

Ethnobotanical survey of medicinal plants used to treat human diseases from Lalthane, Vishrampur village, Palghar tehsil, Thane District, Maharashtra, India.

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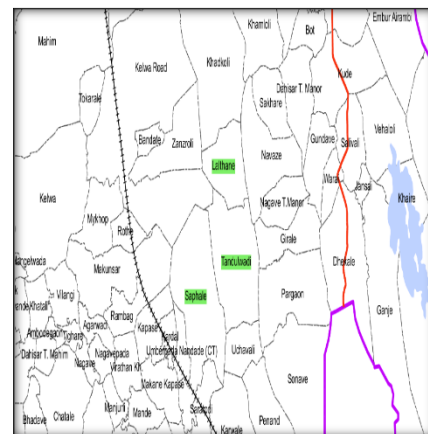
Abstract:- The ancient wisdom regarding medicinal plants greatly contributes to public health and the development of pharmaceuticals. Many individuals around the globe continue to rely on medicinal plants for the treatment and prevention of illnesses. Studies in Palghar district have indicated that the local population has utilized plants for the treatment of various ailments. The study conducted an ethnobotanical survey in Lalthane Vishrampur village, Palghar tehsil, Thane District, to explore the traditional use of medicinal plants in treating human diseases. The primary goal is to record the traditional wisdom regarding medicinal plants preserved by local communities and pinpoint plant species that may have therapeutic benefits. Data was gathered via semi-structured interviews with individuals who possess knowledge and members of the local community. The data gathered in, Palghar tehsil in Maharashtra, India, included details on 114 plant species. This information comprised their vernacular names, medicinal uses (Therapeutic uses), methods of preparation for different types of medicines, and the ways in which they are administered. The findings unveiled a remarkable variety of medicinal plants in Lalthane, Vishrampur village, which are utilized for addressing a range of health issues like gastrointestinal problems, skin conditions, respiratory issues, and fevers.

Keywords: - Ethnobotanical survey, Medicinal plants, Knowledgeable individual, Therapeutic uses, Vishrampur village, Cultural communities.

Introduction:- Ethnobotany delves into the fascinating connection between plants and humans, also known as folkloristic botany. Plants have been essential to sustaining human life since the dawn of time. Their main emphasis was on the importance of gathering information and knowledge regarding natural resources for scientific and economic objectives, assessing ethnobotanical data, and the critical necessity for a fresh research approach to comprehend ethnomedicine practices. (3) It is crucial to document traditional ethnomedicinal knowledge as it can assist in the creation of new medicines. Furthermore, it has the potential to support the safeguarding of indigenous heritage and sustainable utilization of natural resources.(1)

Methodology:-

Selection Of Study Area - Lalthane & Vishrampur villages are located near Tandulwadi fort, in Palghar Tehsil, Thane District, Maharashtra, India. This location was chosen as the study area because of its varied topography and prospective ecological importance. The study incorporated various habitats, which involved tropical forests, grasslands, wetlands, and agricultural lands.



Plant Identification - Plant specimens cited in discussions and field visits with local community members and experts were gathered, dried, and pressed for identification purposes. Plants were identified with the assistance of taxonomic experts and reference materials.

Data analysis - Data analysis involved recording various pieces of information such as plant names, habitats, parts of plants utilized, medicinal purposes, and the techniques employed for preparing medicinal treatments.

Validation - Validation was conducted to ensure the accuracy of the collected information by cross-verification with our field guide, Mr. Vruksha Mitra. Prakash Kale, has thoroughly researched existing ethnobotanical literature such as the Flora of Maharashtra (M. R. Almeida)

Semi-structured interview- A semi-structured interview was conducted in the local dialect, allowing for open-ended conversations about the uses of plants, traditional preparation techniques, and cultural importance.

Result and Discussion :-

Table No.1 Medicinal and traditional plants and their medicinal uses

| Sr. No | Botanical Name | Common Name | Family | Habit | Uses | Part plant used |
|--------|-----------------------------|----------------------|-----------|-------|---|-----------------|
| 1 | <i>Helicteres isora</i> | Murud sheng or kewad | Malvaceae | Tree | It is used in gutti. The dried pods(sheng) is used for stomach problems in infants. | Pods |
| 2 | <i>Jasminum malabaricum</i> | Ranjaai, Ran mogra | Oleaceae | Shrub | It is used as ear drop to cure ear aches. | Leaves |
| 3 | <i>Sida cordifolia</i> | Chikni or Bala | Malvaceae | Herb | Root of this plant is used with the combination of honey for increasing strength in the body. | Roots |

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|----|-------------------------------|-----------------|----------------|-------|---|-------------|
| 4 | <i>Terminalia bellirica</i> | beda | Combretaceae | Herb | Fruits of this plant is washed and it can be chewed in the mouth which relieves cough. | Fruits |
| 5 | <i>Haldina cordifolia</i> | Hedu | Rubiaceae | Tree | The small fruit between the two leaves know as (Boka) the juice of Boka is used for sinus. | Fruits |
| 6 | <i>Bauhinia varigata</i> | kanchan | Fabaceae | Tree | The scale or bark of this tree is boiled in water and it cures the clots on the body. | Bark |
| 7 | <i>Celastrus paniculatus</i> | Jyotishmati vel | Celastraceae | Shrub | The seed oil of this plant is put in the nose for increasing the memory power. | Seeds |
| 8 | <i>Baliospermum blume</i> | Dantivel | Euphorbiaceae | Shrub | Dantivel is used to cure loose motions. This plant infect is used in all medicines of loose motion but only 0.5%. | Stems |
| 9 | <i>Desmodium gangeticum</i> | Salvan | Fabaceae | Shrub | This plant is used in Dashmool kada. | Whole plant |
| 10 | <i>Hemidesmus indicus</i> | Anant vel | Asclepiadaceae | Herb | Roots of this plant purifies the blood and are also effective on skin related problems. | Roots |
| 12 | <i>Cissampelos pareira L.</i> | Pahadvel | Menispermaceae | Herb | This plant is effective for problems related to stomach or cures stomach ache. | Stems |
| 13 | <i>Asparagus racemosus</i> | Shatavari | Liliaceae | Shrub | Shatavari powder is used for weakness 1 spoon of shatavari powder in milk can be taken. | Roots |
| 14 | <i>Gossypium Herbaceum</i> | Kapus | Malvaceae | Shrub | Powder or juice of the leaves are used for jaundice and fever. | Whole plant |
| 15 | <i>Bauhinia racemosa</i> | Apta | Fabaceae | Shrub | Leaves of this tree are crushed with 2-3 spoons of water and the juice is taken for heart attacks. | Leaves |

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|----|-------------------------------------|-----------------|-----------------|---------|---|----------|
| 16 | <i>Gloriosa superba L.</i> | Kal lavi | Colchicaceae. | climber | The white bulb of this plant is used on snake bite as it is anti-venomous. | Rhizomes |
| 17 | <i>Heliotropium indicum L</i> | Naagdawan | Boraginaceae | Herb | 2-3 leaves are crushed and juice is used for the treatment of the flow of white and red fluids in females. | Leaves |
| 18 | <i>Bauhinia acuminata</i> | Safed aaein | Caesalpiniaceae | Shrub | The bark of this tree(2 inch pieces) is soaked in water in a copper glass and it is consumed for joint pain or arthritis. | Rhizomes |
| 19 | <i>Elaeocarpus angustifolia</i> | Rudraksha | Elaeocarpaceae | Tree | Fruit of Rudraksha is soaked in water overnight and it is drunk in empty stomach which keeps a control on diabetes. | Fruits |
| 20 | <i>Aegle marmelos</i> | Bael | Fabaceae | Tree | Leaves of Bael tree is used for jaundice and arthritis. | Leaves |
| 21 | <i>Oroxylum indicum</i> | Tetu | Bignoniaceae | Tree | The scale of this tree is used to cure diarrhea and dysentery. | Roots |
| 22 | <i>Hiptage benghalensis</i> | Madhumalti | Malpighiaceae | Shrub | The leaves of this plant is crushed and applied on the skin (fungal infection) | Leaves |
| 23 | <i>Eclipta alba</i> | Bhringraj, Maka | Asteraceae | Herb | The combination of the leaf juice of Bhringraj and Jai is used to wash the open wounds it helps the wound to cure faster. | Leaves |
| 24 | <i>Cynodon dactylon</i> | Durva | Poaceae | Herb | The roots of this plant is grated and juice is extracted out of it and consumed with the honey for relief from hick- ups. | Roots |
| 25 | <i>Ziziphus mauritiana</i> | Badri | Rhamnaceae | Tree | Gargling with the decoction of Ziziphus leaf relieves gum pain and cure ulcers in mouth. | Fruits |

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|----|-----------------------------|-------------|----------------|-------|---|------------|
| 26 | <i>Datura stramonium</i> | Dhotra | Solanaceae | Shrub | The swelling of the body can be reduced by the application of crushed leaves of Datura. | Leaves |
| 27 | <i>Ocimum sanctum</i> | Tulsi | Lamiaceae | Herb | The juice of the leaves of Tulsi is taken with the pinch of cardomom powder to cure vomiting. | Leaves |
| 28 | <i>Prosopis cineraria</i> | Shami | Mimosaceae | Tree | The young leaves of shami are crushed and applied on the boils caused due to heat. | Leaves |
| 29 | <i>Punica granatum</i> | Dalimb | Lythraceae | Tree | The juice of Pomogrante one cup a day can control high blood pressure. | Fruits |
| 30 | <i>Achyranthes aspera</i> | Aagada | Amaranthaceae | Herb | Roots of Aagada can be taken in the dosage of 10gm to cure Night blindness. | Roots |
| 31 | <i>Solanum indicum</i> | Dorli | Solanaceae | Herb | The juice of the leaves and root of dorli stem is consumed with honey which gives relief from coughing and asthma. | Leaves |
| 32 | <i>Nerium indicum</i> | Kanher | Apocynaceae | Shrub | The roots of white flowering plant is chafed and applied on snake bite as it is anti-venomous. | Flower |
| 33 | <i>Calotropis procera</i> | Rui | Apocynaceae | Shrub | The latex of the plant is used with the combination of jaggery and oil and applied on the wound caused from Dog bite. | Stems |
| 34 | <i>Terminalia arjuna</i> | Arjun | Combretaceae | Tree | Heartwood of the tree is boiled with 2 cups of milk and reduced to half and the decoction is taken to cure heart disease. | Heart wood |
| 35 | <i>Evolvulus alsinoides</i> | Vishnukrant | Convolvulaceae | Herb | The leaves of this plant is crushed and applied on the wounds of Piles. | Leaves |

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|----|-------------------------------|------------|-------------|-------|--|---------------|
| 36 | <i>Cedrus deodara</i> | Devdar | Pinaceae | Tree | The bark of this tree should be chafed and applied on forehead for headache. | Bark |
| 37 | <i>Origanum majorana</i> | Marwa | Lamiaceae | Herb | The juice of the Marwa plant is rubbed on the foot to remove the extra heat of the body. | Leaves |
| 38 | <i>Ficus religiosa</i> | Peepal | Moraceae | Tree | The powder of the bark of peepal tree stops the blood flow and heals the wounds. | Bark |
| 39 | <i>Jasminum officinale</i> | Jai, suman | Oleaceae | Shrub | The roots of this plant is chafed with cows urine (gomutra) and applied on fungal infection. | Roots |
| 40 | <i>Pandanus odoratissimus</i> | Kevda | Pandanaceae | Tree | The young inflorescence of kevda is consumed by the women suffering form irregular menstrual cycle to cure it. | Inflorescence |
| 41 | <i>Sesbania grandiflora</i> | Hadga | Fabaceae | Tree | The juice of Agasta leaf is consumed with jaggery and ginger powder and pimpali to cure greediness and dramatic illusions. | Leaves |
| 42 | <i>Tridax procumbens</i> | Dagdi pala | Asteraceae | Herb | The leaves of this plant is crushed and consumed which cures kidney stone. | Leaves |
| 43 | <i>Ziziphus rugosa</i> | Toran | Rhamnaceae | Tree | This plant is traditionally used for the treatment of ulcers and skin diseases. | whole plant |
| 44 | <i>Syzygium aromaticum</i> | Lavang | Myrtaceae | Tree | Lavang is traditionally used to cure liver ailments and stomach disorders. | Floral Buds |
| 45 | <i>Strychnos nux vomica</i> | Kajra | Loganiaceae | Tree | The dried seeds of kajra are used for the treatment of arthritis and vomiting and also used to increase appetite. | Seeds |

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|----|---------------------------------|---------------------|----------------|------|---|-------------|
| 46 | <i>Emblica officinalis</i> | Avla | Phyllanthaceae | Tree | The avla fruit boost the immunity power and it is consumed to reduce stress and cure headaches. | Fruits |
| 47 | <i>Syzygium cumini</i> | Jambul | Myrtaceae | Tree | Dried and powdered leaves of jambul is used as tooth powder for strengthening teeth gums. | Leaves |
| 48 | <i>Acacia catechu</i> | Khair | Fabaceae | Tree | Heartwood is cooling and helps in digestion it is also directly applied on the skin for curing skin diseases. | Heart wood |
| 49 | <i>Mesua ferrae</i> | Naagkeshar | Calophyllaceae | Tree | Fresh flowers of this tree are useful in skin diseases like leprosy, itching and on wounds. | Flowers |
| 50 | <i>Aquilaria sinensis</i> | Krushnaguru | Thymelaeaceae | Tree | The powder of the plant should be taken with honey which relieves cough. | Whole plant |
| 51 | <i>Butea monosperma</i> | Palas | Fabaceae | Tree | Gum of this tree is used to treat diarrhea and dysentery seeds and fruits are used in treatment of piles and also eye disorders. | Fruits |
| 52 | <i>salmalia malabarica</i> | Sawar | Bombacaceae | Tree | Bark of this tree is used to stop bleeding and also beneficial for healing of wounds, paste of thorns of the bark is used to cure skin. | Bark |
| 53 | <i>Artocarpus heterophyllus</i> | Fanas | Moraceae | Tree | Latex from the leaves are applied over mouth ulcers as part of treatment, ripe jackfruit can be consumed to increase sperm count. | Leaves |
| 54 | <i>Mitragyna parvifolia</i> | Kalamb, bumikadamba | Rubiaceae | Tree | The bark of this tree is used to cure jaundice | Bark |
| 55 | <i>Azadirachta indica</i> | Neem | Meliaceae | Tree | Decoction of neem roots are used to cure fever, neem leaf extract is used for treatment of Malaria. | Roots |

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|----|------------------------------|----------------------|----------------|---------|---|-------------|
| 56 | <i>Madhuca indica</i> | Maha, mahua | Sapotaceae | Tree | The dried flowers of mahua are boiled in milk and given in dose of 40-50ml to treat weakness of nerves. | Flower |
| 57 | <i>Mimusops elengi</i> | Bakula | Sapotaceae | Tree | Unripe fruit can be chewed which helps to cure the bleeding gums, seed powder of this plant is used for the treatment of headache. | Fruits |
| 58 | <i>Cinnamomum tamala</i> | Tejpatra, tamalpatra | Lauraceae | Herb | The paste of the bark of plant is applied over the area affected with swelling and pain, leaf oil is given in dose of 3-6 drops for T.B patients. | Bark |
| 59 | <i>Gardenia jasminoides</i> | Anant | Rubicaceae | Shrub | It is used to boost the immune system and also helps to regulate the hormone levels in both male and female. | whole plant |
| 60 | <i>Semecarpus anacardium</i> | Beeba | Anacardiaceae | Tree | Flowers of this plant are very beneficial for asthma, it is best to cure various skin related disorders such as skin rash, itching and swelling. | Flower |
| 61 | <i>Carissa carandas</i> | Karwand | Apocynaceae | Shrub | The paste of the root is applied over the diabetic, ulcer. Paste of the bark is applied over fresh wounds for its treatment. | Roots |
| 62 | <i>Averrhoa bilimbi</i> | Bilimbi | Averrhoaceae | Tree | Grated bilimbi fruit with a pinch of salt can be applied on the skin in case of pimples. | Fruits |
| 63 | <i>Piper nigrum</i> | Mikhel | Piperaceae | climber | Dried powder of seeds can be taken for lowering the blood pressure. It is also helpful in reducing stress. | Seeds |
| 64 | <i>Plumbago zeylanica</i> | Chitrak | Plumbaginaceae | Herb | The powder of the root is taken with butter milk to cure piles. | Roots |
| 65 | <i>Aerva Lanata</i> | Kapoor tulsi | Amaranthaceae | Shrub | The paste of the plant is applied over the forehead to treat headache. | Leaves |

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|----|------------------------------|------------------------|----------------|---------|--|-------------|
| 66 | <i>Pterocarpus marsupium</i> | Bibla | Fabaceae | Tree | Fresh leaves are crushed into fine paste and it is warmed a little and applied over the swelling. | Leaves |
| 67 | <i>Cymbopogon flexuosus</i> | Gavti chaha | Poaceae | Herb | Hot water extract of roots is used orally to treat diabetics, Few drops of oil is taken with lemon juice in cholera. | Roots |
| 68 | <i>Piper betel</i> | Paanvel | Piperaceae | Climber | Betel leaves applied with castor oil is warmed and tied over chest relieves asthma and cough in children. | Leaves |
| 69 | <i>Morus alba</i> | Shahatuta | Moraceae | Shrub | Decoction from the leaves of tuta is used for gargling in treating sore throat. | Leaves |
| 70 | <i>Clerodendron serratum</i> | Bharangi | Lamiaceae | Herb | Roots of this plant is used to treat jaundice and various disorders related to liver. | Roots |
| 71 | <i>Elettaria cardamom</i> | Elaichi | Zingiberaceae. | Herb | Elaichi is used to cure indigestion, nausea and vomiting it is also beneficial for the suffers of kidney stone. | Floral buds |
| 72 | <i>Gmelina arborea</i> | Shivan | Lamiaceae | Tree | Fruit is useful in bleeding disorders and to improve blood production it also cures Vata and Pitha dosha. | Fruits |
| 73 | <i>Garcinia indica</i> | Kokam | Clusiaceae | Tree | Tender leaves are crushed and taken with buttermilk for headache and gastritis the ripe fruit balances Vata and Kapha dosha. | Leaves |
| 74 | <i>Spondias pinnata</i> | Ambada | Anacardiaceae | Tree | Juice of the leaves of ambada is applied for ear ache. The decoction of the bark is given to regulate menstrual cycle. | Leaves |
| 75 | <i>Vernonia amygdalina</i> | Umubirizi, Bitter leaf | Asteraceae | Shrub | Leaves extract is used for the treatment of diabetes, fever reduction. | Roots |

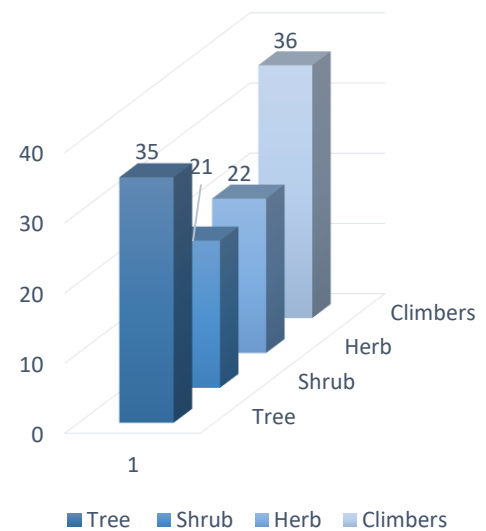
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|----|-------------------------------|-------------|----------------|---------|---|-------------|
| 76 | <i>Vallisneria spiralis</i> | Vishmogri | Apocynaceae | climber | Roots of the plant is used to relief the pain and also used to cure Malaria. | Roots |
| 77 | <i>Merremia tuberosa</i> | Wood rose | Convolvulaceae | climber | The grated roots are useful for those who have swollen bellies and whose intestines rumble. | Roots |
| 78 | <i>Acacia concinna</i> | Shikekai | Fabaceae | climber | In head lice pods decoction is used to wash hair. It also promotes hair growth and controls dandruff. | Pods |
| 79 | <i>Argyreia nervosa</i> | Samudrashok | Convolvulaceae | climber | The cold decoction of the plant is given in a dosage of 40-50 ml to control Diabetes. | whole plant |
| 80 | <i>Pyrostegia venusta</i> | Sakrantvel | Bignoniaceae | climber | The extract of leaves are used in the treatment of hypopigmentation diseases. | Leaves |
| 14 | <i>Caesalpinia bonduc</i> | Sagargop | Caesalpinaceae | climber | Its leaf or seed paste is applied over the hydrocele to reduce the swelling. | Seeds |
| 82 | <i>Clematis hirsuta</i> | Sonjai | Ranunculaceae | climber | Clematis is used for joint pain, headaches and also for skin related problems. | whole plant |
| 83 | <i>Porana paniculata</i> | Himvel | Convolvulaceae | climber | It's used as a folk medicine to treat pain and inflammation. | whole plant |
| 84 | <i>Artabotrys hexapetalus</i> | Hirva chafa | Annonaceae | climber | Flowers are used to treat bad breath, vomiting, itching and leucoderma leaves decoction is also used for malaria and chlorella. | Flowers |
| 85 | <i>Schefflera elliptica</i> | Pachotra | Araliaceae | climber | Barks are used for reliving cough and the resins are used for wound healing. | Barks |

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|----|--------------------------------------|-----------------|----------------|---------|--|--------|
| 86 | <i>Butea superba</i> | Palasvel | Fabaceae | climber | The roots are used for sexual performance problems (erectile dysfunction) and lack of interest in sexual activity. | Roots |
| 87 | <i>Combretum latifolium</i> | Piluk | Combretaceae | climber | The tender leaves of this plant are used to render the immune system strong. | Leaves |
| 88 | <i>Dalbergia horrida</i> | Pentgul | Fabaceae | climber | The leaf paste is mixed with sheep urinals and applied on Herpes. | Leaves |
| 89 | <i>Dalbergia torta</i> | Garudvel | Fabaceae | climber | The leaves are used for the treatment of Colorectal and also used for the treatment of Cancer. | Leaves |
| 90 | <i>Dalbergia volubilis</i> | Alai | Fabaceae | climber | The roots and stem of this plant are used for the treatment of various ailments. | Roots |
| 91 | <i>Bougainvillea spectabilis</i> | Bougenvel | Nyctaginaceae | climber | A tea made from flowers and leaves is used for coughs and sore throats. It is also used to reduce acidity in the stomach and helps protect our livers. | Flower |
| 92 | <i>Petrea volubilis</i> | Sand paper vine | Verbenaceae | climber | Leaves of this plant has antidiabetic, antioxidant, anti- inflammatory, antipyretic, anticancer properties. | Leaves |
| 93 | <i>Combretum ovalifolium</i> | Madvel | Combretaceae | climber | The leaves are used in the treatment of peptic ulcer and its fruits are used in Diarrhea. | Leaves |
| 94 | <i>Ipomoea pescaprae</i> | Maryadvel | Convolvulaceae | climber | The seeds of this plant is chewed with areca nut, sooth abdominal pains and cramps. | Seeds |
| 95 | <i>Aganosma cymosa</i> | Malti | Apocynaceae | climber | The paste of the root is applied externally on the site of snake bite as it has antivenom properties. | Roots |

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|-----|-------------------------------|--------------|---------------|---------|---|--------|
| 96 | <i>Monstera deliciosa</i> | Monstera | Araceae | climber | Fruit of this plant has Vitamin C, anti-inflammatory stress reducing effects make it valuable antioxidant. | Fruits |
| 97 | <i>Combretum indicum</i> | Rangoonvel | Combretaceae | climber | The dried seeds of Rangoon Creeper are beneficial to treat intestinal worms and parasites. | Seeds |
| 98 | <i>Clematis gouriana</i> | Ranjai | Ranunculaceae | climber | In Ayurveda, the leaves of the plant have been used for treating puerperal fever and bruises. | Leaves |
| 99 | <i>Anodendron paniculatum</i> | Lambtani | Apocynaceae | climber | The roots of this plant have been used in traditional folk medicine as remedy for vomiting and cough. | Roots |
| 100 | <i>Capparis zeylanica</i> | Waghanti | Capparaceae | climber | The leaves are widely used for swellings, boils and piles traditionally it is also used as antidote to snake bites. | Leaves |
| 101 | <i>Ruellia prostrata</i> | Wild petunia | Araliaceae | Shrub | The leaves are widely used for swellings, boils and piles traditionally it is also used as antidote to snake bites. | Leaves |
| 102 | <i>Schefflera elliptica</i> | Pachotra | Fabaceae | Climber | Leaves are used in traditional medicine for various ailments, related to diabetes, skin conditions, and as an anticancer agent. | Bark |
| 103 | <i>Butea superba</i> | Palasvel | Combretaceae | Climber | The bark is been used for ailments like cough, wound healing, toothache, and nerve damage | Roots |
| 104 | <i>Combretum latifolium</i> | Piluk | Fabaceae | Climber | The roots (tubers) are used as medicine for erectile dysfunction (ED), increasing sexual desire. | Leaves |
| 105 | <i>Dalbergia horrida</i> | Pentgul | Fabaceae | Climber | The leaves, in particular, are used to treat dysentery and goiter, while the fruits are considered a tonic | Seed |

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|-----|----------------------------|-----------------|----------------|---------|--|-----------------|
| 106 | <i>Dalbergia volubilis</i> | Alai | Araceae | Climber | Powdered wood and seed oil are used for treating various ailments. | Leaves |
| 107 | <i>Monstera deliciosa</i> | Monstera | Combretaceae | Climber | The leaves are used through application for treating various ailments. | Leaves |
| 108 | <i>Combretum indicum</i> | Rangunvel | Convolvulaceae | Climber | The bark is used for treating various ailments. | Leaves |
| 109 | <i>Porana paniculata</i> | Heemvel | Fabaceae | Climber | The fruit is used for treating various ailments. | Leaves |
| 110 | <i>Derris scandens</i> | Ambri | Portulacaceae | Herb | Root paste topically to treat wounds and cure bone fractures | Stem |
| 111 | <i>Portulaca oleracea</i> | Common purslane | Solanaceae | Herb | The dried stem is used in muscular ache as well as in arthritis symptoms. | leaves and stem |
| 112 | <i>Physalis minima</i> | Sunberry | Solanaceae | Shrub | leaves and stems used for treating skin conditions, pain relief, and wound healing. | leaves |
| 113 | <i>Lantana camara</i> | Wild sage | Verbenaceae | Herb | Leaves of plant is traditionally used for conditions like gout, urinary disorders, and bladder ulcers. | leaves |
| 114 | <i>Ipomoea obscura</i> | Morning glory | Convolvulaceae | Shrub | Leaves used to treat cuts, ulcers, swellings, eczema, fever, colds, and high blood pressure | dried leaves |

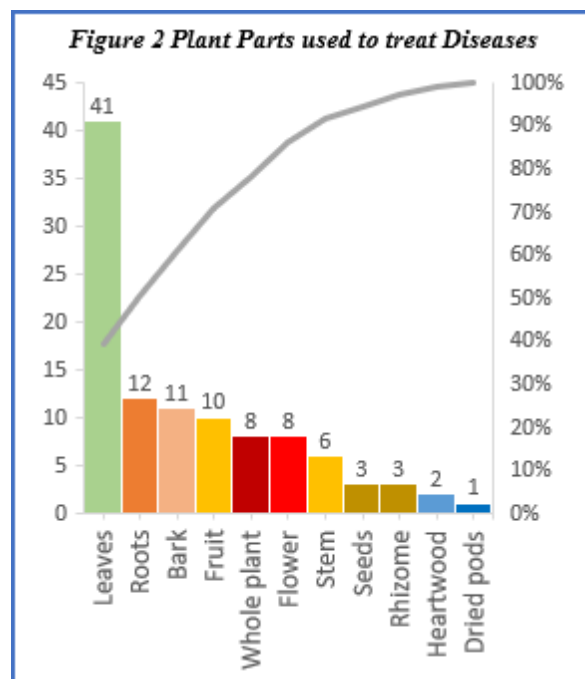
Figure 1 Distribution of Habit



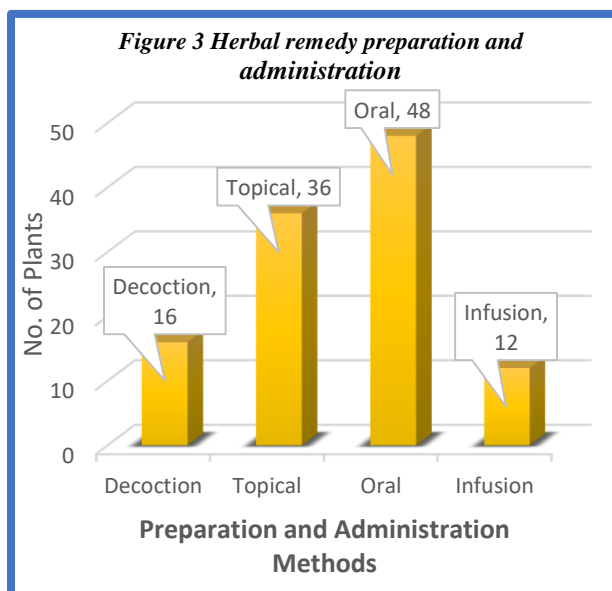
aggregate number of about 114 species belonging to 54 families were listed from the study area. All the plant species listed including woody plants, ornamental plants, timber woods and edible fruits and vegetables during survey is used for various medicinal purposes. Hence, based on the information collected from the local community's people out of 114 species there are 22 herbs, 21 shrubs, 35 trees and 36 climbers

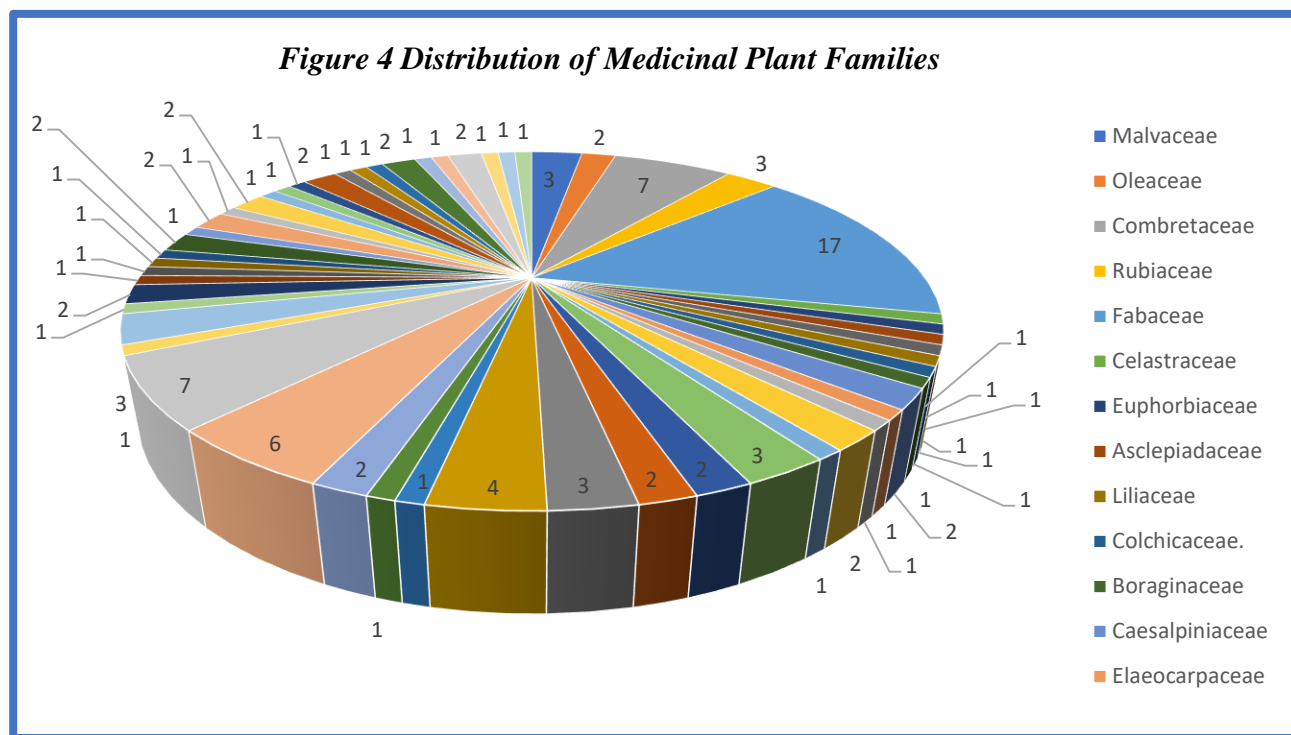
and all the documented ethnobotanical plants possess medicinal properties which cures and proves to be beneficial for number of human diseases.

According to an ethnobotanical survey conducted in Lalthane, Vishrampur village, local community peoples and local vaidu mostly used 90% of leaves of plants, 35% of roots 32% of fruit for medicinal purposes to treat human diseases. They used approximately 25% of whole plant which proved to be beneficial on various diseases. It was documented that 10% to 15% of Seeds and Flowers of the plants were of medicinal significance. The medicines prepared from the stem, rhizome, floral buds, pods and Inflorescence were less than 10% but they were used for the treatment of different diseases.



The most common methods of preparation and administration of medicinal drugs were oral intake with 48 plant species followed by the Topical use of plant species with a total number of 36 plant species. The decoction was prepared from 16 plant species for the treatment of human species. A total number of 12 species are used in Infusion.





The first dominant family among the medicinal plants was the Fabaceae with all around 17 genera which was followed by the Combretaceae and Convolvulaceae family who had a dominance of around 7 genus. The third dominant family was the Apocynaceae with 6 Genus. The next family was the Lamiaceae family with a dominance of 4 Genus. The Moraceae, Malvaceae, Rubiaceae, Solanaceae, Asteraceae were having a total number of 3 genus. The Oleaceae, Poaceae, Moraceae, Calophyllaceae, Amaranthaceae, Combretaceae, Sapotaceae, are the families which had a dominance of only 2 genus. The other families such as Meliaceae, Loganiaceae, Pandanaceae, Thymelaeaceae, Calophyllaceae, Phyllanthaceae were the least dominating Families.

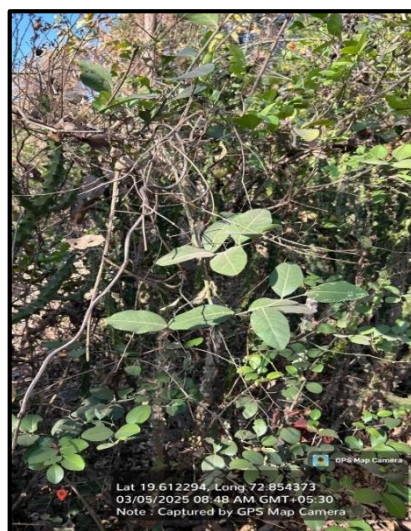


Figure No

6

Figure No

7

Figure 8

Figure No

6:-

Bahunia

variagata, Figure No 7:- *Capparis zeylanica*, Figure 8:- *Holarrhena pubescens*

Conclusion:- The study clearly showed that Lalthane, Vishrampur village, Palghar tehsil is rich in ethnobotanical diversity including many herbs, shrubs and tree components. There are 114 species of plants with medicinal importance, according to the current survey. The ethnobotanical survey in, that Lalthane, Vishrampur village Maharashtra, India has provided valuable information on the traditional knowledge of medicinal plants by the local group of individuals which includes therapeutic, culinary, ritual and other purposes. These bio resources not only provide them with economic security, but also a strong link to their ancestors. In order to preserve the diversity of plant species and in particular forests, it is necessary to take very good care of this area. The current documentation work will be very useful to preserve traditional knowledge.

Future Scope of the Study :-

Ethnobotanical survey can identify plants and compounds used in traditional medicine, providing leads for drug discovery and development.

Clinical trials should be conducted on the medicinal plants of the region because plants with high medicinal value can be used to produce drugs for the pharmaceutical industry.

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References: -

1. Amjad, M. S., Zahoor, U., Bussmann, R. W., Altaf, M., Gardazi, S. M. H., & Abbasi, A. M. (2020). Ethnobotanical survey of the medicinal flora of Harigal, Azad Jammu & Kashmir, Pakistan. *Journal of Ethnobiology and Ethnomedicine*, 16(1), 65. <https://doi.org/10.1186/s13002-020-00417-w>
2. Ayyanar, M., & Ignacimuthu, S. (2011). Ethnobotanical survey of medicinal plants commonly used by Kani tribals in Tirunelveli hills of Western Ghats, India. *Journal of Ethnopharmacology*, 134(3), 851–864. <https://doi.org/10.1016/j.jep.2011.01.029>
3. Chavhan, P. R., & Margonwar, A. S. (n.d.). Ethnobotanical Survey of Markanda Forest Range of Gadchiroli District, Maharashtra, India. *British Journal of Research*, 2(1), 0–0.

4. Jadhav, R. (2015). Ethnobotanical and ethnomedicinal Survey of Kadegaon Tahsil, Sangli (Maharashtra) India RR Jadhav. *Journal of Medicinal Plants Studies*, 4, 11–14.
5. Jagtap, S., Deokule, S., Pawar, P., & Harsulkar, A. (2009). Traditional Ethnomedicinal Knowledge Confined to the Pawra Tribe of Satpura Hills, Maharashtra, India. *Ethnobotanical Leaflets*, 2009(1). <https://opensiuc.lib.siu.edu/ebl/vol2009/iss1/12>
6. Khajuria, A. K., Manhas, R. K., Kumar, H., & Bisht, N. S. (2021). Ethnobotanical study of traditionally used medicinal plants of Pauri district of Uttarakhand, India. *Journal of Ethnopharmacology*, 276, 114204. <https://doi.org/10.1016/j.jep.2021.114204>
7. Khare, S. M., Pawar, S., & Patil, D. A. (2021). Plants of Temples and Religious Places in Khandesh Region (Maharashtra): An Ethnobotanical Perspective. *Plantae Scientia*, 4(5), Article 5. <https://doi.org/10.32439/ps.v4i5.257-265>
8. Lokhande, K. (2020). Ethnobotanical Survey on Wild Edible Plants Used by Tribals & Rural People of Arjuni/Mor Taluka, Gondia District, Maharashtra State, India. *Advances in Zoology and Botany*, 8, 209–217. <https://doi.org/10.13189/azb.2020.080317>
9. Morvin Yabesh, J. E., Prabhu, S., & Vijayakumar, S. (2014). An ethnobotanical study of medicinal plants used by traditional healers in silent valley of Kerala, India. *Journal of Ethnopharmacology*, 154(3), 774–789. <https://doi.org/10.1016/j.jep.2014.05.004>
10. M.R.Almeida [1996]. Flora of Maharashtra (Part 1 to 6) Thomas Paul Almeida for Blatter Herbarium, St Xavier 's college
11. Mutheeswaran, S., Pandikumar, P., Chellappandian, M., & Ignacimuthu, S. (2011). Documentation and quantitative analysis of the local knowledge on medicinal plants among traditional *Siddha* healers in Virudhunagar district of Tamil Nadu, India. *Journal of Ethnopharmacology*, 137(1), 523–533. <https://doi.org/10.1016/j.jep.2011.06.003>
12. Namsa, N. D., Tag, H., Mandal, M., Kalita, P., & Das, A. K. (2009). An ethnobotanical study of traditional anti-inflammatory plants used by the Lohit community of Arunachal Pradesh, India. *Journal of Ethnopharmacology*, 125(2), 234–245. <https://doi.org/10.1016/j.jep.2009.07.004>
13. Prabhu, S., Vijayakumar, S., Morvin Yabesh, J. E., Prakashbabu, R., & Murugan, R. (2021). An ethnobotanical study of medicinal plants used in pachamalai hills of Tamil Nadu, India. *Journal of Herbal Medicine*, 25, 100400. <https://doi.org/10.1016/j.hermed.2020.100400>
14. Ralte, L., Sailo, H., & Singh, Y. T. (2024). Ethnobotanical study of medicinal plants used by the indigenous community of the western region of Mizoram, India. *Journal of Ethnobiology and Ethnomedicine*, 20(1), 2. <https://doi.org/10.1186/s13002-023-00642-z>

15. Tresina, P. S., Selvam, M. S., Sornalakshmi, V., & Mohan, V. R. (2023). An Ethnobotanical Study of Medicinal Plants Used by Traditional Healers in Grizzled Squirrel Wildlife Sanctuary (GSWS) Tamil Nadu, India. In K. Arunachalam, X. Yang, & S. Puthanpura Sasidharan (Eds.), *Bioprospecting of Tropical Medicinal Plants* (pp. 43–106). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-28780-0_3
16. Vijayakumar, S., Morvin Yabesh, J. E., Prabhu, S., Manikandan, R., & Muralidharan, B. (2015). Quantitative ethnomedicinal study of plants used in the Nelliampathy hills of Kerala, India. *Journal of Ethnopharmacology*, 161, 238–254. <https://doi.org/10.1016/j.jep.2014.12.006>
17. Yatish Lele Et Al., Y. L. E. Al. & TJPRC. (2017). Traditional Uses of the Wild Plants by the Tribal Communities of Jawhar, Palghar, Maharashtra, India. *International Journal of Botany and Research*, 7(6), 19–22. <https://doi.org/10.24247/ijbrdec20174>