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Native Morbad Tahsil Plants Used to Treat Dysentery and Diarrhoea in People.

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ABSTRACT

'Ethno botany' word was coined for the study of plant species used by aboriginal people (Hershberger, 1895). Ethnic's knowledge of plant resources is documented in 'Ethno botany'. Ethnobotany is a promising field of research. Ethnobotanical exploration of Murbad Tahasil, Dist.Thane was done. Various medicinal plants employed by tribes of Murbad Tahasil in curing of human diseases were recorded. Out of total medicinal plants, Thakur and Katkari tribes use about 20 species in the treatment of diarrhoea and dysentery.

Key words: Ethno botany, diarrhoea and dysentery, medicinal plants.

INTRODUCTION

The tribes living in remote hilly forest areas and villages of Tahasil Murbad mostly have to depend upon home remedies. Main medicine man of the village has enough knowledge of uses of medicinal plants. 'Medicine men' do not disclose their knowledge to other people. The practice of employing folk medicines to cure human diseases descends down ancestrally. It is possible that such knowledge of medicinal plant remedies may get vanished with 'medicine man'. We tried to collect data of medicinal plants from these medicine men. Thakur, Warali, Katkari, Koli are the tribes in Thane district (Jagtap and Singh, 2002).

Murbad Tahasil is mountainous which lies approximately at 19^0 31^1 N and 73^0 35^1 E (Collectorate of Thane District, 2014.The forests are of tropical mixed deciduous and semi-evergreen types. These forests are reserved, protected and cover an aggregate area of 36256.122 ha. The tribal people collect different materials viz. flowers, fruits, nuts, bark, shoots, tubers,

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roots, leafy vegetables, gum and honey from the forests. Katkari is a nomadic tribal group and are socially and economically backward.

REVIEW OF LITERATURE

Huyin et al., (2000) recorded Blumea balsamifera (family Compositae) which is used in Thailand in case of skin itching. Chinese have been using it in indigestion problems. Saxena et al., (2000) recorded use of Cleome viscosa L. (Family Cleomaceae) in curing diarrhoea. Smoke of its leaves can be used to repel mosquitoes. Reddy and Vatsavaya, (2000) recorded that the tribal people of Nalgonda (Andhra Pradesh state, India), use Adhatoda vasica Nees., Cissus quandricularis L., Withania somnifera (L.) Dunal., Wrightia tinctoria R.Br. and Dolichondrone falcata (DC.) Seem. in treating Anthrax disease of cattle. Cassia italica (Mill) Andr. , Calotropis gigantea (L.) R. Br. And Terminalia chebula Retz. are used in curing constipation. Sharma and Singh, (2001) recorded that the tribal people of Dadra, Nagar Haveli and Daman (India) consume varieties of plant species in their regular diet. They use Aegle marmelos (L.) Corr. in treating dysentery and Syzygium cuminii (L.) Skeels. in digestive disorders.

METHODOLOGY

Extensive field work was done into the forest. The medicine men or tribal people were requested to accompany us in the field work. The information about medicinal uses of plants was confirmed. The methodology of previous workers was adopted (Jain, S. K. and Mugdal, V. (1999) and Malhotra *et al* (2001.).We entered the data in a field notebook.

RESULTS AND DISCUSSION

Present work is the result of Ethnobotanical exploration of Murbad Tahasil, Dist. Thane. We recorded medicinal plants used by tribes of Murbad Tahasil in treatment of various human diseases. Out of total medicinal plants tribe use about 20 species in stomachache and 18 plant species in diarrhoea and dysentery. Enumeration of these plant species is given below.

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1. Cissampelos pareira L. var **hirsuta** (Buch.-Ham. ex DC.) Forman. in Kew Bull. 22: 356. 1968. C. pareira L., Sp. Pl. 1031. 1753; Cooke, Fl. Pres. Bombay 1: 24. 1958 (Repr. Ed); Kulkarni in Singh et al. Fl. Maharashtra St. Dicot. 1: 178. 2000. Venivel/ Padvel.

Twinner; hairy; leaves ovate, reniform, peltate; flowers greenish yellow, minute; drupes obovoid, transversely ridged.

Family **:** Menispermaceae

Fls & Frts : July-November.

Distrib : Frequent in hedges in forest area. Gorakhgad (NACSA) 279.

Uses : Root infusion, one spoon twice a day is used to check dysentery in kids.

Literature : Jain (1991) -(rt) dysentery.

2.Cocculus hirsutus (L.) Theob. in Mason, Burma ed. Theob. 2: 657.1883; Santapau, Fl. Khandala ed. 3, 4, 1967; Kulkarni in Singh et al. Fl. Maharashtra St. Dicot.1: 179. 2000; C. villosus DC., Syst. 1:525, 1818; Cooke, Fl. Pres. Bombay 1: 22. 1958. (Repr. ed.). Vasanvel, Taan, Para-vel, Jaljamni.

Scandent or straggling undershrub; hirsute branches; leaves villous; male flowers- in axillary cymose panicles, female flowers- in clusters; drupes reddish.

Family : Tiliaceae

Fls & Frts : Feb - June.

Distrib : Common in deciduous forest. Kheware (NACSA), 015

Uses : Stomachache: root infusion with water is taken orally; Stem- is tied over waist to control dysentery in kids.

Literature : Jain (199)1 -(px) dysentery, (st) stomach disorder.

3.Stephania japonica (Thunb.) Miers. Hook, f. and Thoms. in Hook, f. Fl. Brit, India 1:103. 1872; Cooke, Fl. Pres. Bombay 1: 23. 1958 (Repr. Ed); Kulkarni in Sing et al. Fl. Maharashtra St. Dicot. 1: 181. 2000. Pahad vel.

Twining shrub; leaves broadly ovate, base cordate, apex acute- acuminate; flowers minute, greenish- yellow; drupes solitary, obovoid, red.

Fls & Frts : July – February.

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Distrib : Infrequent in hills of forests. Gorakhgad (NACSA) 280.

Uses : 2-4 spoonful leaf juice in water is given in dysentery.

Literature : Sharma and Singh (2001) -(roots) in dysentery.

4.Abelmoschus esculentus (L.) Moench. Meth. Pl. 617. 1794; Mast. in Hook, f. Fl. Brit, India 1: 343. 1874; Cooke, Fl. Pres. Bombay 1: 119. 1958 (Repr. Ed); Venkanna and Das Das in Singh et al. Fl. Maharashtra St. Dicot. 1: 334. 2000. Bhendi.

Herbs or undershrubs, branches with stiff hairs; Leaves variously 3-9 lobed; Flowers axillary, solitary, corolla yellow with reddish centre; Capsules 5-angled, woody at maturity; seeds greenish-brown, reniform.

Family : Malvaceae

Fls & Frts : Throughout the year.

Distrib : Commonly cultivated in backyards. Zapwadi (NACSA) 273.

Uses : It is best used against dysentery.

Literature : Jain (1991) - (fr) vegetable.

5.Sterculia urens Roxb. Pl. Corom. 1: 25, t. 24. 1795; Mast. in Hook, f. Fl. Brit, India 1: 355. 1874; Cooke, Fl. Pres. Bombay 1:131.1958 (Repr. Ed); Moorthy in Singh et al. Fl. Maharashtra St. Dicot.1:359. 2000. Kandol, pandruk, Bhutkes.

Tree; bark shining- softly pubescent; Leaves 3-5 lobed, velvety hairy; flowers in terminal panicles; follicles 5-6, densely covered with dark purple, stinging, shining hairs; seeds 3-6, oblong black.

Family : Sterculiaceae

Fls & Frts : December- May.

Distrib : Common in dry deciduous forest. Walhivare (NACSA) 041.

Uses : Gum is used to check diarrhoea..

Literature : Naidu et al, (2008) -(bk) rheumatism, (gum) dysentery.

6.Triumfetta rhomboidea Jacq. Enum. Syst. Pl. 22. 1760; Mast in Hook, f. Fl. Brit, India 1: 395. 1874; Cooke, Fl. Pres. Bombay 1: 156. 1958 (Repr. Ed); Pradhan in Singh et al. Fl. Maharashtra St. Dicot. 1: 399. 2000. Thinjira.

Herbs; Leaves variable, rhomboid-ovate, stellately hairy; Flowers yellow in cymes.

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Family : Tiliaceae

Fls & Frts : July-December.

Distrib : Common on roadside and hill slopes. Khutal (NACSA) 315

Uses : Roots and leaves are used in curing dysentery.

Literature : Jain (1991) -(lf) dysentery, (st) fibre.

7.Citrus aurantifolia (Christm and Panz.) Swing. in J. Wash. Acad. Sci. 3: 465. 1913; Hook, f. in Hook, f. Fl. Brit, India 1: 515. 1875; Cooke, Fl. Pres. Bombay 1: 201. 1958 (Repr. Ed); Jadhav in Singh et al. Fl. Maharashtra St. Dicot. 1: 483. 2000. Limbu.

Thorny shrubs or small trees; Leaves oblong to elliptic-ovate, Petioles distinctly winged; Flowers white, solitary or few in axillary; Fruits globose, green, yellow when ripe.

Family :Rutaceae

Fls & Frts : Throughout year.

Distrib : Cultivated for its fruits. Shivle (NACSA) 328.

Uses : Fruit juice with tea is taken in stomach disorder.

Literature : Jain (1991) -(fr) diarrhoea.

8.Soymida febrifuga (Roxb.) Juss. in Mem. Mus. Hist. Nat. 19: 251. 1830; Hiern in hook. F. Fl. Brit. India 1: 567. 1875: Cooke, Fl. Pres. Bombay 1: 228. 1958 (Repr.); Moorthy in Singh et al. Fl. Maharashtra st. Dicot. 1: 508. 2000. Rohan.

Tree; Leaves crowded towards the ends of branches; Leaflets 3-6 pairs; Flowers in axillary and terminal panicles; Capsules woody, 5-valved; Seeds winged.

Family : Meliaceae

Fls & Frts : March-May

Distrib : Rare in hill forests. Gorakhgad (NACSA) 284.

Uses : Bark decoction is given orally twice a day to cure dysentery and stomachache.

Literature : Jain (1991) -(bk) dysentery.

9.Ziziphus mauritiana Lam. Encycl. 3:319. 1789; Law. in Hook, f. Fl. Brit, India 1: 632. 1875; Cooke, Fl. Pres. Bombay 1:256.1958 (Repr. Ed); Pradhan in Singh et al. Fl. Maharashtra St. Dicot.1:544. 2000. Bor.

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Large shrubs or small trees; Leaves ovate- elliptic, glabrous above, dusty beneath; Flowers greenish yellow; Drupes globose, red when ripe, stone longitudinally grooved.

Family : Rhamnaceae

Fls & Frts : September- January

Distrib : Common on barren hill slopes. Shivle (NACSA) 325.

Uses : Bark- Crushed in water and infusion prepared is consumed to control dysentery.

Literature : Kadel and Jain (2006) -(rt) fmd. Jain (1991)- (fr) edible, (px) dysentery.

10.Mangifera indica L. Sp. Pl. 200. 1753; Hook, f. Fl. Brit, India 2: 13. 1876; Cooke, Fl. Pres. Bombay 1:291.1958 (Repr. Ed); Prasanna in Singh et al. Fl. Maharashtra St. Dicot.1:584. 2000.Amba.

Large evergreen tall tree; leaves oblong- lanceolate, coriaceous; flower polygamous in terminal panicles; drupes fleshy, pyriform with hard, fibrous stones.

Family : Anacardiaceae

Fls & Frts : January- June

Distrib : Common in deciduous forest. Kheware (NACSA), 142.

Uses : bark decoction is given orally to check diarrhoea in cattle.

Literature : Singh and Chauhan (2004) -(lf) religious. Bhatt et al., (2001) - (bk) diarrhoea.

11.Careya arborea Roxb. Pl. 3: 14, t. 218, 1819; Cooke, Fl. Pres. Bombay 1:497, 1903; Hook. f., Fl. Brit. Ind. 2: 511, 1878; Almeida, Fl. Sawantwadi 174, 1990; Pradhan in Singh et al. Fl. Maharashtra St. Dicot.2:22. 2001. Kumbhi.

Tree; leaves, oblong- obovate, rounded or shortly acuminate, crenate- denticulate, tapering at the base. Flowers yellowish- white, ill smelling in terminal spikes; fruits green, globose.

Family : Lecythidaceae

Fls & Frts : March - July.

Distrib : Common in forest. Kheware (NACSA), 004

Uses : Bark & roots. Bark decoction is given in Dysentery.

Literature : Jain, (1991) -(bk) snake bite, dysentery, (rt) fish poison.

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12.Psidium guajava L.Sp. Pl. 470. 1753; Duthie in Hook, f. Fl. Brit, India 2: 468. 1878; Cooke, Fl. Pres. Bombay 1: 529. 1958 (Repr. Ed); Kulkarni in Singh et al. Fl. Maharashtra St. Dicot. 2: 8. 2001.Peru.

Shrub; bark peeling of in flakes; leaves sessile, oblong-elliptic, pubescent on both sides; flowers axillary, solitary, white; fruits pyriform, fleshy, green, pulpy; Seeds globose.

Family : Myrtaceae

Fls.& Frts : Throughout year

Distrib : Cultivated for its fruits. Walhivare (NACSA), 037.

Use : Leaves juice given orally to check dysentery (H & V)

Literature : Khyade et al., (2010) -(lf) toothache; Jain, (1991)- (lf) dysentery (fr) edible.

13.Holarrhena pubescens (Buch.-Ham) Wall. Ex G. Don.Gen syst. 4: 78. 1837; in Taxon. 26: 533. 1977; Pradhan in Singh et al. Fl. Maharashtra St. Dicot. 2: 322. 2001; H. antidysentrica Wall. ex DC in DC Prodr. 8: 413. 1844; Hook, f. Fl. Brit, India 3: 644. 1882; Cooke, Fl. Pres. Bombay 2: 195. 1958 (Repr. Ed).Kuda

Small trees; Leaves elliptic-ovate; Flowers white, in terminal corymbose cymes; Follicles linear, cylindrical; Seeds tipped with deciduous coma of brown hairs.

Family : Apocynaceae

Fls & Frts : Almost through year.

Distrib : Common in deciduous forest. Sonawale (NACSA), 154.

Use : Leaves- in Stomachache and Dysentery: Seeds- powdered and taken with jaggery to get relief.

Literature : Jain, (1991) - (bk, sd) dysentery, stomachache, (fl) vegetable

14.Bridelia retusa (L.) Spreng. Hook, f. Fl. Brit, India 5: 268. 1887; Cooke, Fl. Pres. Bombay 3: 68. 1958 (Repr. Ed); Londhe in Singh et al. Fl. Maharashtra St. Dicot. 2: 863. 2001. Asana.

Trees; 5 to 8 m in height, spiny, bark grey- brown; leaves elliptic- oblong; flowers yellowish in axillary clusters; Drupes fleshy, globose, purplish-black.

Family : Euphorbiaceae

Fls & Frts : June- December.

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Distrib : Common in deciduous forest. Jamburde (NACSA), 069.

Uses : Bark- dried powder consumed with sugar to control dysentery. Poultice of bark applied on inflammation.

Literature : Murugesan et al. (2011) - (bk) pain. Jain 1991 - (bk) diarrhoea.

Plant species used in the treatment of diarrhoea & dysentery by tribes of Murbad Tahasil, Thane district (India):

Thakurs, Katkari and Koli use bark of Amba (Mangifera indica L.Anacardiaceae), Asana (Bridelia retusa (L.) Spreng.Euphorbiaceae),Kumbhi (Careya arborea Roxb.Lecythidaceae) , Rohan (Soymida febrifuga (Roxb.) Juss.Meliaceae) and Bor (Ziziphus mauritiana Lam.Rhamnaceae).They give orally to cure diarrhoea and dysentery in tribal people.Thakurs and koli give leaf decoction orally Pahad vel (Stephania japonica (Thunb.) Miers.Menispermaceae), Peru (Psidium guajava L.Myrtaceae), root powder of Padvel (Cissampelos pareira L. var hirsuta Buch.-Ham. ex DC.) Forman.Menispermaceae) and Thinjira (Triumfeta rhomboidea Jacq.Tiliaceae).They tie stems of Vasanvel (Cocculus hirsutus (L.) Theob.Menispermaceae) and Murud- sheng (Helictres isora L.Sterculiaceae); flowers of Jaswand (Hibiscus rosa-sinensis L.Malvaceae) ;fruits of Bhendi (Abelmoschus esculentus (L.) Moench.Malvaceae) and seeds of Kuda (Holarrhena pubescens (Buch.-Ham) Wall. Ex G. Don.Apocynaceae).

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