. Vijaynagar, Khedbrahma and Bhiloda of Aravalli ranges of Sabarkantha district, treat the hair ailments with plant remedies on the basis of their rich inherited knowledge.

Perusal of literature revealed that Sabarkantha district has never been surveyed from ethnomedicinal view point with respect to hair care. The same aspect is covered in the present paper.

**Methodology**


The firsthand data were collected by personal contact from a large number of tribal informants and Bhagats/Vaidyas of herbal medicines of the villages who have knowledge about the therapeutic value of wild plants in hair care. The uses and local names of plants were recorded as given by Bhagats/Vaidyas. The collected plant specimens were identified using Flora of Gujarat State. The collected plant materials have been deposited in the Herbarium at HariAum Foundation, Gandhinagar, Gujarat. More than 80 local informants were interviewed. The data were considered worth mentioning only when more than 30 informants gave similar answers for the same plant.

**Results**

Twenty one plant species utilized for hair care and hair problems in traditional phytotherapy in Sabarkantha district are presented in alphabetical order in the following manner: botanical name, family in parentheses, local name, voucher specimen number in parentheses, plant parts and some formulations of plant parts used.

**Abrus precatorius** Linn. (Fabaceae), Chanothi. [BLP-3]

The paste of the seeds is applied on the bare scalp and on sharply defined bare patches due to loss of hair (in alopecia). The seed oil is applied on scalp to stop hair falling due to Undari (Tinea capitis). The roots and seeds are crushed with honey to make a paste. The paste is applied on head to prevent baldness.

**Achyranthes aspera** Linn. var. aspera (Amaranthaceae), Anghedi. [BLP-11]

The paste of fresh roots is applied on scalp and left overnight. It cures dandruff and promotes hair growth. The plant ash is also used in the preparation of hair dyes.

**Alangium salviifolium** (Linn.f.) Wang. (Alangiaceae), Ankol. [BLP-22]

The seed paste is applied on head to promote hair growth in case of baldness. The paste of fresh stem bark is applied on hair to prevent dandruff and hair falling.

**Anisomeles indica** (Linn.) Kuntze (Lamiaceae), Chodharo. [BLP-36]

The ash of the plant is mixed with coconut oil and applied over scalp to
remove dandruff and to prevent falling of hairs due to Undari (Tinea capitis).

**Azadirachta indica** A. Juss. (Meliaceae), Limdo, [BLP-46]
The crushed seeds and leaves are applied over hair as insecticide to kill lice. The infusion of fresh leaves is applied on the head to cure dandruff. The mixture of seed and exuded sap from trees growing near water, is massaged on baldhead for promoting hair growth.

**Delonix elata** (Linn.) Gamble
(Caesalpiniaceae), Sandesaro, [BLP-124]
The paste of the leaves is applied on hair to cure falling of hair.

**Dioscorea bulbifera** Linn.
(Dioscoreaceae), Arithi, [BLP-135]
The dried tuber powder is used for hair wash to remove dirt and to promote hair growth.

**Eclipta prostrata** Linn. syn. *E. alba* (Linn.) Hassk. (Asteraceae), Bhangro, [BLP-142]
The leaf juice is mixed with oil and applied on hair to cure dandruff. The fresh juice of the leaves is rubbed on the shaven scalp for the purpose of promoting hair growth and for blackening of hair.

**Embllica officinalis** Gaertn. syn. *Phyllanthus emblica* Linn.
(Euphorbiaceae), Aamla, [BLP-145]
Seed oil is mixed with sesame (*Sesamum indicum* Linn.) oil and is applied over the head for promoting hair growth. The fruit rind powder boiled with sesame oil is used as hair dye.

**Hemidesmus indicus** (Linn.) R. Br. (Asclepiadaceae), Upalsari, [BLP-166]
The powdered herb is used in the preparation of hair oil as hair tonic for good hair growth.

**Lawsonia inermis** Linn. (Lythraceae), Mendi, [BLP-187]
The paste of the fresh leaves is spread on head in the form of thick layer and kept for one day to cure dandruff. The extract of the leaves is useful in preparation of hair oil as hair tonic and hair dyes.

**Lepidagathis trinervis** Wall. ex Nees (Acanthaceae), Harancharo, [BLP-190]
The paste of the herb is applied on head to cure itchy affections of the skin. Ash of whole plant is mixed with edible oil, and applied on scalp to cure dandruff.

**Leucas cephalotes** (Roth) Spreng. (Lamiaceae), Doshino kubo, [BLP-192]
Fresh juice or ash of the plant is mixed with oil and applied on hair to remove dandruff.

**Madhuca longifolia** (Koenig) Macb. syn. *M. indica* Gmel (Sapotaceae), Mahudo, [BLP-199]
The extract of dried petals is massaged on head to promote hair growth.

**Maytenus senegalensis** (Lamk.) Exell syn. *M. emeriginata* (Willd.) Ding-Hou (Celastraceae), Vikro, [BLP-205]
The paste of the stem bark is mixed with mustard (*Brassica juncea* Coss.) oil. The medicated oil is applied over the head to kill lice and to cure itching due to dandruff.
Melia azedarach Linn. (Meliaceae), Bakan limdo, [BLP-206]
The crushed flowers are applied over scalp to remove dandruff.

Sapindus marginatus Vahl
(Sapindaceae), Aritha, [BLP-264]
The leaves and stem bark are macerated in cold water and the mixture is applied to hair to remove lice. The dried fruit powder is mixed in water and kept overnight; the mixture is used in washing hair, which provides extra shine.

Terminalia bellirica (Gaertn.) Roxb.
(Combretaceae), Baheda, [BLP-285]
The seed oil is considered a good hair tonic. Powdered fruit is added into the water and kept overnight; on the next day this suspension is used for washing hair to prevent falling of hair. The powdered fruit is also used in the preparation of natural hair dyes.

Trichosanthes cucumerina Linn.
(Cucurbitaceae), Jangli parval, [BLP-295]
The leaf juice is applied externally to the bald patches on the head to cure dandruff.

Vernonia anthelmintica (Linn.) Willd.
(Asteraceae), Kalijiri, [BLP-303]
The powdered seeds mixed with lemon fruit juice are applied on hair to remove lice.

Vitex negundo Linn. (Verbenaceae), Nagod, [BLP-309]
The leaves are used in the preparation of hair oil as a hair dye and insecticide.

Discussion and Conclusion
Amongst the plants of 18 families utilized in hair problems, maximum 2 plants were from each of the 3 families i.e., Lamiaceae, Meliaceae and Asteraceae, where as 1 plant was from each of the 15 families, viz. Fabaceae, Alangiaceae, Caesalpiniaceae, Dioscoreaceae, Euphorbiaceae, Aselepiadaceae, Lythraceae, Acanthaceae, Sapotaceae, Celastraceae, Sapindaceae, Combretaceae, Cucurbitaceae, Verbenaceae and Amaranthaceae.
The present study shows that Sabarkantha district in Aravalli ranges has great diversity of medicinal plants with rich therapeutic application in hair problems and therefore, utilized by the tribal people for curing hair problems. Thus, this information gives lead for developing herbal formulations further.

Acknowledgment
The authors are highly thankful to all the tribal informants and Bhagats/Vaidyas for their cooperation and help during ethnobotanical study by providing the information and identifying the plant during the field trips in the forest area.

References