



Indigenous Knowledge in treatment of common Health Problems



**GLOBAL SUMMIT ON HERBAL AND NATURAL REMEDIES
OCT 26-27, 2015**

Dr. Manoshi Baruah Deka

Dr. Rekha Moni Saikia

**Assam Agricultural University,
Jorhat, Assam, India**

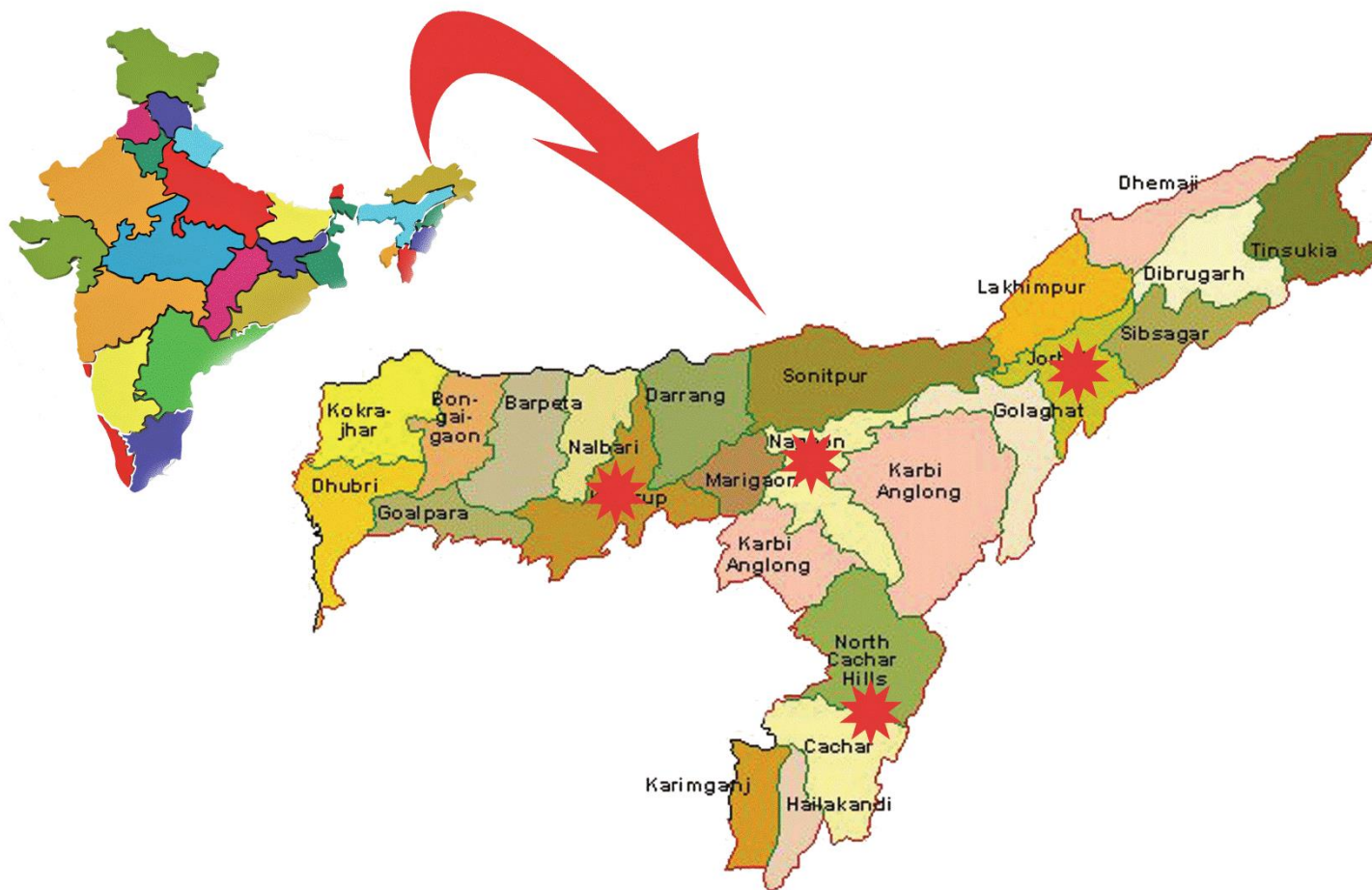
© Dr. M. B. Deka, Assam Agricultural University, India





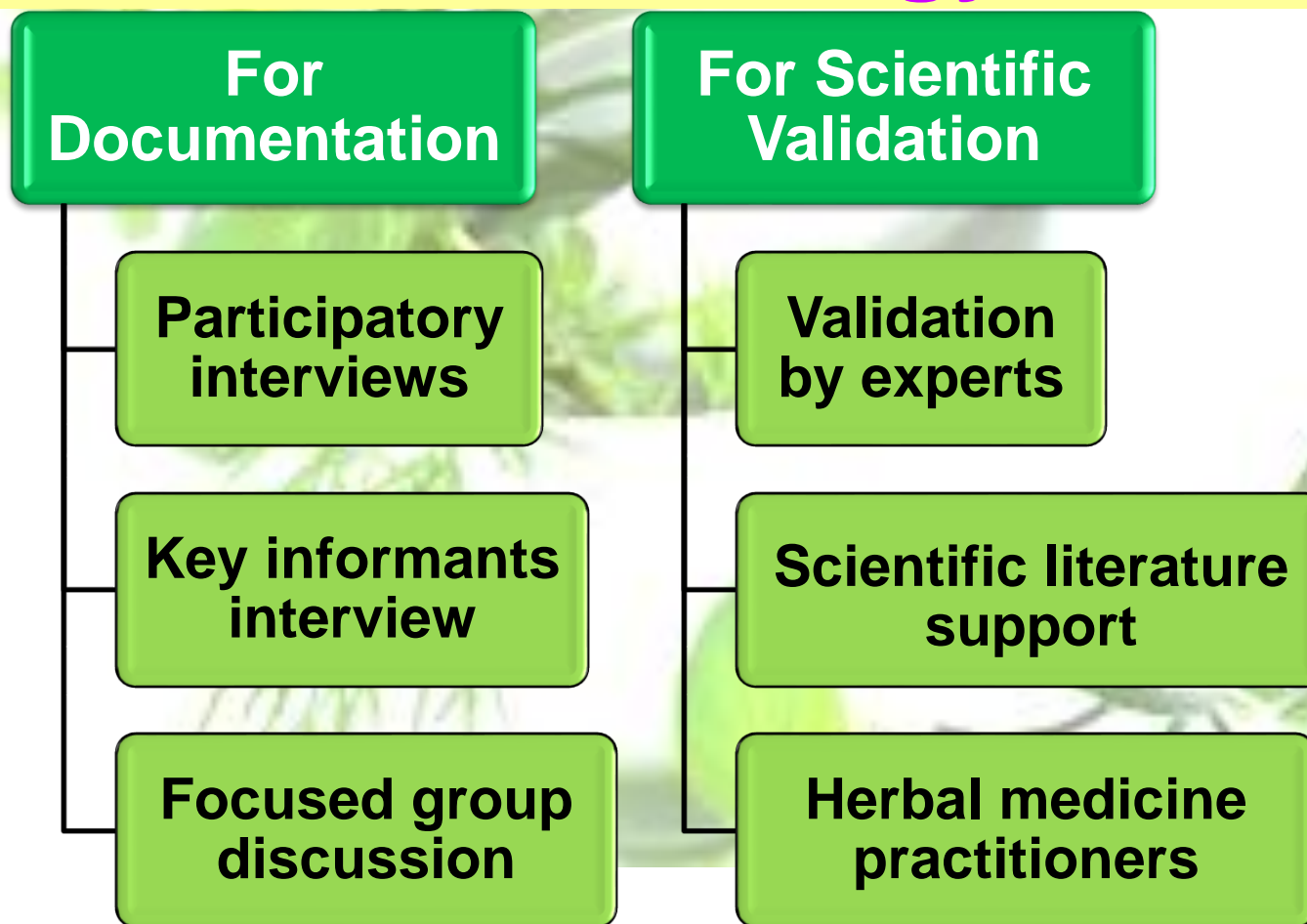
INDIGENOUS KNOWLEDGE

- As pearls of wisdom - existing in our indian traditional life style at household level
- Sum total of information and practices which are based on people's accumulated experience in dealing with different situations
- Elderly persons act as guardians of indigenous knowledge who nurture the practices and keep them alive for future generation





Methodology





Methods for documentation



To generate information from a focused group in order to come to a mutual consensus of a practice



To obtain special information from a key person within a social structure or social system to check the authenticity of information obtained from respondent



To elicit in-depth information from the respondent by maintaining control over the questions and re-structuring questions as per need for seeking information



Methodology used for ascertaining scientific rationality

Scientific validation

Pharmacognosy of identified source

Pharmacology -properties and action

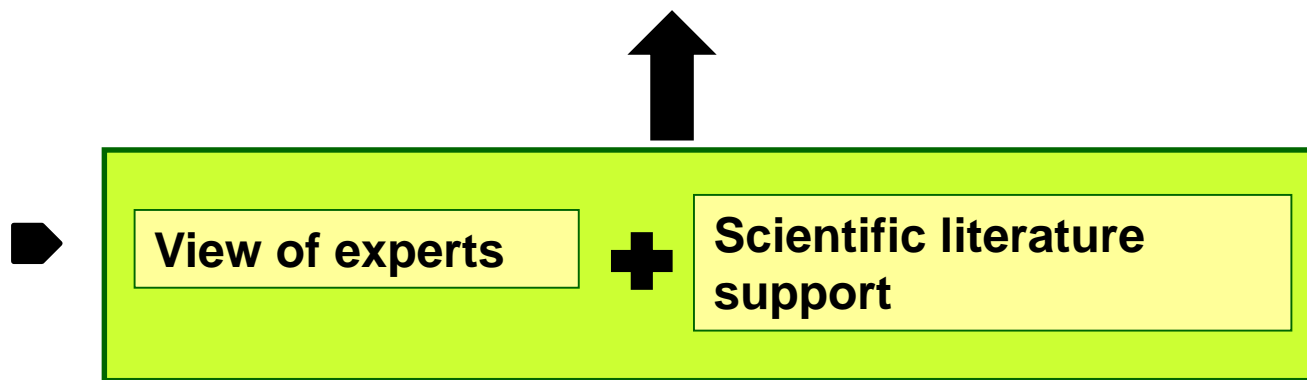
Pharmaceutical -formulation dose and forms of use

Sources of validation

View of experts



Scientific literature support





Methods of scientific validation -justification contd..

Methods	Functions
Validation by experts	The scientists and medical practitioners assisted in deriving at conclusions from the premises through authenticity and arguments related to terminology, method or practice.
Validation through scientific literature	The codified and documented medical system of Ayurveda, and Ethnobotanical sources served as scientific literature source to validate the information.





Dr. Gunaram Khanikar, a herbal medicinal expert, started practice around 30 years ago.

He tried out **old things** and at the same time **developed new herbal medicine**, written 30 books

Mr. Khanikar also heads an NGO called The Regional Research and Training Centre on Indian traditional Treatment RRTCITT).

Recipient of National Innovation foundation award



Herbal Medicine for
• heart palpitation
• malaria



Dr. Anada Chandra Dutta, born in Feb 8 1923- internationally reputed botanist.

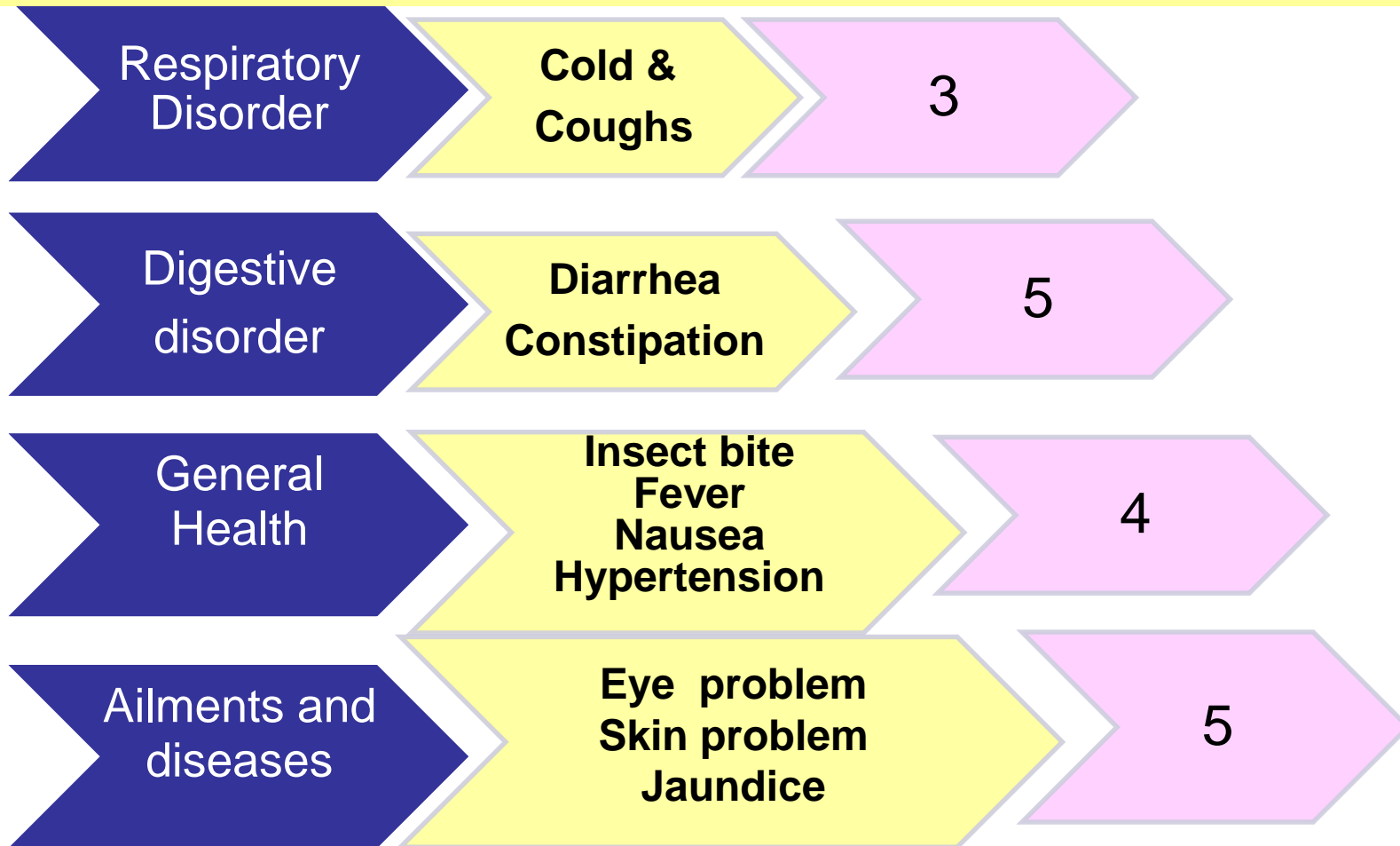
Established a tea museum at Jorhat in 1977, prepared a list of 10,000 trees for the Tocklai herbarium.

He was awarded Degree of Doctor of Science by Dibrugarh University





Grouping of health problems & no. of recepies documented





Categories of plant sources

Categories	No. reported	English Names
Herb	10	Basil, Sweet flag, Bermuda grass, Indian pennywort, Racaba, Mother wort, Aloevera, Garlic, Ginger, Turmeric
Shrub	2	Henna, Lemon
Tree	5	Night Jasmine, Bel, Papaya, Carambola, Guava
Climber	1	Butterfly flower



Basil



Indian motherwort

Herbs

Parts used-leaves



Bermuda grass



Alovera



Herbs-Parts used-roots(tubers/rhizome)



Ginger



Turmeric



Garlic



Sweet Flag





Herbs

Parts used-whole plant



Indian pennywort



Racaba



Shrubs & climber



Henna



Lemon



Butter fly flower





Trees



Papaya



Night Jasmine



Bel



Guava



Carambola



Ocimum basilicum

English name: Basil

Local name: Tuloshi

Pharmacognosy status : Herb



Pharmacological status

Properties	Actions
Pungent Demulcent Stomachic Anthelmintic Alexetric Antipyretic	Improves the taste , useful in diseases of the heart and blood, biliousness, leucoderma, itching, burning sensation, chronic pain in the joints asthma, the juice gives lustre to the eye, good for toothache, earache, headache and it stops nasal haemorrhage. Acts as a remedy for snake and insect bites.

Pharmaceutical status-

Cold and cough

Method of preparation	Form of medicine	Dosage
Crush 6-8 basil leaves, grind with 10 gms ginger , extract juice mix with half teaspoon honey	Juice	1 tsp twice daily for a week
Leaf juice mixed with camphor stops nasal haemorrhage.	Liquid	1-2 drops daily for 3 days





Acorous calamus

English name: Sweet flag

Local name: Bos

Pharmacognosy status : Herb

Pharmacological status



Properties	Action
Antibacterial ,Alexeric Expectorant Anodyne ,Thermogenic ,Sedative	Prevents infection,Helps to bring out the mucus Reduces pain ,Generates heat and increases body temperature ,Gives relief to the body Relieves from insomnia

Pharmaceutical status-

cold & cough

Method of preparation	Form of medicine	Dosage
Cut the root into small pieces and make a string.	Solid	Make the child wear in neck for two days
Rub one piece of root on a stone by adding water simultaneously to make a paste	Paste	Apply on forehead once in a day till it provides relief





Curcuma longa

English name: Turmeric

Local name: Halodhi

Pharmacognosy status : Herb

Pharmacological status



Properties	Action
Antiseptic ,Anodyne Anti-inflammatory, Expectorant Antibacterial	Useful in inflammations ,ulcers, wounds, reduces pain cures skin diseases , prevents swelling relieves from asthma, bronchitis , prevents bacterial growth

Pharmaceutical status—Cut & wounds, Cough

Method of preparation	Form of medicine	Dosage
Clean the rhizome , crush and grind into paste. Soak a piece of cloth and wrap the paste and apply compression in the in the infected area and wounds . Grind rhizome and extract juice mix with jiggery and honey and taken in empty stomach in case of constipation, bronchitis, cough	Paste	2 –3 times daily
	Liquid	1 tsp ,Once daily for three days



Identification status : *Cenetella asiatica* ,

English name: Indian pennywort

Local name: Manimuni

Pharmacognosy status : Herb

Pharmacological status



Properties	Action
Acrid, sweet, cooling, cardio tonic, Nerve tonic, stoma chic, carminative, antiheroic, diuretic and febrifuge	Useful in insomnia, epilepsy, hoarseness, asthma, bronchitis ,hiccough, abdominal disorders, hypertension

Pharmaceutical status – digestive disorder-Diarrhoea

Method of preparation	Form of medicine	Dosage
Grind leaves of mint, racaba, <i>Indian pennywort</i> and parpata into paste . Mix it with a pinch of salt to cure diarrhoea. Make milk decoction with whole plant as a mental tonic Crush whole plant and extract juice to get relief from scanty urination with burning sensation. Crush the leaves and extract juice	Paste	1tsp, Twice daily after food
	Liquid	1 cup at bed time for 7-20 days
	Liquid	3 tsp of juice with honey thrice daily for 7 days
	Liquid	2 tbsp daily in empty in for 3days



Alternanthera sessilis

English Name : Racaba

Local name: Matikanduri

Pharmacognosy status : Herb

Pharmacological status



Properties	Actions
The plant is bitter, sweet, astringent, acrid, Cooling, constipating, depurative, digestive, Cholagogue, galactagogue and febrifuge.	Useful in burning sensation, diarrhea, Leprosy, skin disease, dyspepsia, Hemorrhoids, agalactia, and fever.

Pharmaceutical status-- Diarrhoea

Method of preparation	Form of medicine	Dosage
Grind leaves of mint, racaba, <i>Indian pennywort</i> and parpata into paste . Mix it with a pinch of salt, take it in the morning and afternoon after meal during diarrhoea.	Paste	2 tsp, twice daily





Psidium guava

English name : Guava

Local name: Madhuri

Pharmacognosy status : Tree

Pharmacological status



Properties	Actions
The fruit is acrid ,cooling, aphrodisiac Astringent, laxative	The leaves are used for wounds and ulcers and astringent for bowels. The flower cools the body . Leaves and bark are remedy in toothache . Used in curing diarrhoea and dysentery . An extract of leaves is used in epilepsy

Pharmaceutical status--

Diarrhoea & dysentery

Method of preparation	Form of Medicine	Dosage
The tender tip of guava crushed and extract the juice	Liquid	1 tsp ,2-3 times daily in empty stomach
Grind leaves, make a paste then locally apply in rheumatism	Paste	As required and when needed



Carica papaya

English name: Papaya

Local name: Amita

Pharmacognosy status :Tree

Pharmacological status



Properties	Actions
Ripe fruit is tasty, Astringent, aphordiasic, stomachic, appetiser, digestive, carminative haemoptysis , diuretic, anthelmintic	Cures inflammations, enlargement of spleen, remove urinary concretions, relieves obesity, used in bleeding piles ,wounds of the urinary tracts, useful in ringworm, skin disease

Pharmaceutical status--

Constipation

Method of preparation	Form of medicine	Dosage
Boil the raw fruit and mix with salt and eat along with food for proper digestion.	Cooked and Solid	Two times daily





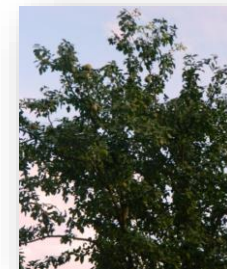
Aegle marmelos

English name: Bel tree

Local name: Bel

Pharmacognosy status : Tree,

Pharmacological status



Properties	Actions
Roots are sweet, astringent, Bitter and febrifuge The unripe fruits are bitter, acrid, The ripe fruits are astringent, sweet, aromatic, cooling, laxative and tonic	Useful in diarrhoea, dysentery ,dyspepsia, Vomiting, intermittent fever, swelling and gastric irritability Good for heart and brain and dyspepsia

Pharmaceutical status--

Constipation

Method of preparation	Form of medicine	Dosage
The whole raw fruit is dried then crushed and soaked in clean water for 2-3 hours and drink after food for constipation	Liquid	3 times daily



Leucas linifolia

English name : Mother wort

Local name: Doron

Pharmacognosy status : Herb

Pharmacological status



Properties	Actions
Anthelmintic ,Carminative,Laxative Stomachic,Diaphoretic ,Febrifuge	Sore eyes,Conjunctivitis, Sinasitis Loss of appetite ,Treatment of snake bite Ringworm ,Useful in piles

Pharmaceutical status-- conjunctivitis & sinusitis

Method of preparation	Form of medicine	Dosage
Crush the leaves and extract the juice and apply in nose and eye infection	Liquid	2 drops twice a day



Citrus aurantifolia

English name : Lemon,

Local name : Nemu

Pharmacognosy status :Shrub

Pharmacological status



Properties	Actions
Sour, bitter, astringent, thermogenic, laxative, appetizer, stomachic, digestive and anthelmintic	Useful in cough, bronchitis, dyspepsia, nausea, flatulence, colic, helminthiasis, scabies and anaemia

Pharmaceutical status--

Ringworm , Insect bite & nausea

Method of preparation	Form of medicine	Dosage
Extract the juice of the lime, mix with honey , rub vigorously in the infected area of insect bite	Liquid	10ml, 2-3 times daily
The lime preserved in salt for 1 year or more, seeds taken out and crushed and eaten for digestion.	Solid	4-5 nos of seeds 2-3 times daily
Crush the leaves and inhale aroma to reduce nausea and vomiting	Solid	3-4 times



Nyctanthes abortristis

English name: Night jasmine

Local name: Sewali

Pharmacognosy status : Tree

Pharmacological status



Properties	Actions
The flowers have a bitter taste, stomachic ,carminative, astringent, inflammatory	Flowers and leaves cure fever, astringent to the bowels, Enlargement of spleen, The bark cures bronchitis, Tonic for hair, acrid, ant bilious, expectorant, oil from the bark is used for pain in the eye. Seeds are useful in piles and skin disease

Pharmaceutical status--

Fever

Method of preparation	Form of medicine	Dosage
Six or seven leaves are rubbed with water and a little fresh ginger, administered in intermittent type of fever	Paste	1 tsp,2 –3 times daily
Dry the flowers , make into powder and mix with honey and take to get rid of fever.	Paste	1 tsp,2 –3 times daily





Cynodon dactylon

English name: Bermuda grass,

Local name : Dubari ban



Pharmacognosy status : Herb

Pharmacological status

Properties	Action
Astringent ,Cooling ,Haemostatic Depurative,Diuretic	Useful in skin diseases and wounds.Reduces burning sensation, useful in conjunctivitis, haematuria, wounds , , leprosy ,skin disease, purifies blood increases urination

Pharmaceutical status--

cuts & wounds

Method of preparation	Form of medicine	Dosage
2-3 leaves of betel vine, 5-6 no.s of Bermuda grass & 30 gms of rice are mixed and grind to a paste Clean the herb, crush and grind into paste	Paste Paste	Twice daily in empty stomach for excessive bleeding in menstruation. Apply the paste in the cut and wound Twice a day cover the wound





Aloe vera

English name: Indian aloea

Local name: Chal kunwari

Pharmacognosy status : Herb

Pharmacological status



Properties	Actions
The plant is bitter, Sweet , cooling, asperient, Anthelmintic , carminative, depurative, diuretic, stomachic, ophthalmic and alexetric	Used for dyspepsia, amenorrhoea, burns, colic, hepatopathy, skin disease, constipation, abdominal tumours, dropsy and flatulence The elio is used for helminthiasis in children Acts as a purgative, anthelmintic Used for local application in painful inflammations, chronic ulcers, and burns.

Pharmaceutical status-- Fever & skin problem

Method of preparation	Form of medicine	Dosage
Crush the elio and make into paste, apply on the head and keep it for sometimes to relief for fever.	Paste	1 tbsp twice daily





Allium sativum

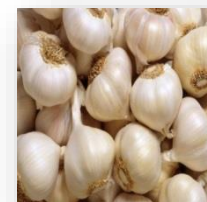
English name: Garlic

Local name: Naharu

Pharmacognosy status : Herb

Part used: Bulbs

Pharmacological status



Properties	Actions
The bulbs are acrid, bitter, sweet, astringent,,Salty, thermogenic, asperient, anodyne, laryngeal tuberculosis expectorant, diuretic , alexeteric,Stimulant, anticholesterol, antibacterial	Useful in whooping cough, bronchitis, asthma, fever, facial paralysis, flatulence, colic, Stimulant, anti cholesterol, antibacterial, constipation, duodenal ulcers, pulmonary cardiopathy, leprosy, hysteria, swellings, and dental caries. It helps in controlling the excess of liquids and cholesterol

Pharmaceutical status-- Hypertension

Method of preparation	Form of medicine	Dosage
Peel the outer cover of 2-3 cloves of garlic, and have it early in the morning to get rid of hypertension.	Solid	2-3 cloves once daily



Lawsonia inermis

English Name : Mandira camphire, Henna, Local name: Jetuka

Pharmacognosy status : Shrub

Pharmacological status



Properties	Actions
The leaves are emetic, expectorant, bitter Bad taste, diuretic	The leaves are useful in headache, hemicrania, boils, ulcers, stomatitis, ophthalmia, Leaves are used in leprosy

Pharmaceutical status- Skin Problem

Method of preparation	Form of medicine	Dosage
Crush the leaves and grind into paste, apply in the hair and keep for one hour for hair fall and grey hair	Paste	Once daily initially followed by alternate day for a week





Averrhoa carambola

English name : Carambola,

Local name : Kordoi

Pharmacognosy status : Tree

Part used: Fruits, leaves

Pharmacological status



Properties	Actions
<p>The ripe fruit has a hot sharp taste, sweet and Sour, digestible, tonic, strengthening, antipyretic antipruritic and antiscorbutic</p>	<p>It act as astringent to the bowels, stops diarrhoea, and vomiting, the Piles also useful in relieving thirst Febrile excitement The dried fruit is given in fevers; it is Cooling and considered one of the best Indian cooling medicines. The leaves are antipyretic and used in the treatment of scabies .</p>

Pharmaceutical status- Jaundice

Method of preparation	Form of medicine	Dosage
Clean the fruit and extract the juice mix it with salt, have it as a drink to cure jaundice	Liquid	2-3 times daily





CONCLUSION

- Rural people use a **wide variety of plant sources** for medicinal purposes as per its availability under different ecological conditions
- **Different parts of the plants** are used in processed or non-processed form for medicinal purposes that include curative, preventive, promotive and protective functions along with use for controlling, improving, reducing, inducing and improving signs and symptoms of disease.



- The local communities can identify the plants with medicinal value for use in form of juice, paste, solution, decoction, powder, infusion.
- A combination of plant sources are used for some of the health care practices to supplement, compliment, reduce or invigorate the action of properties present in a particular plant source



RECOMMENDATIONS

- Undertake detailed studies on this stream of knowledge to **generate additional information** and document the same after scientific validation in order to **prevent the erosion of time tested knowledge**
- there is an urgent need to conserve such plants with high medicinal value to ensure their existence and survival against massive, indiscriminate deforestation.



- It may bring into focus new drugs of herbal origin especially when the whole world is talking and valuing 'organic' every where hence



- Traditional Medicine will contribute to human health care in the 21st century
- There are many challenges to the safety and effective use of traditional medicine

but...



It is long way to go...



THANK YOU

© Dr. M. B. Deka, Assam Agricultural University, India

