



An Ethno Botanical Study of *Ralte* Communities in the North Eastern Part of Mizoram, North East India

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ABSTRACT

The present study deals with the first-hand information of ethno-medicinal plants which are used traditionally by the Ralte tribes of Mizoram. The treatment includes various ailments such as hypertension, tuberculosis, rheumatism, allergies, fractured bones, jaundice, dysentery, cuts and wounds. The Ralte people of the study area represent a well-organized tribe with unique dialect and identities. The study has revealed 106 plant species of ethno-botanical importance belonging to 96 genera and 57 families. The need for complete inventory and documentation of such indigenous knowledge is very important before they are being lost forever from the community.

Keywords: Ethno-medicine, Ralte, Traditional knowledge, Mizoram, Hilly tribe

INTRODUCTION

Health is like a precious jewel that makes life a wonderful adventure. Treating human health with indigenous traditional knowledge dates back age's ago [1]. It is estimated that 70-80% of the people worldwide rely on indigenous herbal remedies for their primary healthcare [2].

The *Ralte* are hilly tribe living in Mizoram, Manipur and Myanmar. The word Ralte consists of two parts, viz, **Ral** means *enemy* and **te** indicates *plurality*. The Ralte people of the study area represent a well-organized tribe with unique dialect and identities. About 200 years ago they are found living mostly near Champhai in the Eastern part of Mizoram. The Ralte's zealously maintained their individual identities and resisted absorption into the folds of Lushai (Mizo) tribes. They divided themselves into mainly 4 main clans namely Siakeng, Kawlnei, Khelte and Lelhchhun clan [3]. Agriculture is the main occupation of the people.

The Ralte people are said and considered to be the noisiest people among the Mizo clan because of their high pitched tone. Almost the entire population in the rural areas (>95%) of Mizoram relies on herbal medicines and nearly 98% raw materials are harvested from wild plant resources [4].

METHODOLOGY

Study area

The study area lies within Kolasib district in the northern most part of Mizoram and bordered by Aizawl district in the south and east and Mamit district in the west and Assam state in the north. The geographical area of Kolasib district is 1382.51 km. This is 6.56% of the state total geographical area (Figure 1). It is situated in between 23°5' to 24°35'N Latitude and 92°3' to 93°E Longitude [5].

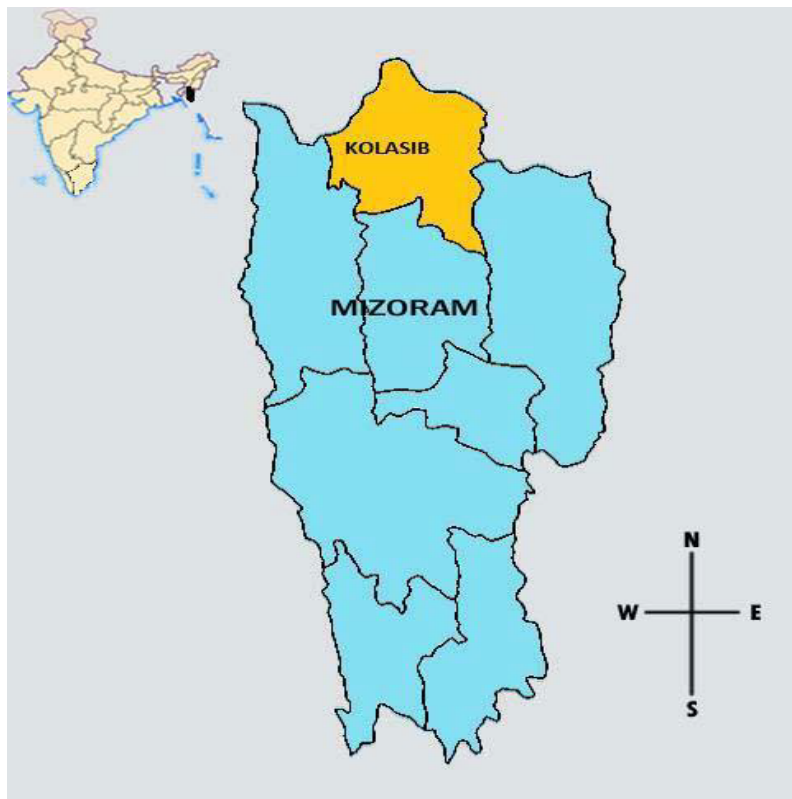


Figure 1: Location of Kolasib district in Mizoram

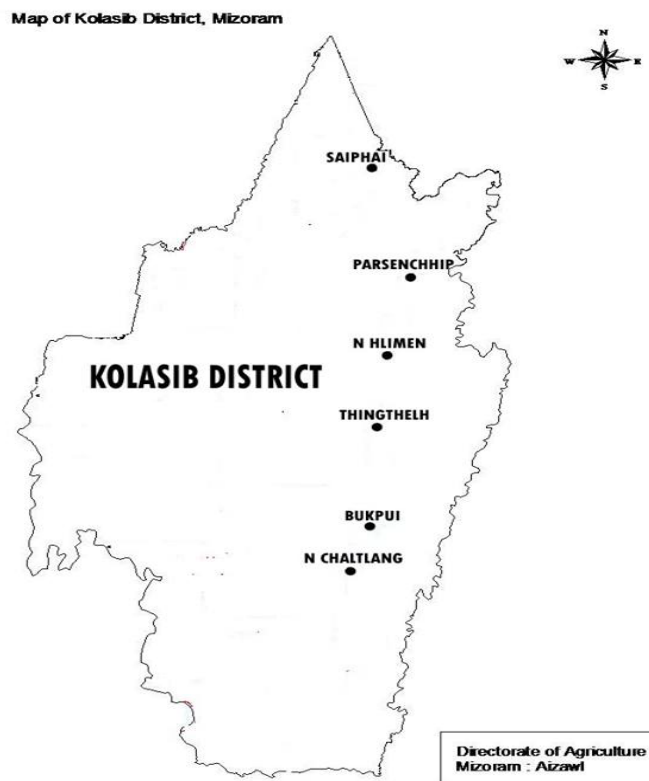


Figure 2: Kolasib district map showing study area

The present study was conducted in Ralte dominated villages viz, North Chaltlang, Parsenchhip, North Bukpui, Thingthelh, North Hlimen, fewer numbers at Saiphai villages shown in Figure 2. The District is covered by Humid Sub-tropical Hill Zone (N. Hlimen, Parsenchhip, Bukpui, Thingthelh, N. Chaltlang villages) and Humid mild tropical zone (Saiphai village)[6].

Field observation

An extensive field work was conducted in these tribal’s dominated areas during 2013-2014. Prior informed consent was first obtained from the traditional healers. Random interviews of the herbalists, elderly men and women were done for documentation. The herbal healers or the knowledgeable person took the interviewers to the areas where they collect the plants and describe its uses. Plant specimens were photographed, collected, pressed and identified with the help of regional floras and manuals available [7-10]. The unidentified specimens are taken to Botanical Survey of India (BSI), Shillong for matching and identification. They are deposited as voucher specimen in the Herbarium of Mizoram University, Aizawl or in life forms in the botanical garden of Mizoram University, Aizawl.

RESULTS

From the 35 (26 female and 9 males) informants interviewed the important medicinal plants used by the tribal are, covering 106 plant species belonging to 96 genera and 57 families along with their uses are listed along with the collection number (ZO) are listed in Table 1. Most of the plants used for treatment are collected from the wild (73 plants; 68.86%). Habit wise analysis of the plants indicates that trees are highly used (33 spp.), herbs (28), climbers (13), shrubs (12) with Small tree (12) while epiphytes, succulents, canes and bamboo are less represented.

Of the 57 families reported Euphorbiaceae and Asteraceae have been found to be the most dominant with 8 species in used, followed by Zingiberaceae and Cucurbitaceae with four and five species respectively. Some of the common ailments those are cured by using herbs are fever, cough, dysentery, toothache, cuts and wounds etc. Usually one plant was used for treatment of a single ailment, like *Adina cordifolia* for typhoid. Used of the same species for more than one ailments were also common, like use of *Callicarpa arborea* for both hypertension and stomach ulcer. Depending on the type and severity of the disease they usually prefer external or internal applications, usually by decoction of the plant part, infusion, ash of the plant, paste which are directly taken alone or with sugar and honey. Leaves are highly utilized by the local people (29%), followed by bark (16%), aerial part of the plant (13%), fruits (8%), roots and juice (7%) whereas the rest like flowers, stem, latex or lac, seeds are less represented.

Table 1: Plants used by the Ralte tribes for treating different diseases

Sl. No.	Scientific name/ Voucher No.	Family	Local name	Habit	Part(s) used	Preparation and administration	Distribution
1	<i>Acer laevigatum</i> Wall. (ZO 16622)	Sapindaceae	Thingkhim	T	Bark	Decoction of bark applied as a massaging lotion in muscle strain.	F, W
2	<i>Adina cordifolia</i> Roxb. (ZO 16602)	Rubiaceae	Lungkhup	T	Leaves	Decoction of leaves taken in typhoid. 1 cup (50 ml twice per day after food)	C, W
3	<i>Ageratum conyzoides</i> (L.) L. (ZO 16623)	Asteraceae	Vaihlehlo	H	Roots	Decoction of roots taken as a remedy for cancer (50 ml twice per day after food)	A, W
4	<i>Alocasia fornicata</i> Schott (ZO 16620)	Araceae	Baibing/ Dawl	H	Fruit	The fruits are dried and smoked for tuberculosis	Cu, A
5	<i>Aloe barbadensis</i> var. <i>chinensis</i> Haw. (ZO 5202)	Aloaceae	Aloe vera	Su	Aerial parts	The aerial parts are cleansed and taken raw as convenient by the patient for stomach ulcer	In, C
6	<i>Alstonia scholaris</i> (L.) R. Br. (ZO 16608)	Apocynaceae	Thuamriat	T	Bark, leaves	Decoction of bark and leaves taken in 100 ml after food for hypertension	C, W
7	<i>Anogoeisus acuminata</i> Roxb. (ZO 16609)	Combretaceae	Zairum	T	Leaves	Decoction of leaves taken in 100 ml after food for hypertension	C, W

8	<i>Aporosa octandra</i> (Buch.-Ham. ex D. Don) (ZO 5210)	Phyllanthaceae	Chhawntual	T	Bark	Decoction of bark taken as a tea for stomach ulcer, it is also used as a tonic.	F, W
9	<i>Aquilaria malaccensis</i> Lam. (ZO 5214)	Thymelaeaceae	Thingrai	T	Resin, Bark	Dropsy, tonic, vomiting, heart palpitations	R, W
10	<i>Artemisia indica</i> Willd. (ZO 5204)	Asteraceae	Sai	H	Leaves	Decoction of leaves taken in 50 ml before food in stomach ulcer	F, W
11	<i>Averrhoa carambola</i> L. (ZO 16674)	Oxalidaceae	Theiherawt	St	Fruits	Raw fruits are taken as convenient by the patients in diabetes, regulating menstrual period in women	Cu, C
12	<i>Baccaurea ramniflora</i> Lour. (ZO 5267)	Euphorbiaceae	Pangkai	T	Bark	Decoction taken in 100 ml before food in stomach ulcer	C, W & Cu
13	<i>Begonia roxburgnii</i> (Miq.) A.DC (ZO 16654)	Begoniaceae	Sekhupthur	H	Aerial parts	The whole plant is crushed and the juice is taken for piles problems and applied externally on the affected area.	F, W
14	<i>Benicasia hisipida</i> (Thumb.) Cogn.(ZO 16607)	Cucurbitaceae	Maipawl	C	Leaves	Crushed juice of the leaves taken internally for jaundice, applied externally on snake bite, taken in 50 ml after food twice a day for cholera.	Cu, A
15	<i>Berberis nepalensis</i> (DC.) Spreng. (ZO 16621)	Berberidaceae	Pualleng	T	Bark	Decoction of the bark taken internally for stomach ache.	R, W
16	<i>Blumea lanceolaria</i> Roxb. (ZO 16636)	Asteraceae	Buarze	S	Leaves	3-5 leaves are taken raw for stomach ulcer, juice of the crushed leaves applied externally for cuts and wounds.	C, W
17	<i>Calamus tenuis</i> Roxb.(ZO 16645)	Arecaceae	Thilte	Ca	Shoots	Juice of the pounded shoots taken for malaria.	C, W
18	<i>Callicarpa arborea</i> Roxb. (ZO 16606)	Verbenaceae	Hnahkiah	T	Bark	Decoction of bark taken in 100 ml for hypertension, stomach ulcer.	A, W
19	<i>Carcinia pedunculata</i> Roxb. ex Buch.-Ham. (ZO 16613)	Clusiaceae	Vawmvapui	T	Fruit	The fruits are taken raw as a laxative.	C, W
20	<i>Carica papaya</i> L. (ZO 16689)	Caricaceae	Thingfanghma	St	Leaves	Juice of the pounded leaves taken in stomach ulcer and allergies towards meat.	Cu, A
21	<i>Senna occidentalis</i> (L.) Link (ZO 5274)	Caesalpiniaceae	Rengan	St	Leaves	The leaves are boiled with rice and taken as a vegetable for increasing breast milk.	F, W
22	<i>Castanopsis tribuloides</i> (Sm.) A.DC.(ZO 16603)	Fagaceae	Thingsia	T	Juice	The juice oozing out from the stem is dropped into the mouth for mouth ulcer.	F, W
23	<i>Catharanthus roseus</i> (L.) G. Don. (ZO 16658)	Apocyanaceae	Kumtluang	H	Aerial parts	Decoction taken in 20 ml after food for hypertension and dysentery in children	Or, F

24	<i>Centella asiatica</i> (L.) Urb. (ZO 16605)	Apiaceae	Lambak	H	Aerial parts	Raw plants are directly taken and chewed to cure kidney problems and toothache.	C, W
25	<i>Chromolaena odorata</i> (L.) R.M. King & H. Rob. (ZO 16615)	Asteraceae	Tlangsam	H	Leaves	The crushed leaves are bandaged upon cuts and wounds.	A, W
26	<i>Citrus aurantifolia</i> Christm. (ZO 16624)	Rutaceae	Nimbu	S	Juice	The fruit juice is taken directly in 10-20 ml every morning for stomach ulcer.	Cu, C
27	<i>Citrus grandis</i> L. (ZO 16644)	Rutaceae	Sertawk	T	Seeds	3-5 seeds are taken raw and chewed for hypertension	F,W
28	<i>Citrus sinensis</i> (L.) Osbeck (ZO 16604)	Rutaceae	Serthlum	T	Leaves	Decoction of leaves taken as diuretic, and used for bathing patients with fever.	Cu, A
29	<i>Clerodendrum bracteatum</i> Wall. ex Walp. (ZO 16661)	Verbenaceae	Phuihnam chhia	S	Leaves	Decoction of leaves or juice of the pounded leaves taken in small amount for dysentery.	F, W
30	<i>Clerodendrum colebrookianum</i> Walp. (ZO 16633)	Verbenaceae	Phuihnam	St	Leaves	Decoction of leaves taken for hypertension and for increasing breast milk.	Cu, A
31	<i>Cordia fragrantissima</i> Kurz. (ZO 16635)	Boraginaceae	Muk	T	Leaves	Juice of the crushed leaves applied in the affected area for Melasma.	C, W
32	<i>Costus speciosus</i> (Koenig) J.E. Sm (ZO 16610)	Zingiberaceae	Sumbul	S	Aerial parts	Juice of the aerial part used as a lotion for massaging sciatica, taken internally for kidney problems, dropped on the eye for eye infections.	F, W
33	<i>Cucumis sativus</i> L. (ZO 16677)	Cucurbitaceae	Fanghma	C	Fruit	The juice of the fruits is applied on insect bites.	Cu, A
34	<i>Curcuma longa</i> L. (ZO 16643)	Zingiberaceae	Aieng	H	Root stock	Decoction of root stock taken for stomach ulcer and jaundice, paste of the root stock applied for fractured bones, skin lightening.	Cu, A
35	<i>Curcumorpha longiflora</i> Wall. (ZO 16618)	Zingiberaceae	Ailaidum	H	Root stock	1-2 slices of the root stock taken for stomachache.	Vu, Cu & W
36	<i>Dendrobium</i> sp. (ZO 16664)	Orchidaceae	Nauban	Epiphyte	Flower	The flower is chewed for toothache.	Vu, W
37	<i>Dendrocnicida sinuate</i> (Blume) Chew (ZO 16695)	Urticaceae	Thakpui	T	Roots	Decoction of roots taken internally for jaundice, tender leaves is consumed as vegetable.	A, W
38	<i>Dillenia pentagyna</i> Roxb. (ZO 16626)	Dilleniaceae	Kaihzawl	T	Bark	Decoction of bark taken for stomach ulcer.	F, W
39	<i>Elaegmus caudate</i> Schlecht. ex Momiyama (ZO 16614)	Elaegnaceae	Sarzuk	St	Leaves	Decoction of leaves taken for retained placenta, diarrhoea, stomachache.	C, W

40	<i>Elsholtzia communis</i> (Collett & Hemslley) Diels (ZO 16647)	Lamiaceae	Lengser	H	Flowers	Flowers are chewed raw for diarrhea.	Cu, C
41	<i>Emblica officinalis</i> Gaertn. (ZO 16612)	Euphorbiaceae	Sunhlu	T	Fruit	Taken as vitamins, tonic	A, Cu & W
42	<i>Ensete superbum</i> (Roxb.) Cheesman (ZO 16625)	Musaceae	Saisu	Su	Seeds	2-3 dry seeds are woven around the neck with a thread to cure epilepsy in children.	Cu, F
43	<i>Eryngium foetidum</i> L. (ZO 16679)	Apiaceae	Bahkhawr	H	Aerial parts	Consumed raw for increasing breast milk	Cu, A
44	<i>Erythrina stricta</i> Roxb. (ZO 16687)	Fabaceae	Fartuahpui	T	Bark	Paste applied directly on skin diseases in domestic animals, decoction taken for stomach ulcer.	F, W
45	<i>Erythrina alba</i> Cogn. & Marchal (ZO 16617)	Fabaceae	Fartuah par var	T	Bark	Decoction of bark taken for stomach ulcer.	R, In
46	<i>Euphorbia royleana</i> Boiss. (ZO 16691)	Euphorbiaceae	Chawng	S	Latex, leaves	The latex is taken directly for fever, decoction of leaves taken for jaundice.	C, Cu
47	<i>Ficus prostate</i> Buch-Ham. (ZO 5211)	Moraceae	Theitit	T	Latex	Applied directly on affected area of bee stings.	F, W
48	<i>Garcinia cowa</i> Roxb. (ZO 16697)	Clusiaceae	Chengkek	St	Leaves	Decoction of leaves taken for dysentery	C, Cu & W
49	<i>Hedychium coccineum</i> J.E. Sm. (ZO 16641)	Zingiberaceae	Aichhia	H	Root stock	Crushed plant part applied directly on the affected area of bee stings.	C, W
50	<i>Hedychium spicatum</i> Koenig (ZO 16678)	Zingiberaceae	Kelhnamtur	H	Aerial parts	Decoction taken for kidney and urinary problems.	F, W
51	<i>Helicia robusta</i> (Roxb.) R. Br. ex Blume (ZO 16700)	Proteaceae	Pasaltakaza	T	Bark, roots	Decoction taken in 100ml after food twice a day for stomach ulcer.	Vu, W
52	<i>Homalomena aromatic</i> Schott. (ZO 5275)	Araceae	Anchiri	H	Root stock	Paste applied on broken, fractured bones, cuts and wounds, nerve problems.	Vu, W
53	<i>Inula cappa</i> DC. (ZO 16655)	Asteraceae	Buarthau	H	Aerial part	Juice of the pounded plant taken internally for intestinal ulcer.	C, W
54	<i>Jasminum nervosum</i> Lour. (ZO 16673)	Oleaceae	Maufimhlo	H	Aerial parts	Decoction of the plant taken in 50 ml for ovarian disorder, kidney problems	C, W
55	<i>Jatropha curcas</i> Linn. (ZO 16639)	Euphorbiaceae	Kangdamdawi	S	Leaves	Paste applied on scabies and burns.	C, W
56	<i>Lagerstroemia speciosa</i> (L.) Pers. (ZO 16619)	Lythraceae	Thlado, Chawnpui	T	Bark	Decoction taken in large quantities for diarrhea, stomachache, vomiting, diabetes	F, W
57	<i>Lepionurus sylvestris</i> Blume (ZO 16627)	Olacaceae	Anpangthuam	St	Leaves	Decoction of the leaves taken for hrilawn (Mizo) a certain sickness in new born babies and halitosis.	C, W

58	<i>Lindernia ruelloides</i> Pennell. (ZO 16656)	Scrophulariaceae	Thasuih	H	Whole plant	Juice applied on cuts and wounds, used as a lotion for massaging muscular spasm.	F, W
59	<i>Lobelia angulata</i> Forst. (ZO 16630)	Campanulaceae	Choakthi	C	Leaves	Juice of the crushed leaves taken internally for dysentery, diarrhea, stomach ulcer, night blindness.	C, W
60	<i>Lobelia nicotianaefolia</i> Heynne. (ZO 16616)	Lobeliaceae	Berawchal	H	Juice	Juice of the fruits rubbed on boils and warts.	R, W
61	<i>Mallotus philippensis</i> (Lam.) Muell. Arg (ZO 16696)	Euphorbiaceae	Thingkhei	T	Bark, root	Decoction taken internally for diarrhea and stomachache.	R, W
62	<i>Mallotus roxburghianus</i> Muell.-Arg. (ZO 16651)	Euphorbiaceae	Zawngtenawhlung	St	Leaves	Decoction of leaves taken in 100 ml thrice per day for hypertension.	A, W
63	<i>Mangifera indica</i> L. (ZO 16628)	Anacardiaceae	Theihai	T	Bark	Decoction of bark taken in 100 ml twice per day for diarrhea.	F, W
64	<i>Marsdenia maculate</i> Hook.f. (ZO 16676)	Asclepiaceae	Ankhapui	St/C	Leaves	Crushed leaves are applied externally for herpes zoster.	C, W
65	<i>Melocalamus compactiflorus</i> (Kurz.) Benth. & Hook.f. (ZO 16611)	Poaceae	Sairil	Ca	Juice	Juice of the cane applied externally for inducing hair growth.	C, W
66	<i>Melocanna baccifera</i> (Roxb.) Kurz. (ZO 16660)	Poaceae	Mau	Ba	Juice of the cut stem	Juice applied on cuts and wounds.	A, W
67	<i>Mentha arvensis</i> L. (ZO 5284)	Lamiaceae	Pudina	H	Aerial parts	The aerial parts consumed raw for stomach ulcer.	Cu, C
68	<i>Mikania micrantha</i> Kunth. (ZO 5216)	Asteraceae	Japanhlo	C	Leaves	Juice of the crushed leaves taken internally for diarrhoea, applied on cuts and wounds, consumed for dysentery.	A, W
69	<i>Milletia pachycarpa</i> Sm. (ZO 5218)	Fabaceae	Rulei		Roots	Paste applied for acute cellulitis	C, W
70	<i>Mimosa pudica</i> L. (ZO 5231)	Fabaceae	Hlonuar	H	Leaves	Decoction of leaves used for massaging sciatica.	A, W
71	<i>Momordica charantia</i> L. (ZO 5271)	Cucurbitaceae	Changkhate	C	Aerial parts	Juice taken directly for hypertension.	Cu, C
72	<i>Musa</i> sp. (ZO 16672)	Musaceae	Changel	Su	Tender shoots, juice	Tender shoots are taken internally for jaundice and stomachache, juice of the stem applied on snake bite	A, W

73	<i>Myrica esculenata</i> Ham. (ZO 16653)	Myricaceae	Keifang	T	Bark, flowers	Decoction taken for fever, cough, sore throat, urinary disorders, flowers used in dysentery and diarrhea. Flowers smoked for asthma.	C, W
74	<i>Nicotiana tabacum</i> L. (ZO 16629)	Solanaceae	Vaihlo	S	Leaves	Leaves chewed for tongue ulcer.	Cu, A
75	<i>Occimum tenuiflorum</i> Linn. (ZO 5298)	Apiaceae	Tulsi	H	Leaves	Decoction of leaves taken for typhoid.	C, Cu
76	<i>Oroxylum indicum</i> (L.) Kurz (ZO 16675)	Bignoniaceae	Archangkawm	T	Aerial parts	Decoction taken for hepatitis, adenitis.	C, W
77	<i>Oryza sativa</i> L. (ZO 16638)	Poaceae	Buh	H	Roots	Decoction taken for UTI, Fever	Cu, A
78	<i>Osbeckia sikkimensis</i> Craib. (ZO 16699)	Melastomataceae	Builukhampa/ Khampa	S	Roots	Decoction of roots consumed in 100 ml thrice a day for renal failure, UTI, stomachache	F, W
79	<i>Paedaria foetida</i> L. (ZO 16671)	Rubiaceae	Vawihuihhroi	C	Stem	Chewed for toothache.	C, W
80	<i>Parkiana roxburghii</i> Roxb. (ZO 5213)	Leguminaceae	Zawngtah	T	Bark	The bark is chewed for food allergies, i.e., pork, paste applied on cuts and wounds.	Cu, A
81	<i>Phyllanthus fraternus</i> Webster. (ZO 16682)	Euphorbiaceae	Mitthisunhlu	H	Aerial parts	Decoction taken for hepatitis, diabetes.	F, W
82	<i>Piper betle</i> L. (ZO 16632)	Piperaceae	Panhnah	C	Leaves	Smoke of the leaves inhaled for asthma.	Cu, A
83	<i>Prunus domestica</i> L. (ZO 16646)	Rosaceae	Japan theite	St	Leaves, fruit	Paste of the leaves applied externally for scabies, fruits used for treating asthma.	C, W
84	<i>Prunus persica</i> (L.) Stokes (ZO 5241)	Rosaceae	Theite hmul	St	Leaves	Dried leaves smoked for asthma	Cu, A
85	<i>Prunus venosa</i> Buch.-Ham ex D.Don (ZO I6640)	Rosaceae	Theiarlung	T	Leaves	Decoction of leaves taken for aegina.	C, W
86	<i>Pseudodrynaria coronans</i> Ching. (ZO 16684)	Polypodiaceae	Awmvel	Epiphyte	Root stock	Juice of the crushed root stock applied externally on the affected area of herpes zoster	Vu, W
87	<i>Psidium guajava</i> L. (ZO 16642)	Myrtaceae	Kawlthei	T	Tender leaves	Tender leaves as convenient by the patient are chewed for diarrhea	Cu, A
88	<i>Saccharum officinarum</i> L. (ZO 16694)	Poaceae	Fu	S	Juice	Juice of the stem consumed for Jaundice and facial discoloration in women.	Cu, A
89	<i>Saraca asoca</i> Roxb. (ZO 5203)	Caesalpiniaceae	Mualhawih	T	Bark	Decoction of bark taken as a tonic and as diuretic.	VU, W
90	<i>Schima wallichii</i> (DC.) Korthals. (ZO 16631)	Theaceae	Khiang	T	Bark, seeds	Decoction of bark taken for diarrhea, seeds applied externally for insect bites.	A, W

91	<i>Scoparia dulcis</i> L. (ZO 16652)	Scophulariaceae	Perhpawngchaw	H	Aerial parts	Decoction of the plant taken for kidney problems like kidney stones.	C, W
92	<i>Securinega virosa</i> Roxb. (ZO 16692)	Euphorbiaceae	Saisiak	S	Leaves	Decoction used for bating patients with measles and scabies.	F, W
93	<i>Smilax glabra</i> Roxb. ZO 16650	Liliaceae	Tluangngil	C	Bark	Decoction of bark used for massaging vsclatica, osteoarthritis, drunk for ovarian disorders and also used as a tonic	R, W
94	<i>Solanum melongena</i> L. (ZO 16681)	Solanaceae	Bawkbawn	H	Fruit	The fruits are rubbed on the affected area of eczema.	Cu, A
95	<i>Solanum nigrum</i> L. (ZO 16693)	Solanaceae	Anhling	H	Aerial parts	Decoction of the aerial parts consumed for kidney problems.	Cu, A
96	<i>Solanum</i> sp. (ZO 16634)	Solanaceae	Bawngek hling	S	Fruits	Dried fruits are smoked for toothache	C, W
97	<i>Spilanthes clava</i> D.C. (ZO 16637)	Asteraceae	Ankasate	H	Aerial parts	Raw plants chewed as anthelmintic, decoction of plants is also drunk as anthelmintic.	Cu, A
98	<i>Tamarindus indica</i> L. (ZO 5255)	Papilionaceae	Tengtere	T	Seeds	Seeds attached on the affected area of insect bites and snake bites.	C, Cu
99	<i>Thunbergia grandiflora</i> Roxb. (ZO 16601)	Acanthaceae	Vako	C	Leaves	Juice of the crushed leaves dropped directly on eye infections.	R, W
100	<i>Tinospora cordifolia</i> (DC.) Miers. ex. Hook. (ZO 16649)	Menispermaceae	Theisawntlung	S	Stem, root	Decoction of the stem taken for stomachache, used as diuretic, drunk for diabetes and paste of the roots applied on skin diseases.	R, W
101	<i>Tinospora sinensis</i> (Lour.) Merr. (ZO 16657)	Menispermaceae	Vankai hrui	C	Stem, leaves	Decoction of stem and leaves drunk for malaria.	C, W
102	<i>Trichosanthes anguina</i> L. (ZO 5212)	Cucurbitaceae	Berul	C	Latex	Latex consumed for diarrhea.	Cu, A
103	<i>Uncaria sessilifructus</i> Roxb. (ZO 5227)	Rubiaceae	Ralsamkuai	C	Leaves	Tender leaves chewed for tonsillitis.	F, W
104	<i>Vitex peduncularis</i> Wall. ex. Schauer. (ZO 16667)	Verbenaceae	Thingkhawilu	T	Leaves	Decoction of leaves taken internally for typhoid.	F, W
105	<i>Zanonia indica</i> L. (ZO 16698)	Cucurbitaceae	Lalruanga dawibur	C	Fruit	Water is poured in to the cavity of the fruits and drunk for stomachache.	R, W
106	<i>Zingiber officinale</i> Rosc. (ZO 5201)	Zingiberaceae	Sawhthing	H	Root stock	Consumed directly for inducing lactation, roasted root stock taken for sore throat, cough, asthma and food poisoning.	Cu, A

H: Herb; C: Climber; T: Tree; St: Small tree; Su: Succulent; UTI: Urinary Tract Infection; Ca: Cane; Cu: Cultivated; A: Abundant; R: Rare; W: Wild; F: Frequent; C: Common; Vu: Vulnerable; In: Introduced; Or: Ornaments; ml: millilitre

DISCUSSION AND CONCLUSION

The Ralte traditional herbal healers and knowledgeable persons are co-operative, their hospitality and their response were noteworthy. They are among one of the trusted members of the community. In each village it is found that women have better knowledge about plants and their medicinal uses than men. Due to the road conditions and the distance of the villages from the hospital, the people mainly depend on plants and its resources for their first aid as medical facilities were not easily available. Shifting cultivation, smuggling of medicinal plants and overexploitation are also the major threats to the medicinal plants. However there is a concern that these knowledge are disappearing from the community. Therefore, the need for documentation of such indigenous knowledge is very important before they are being lost forever from the community.

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