

Traditional healthcare practices of Manipur, North-East India – Its genesis and sciences

Ningthoukhongjam Tombi Raj^a, Bharat Gopalrao Somkuwar^b, Khumukcham Nongalleima^c, Nameirakpam Surjit Singh^c, Dipak Biswas^c, Taothing Panmei Rikhang^a, Adin Pamei^a, Khangsiang Rangbuiyang^a, Kachakbeang Akeo^a, Yumlebam Hera Meitei^a, Maibam Nilababu Singh^a, Kangabam Thaba Devi^a, Setur Promila^a, Selsi Shem Lamkang^a, Khulpuwa Agnam^a, Hungyo Yaomei^a, Yangmi Kasar Awangsi Worthotmi^a, Yanao Lunghar Leiyapam^a, Yaikhom Subash Meitei^a, Sagolsem Jugeshor Singh^a, Khaidem Angouchou Singh^a, D Namshachung Kabui^a, Sanlut Lenthang Haokip^a, Pr Paokhokam Singisan^a, Maibam Ibohal Singh^a, Nongmaithem Brojen Singh^a, Haji Kamal Uddin^a, Angom Shyam^a, Thangkhojang Kipgen^a, Thangkholun Doungel^a, Hebem Haokip^a, L Lungkhagin Haokip^a, Wangjam Shanti Chanu^a, Laishram Jiban Meitei^a, Wahengbam Mohan Singh^a & Lokesh Deb^{c,*}

^aApunba Manipur Maiba Maibi Phurup (AMMMP) (Manipur State Traditional Healers' Association), Uripok Ningthoukhongjam Leikai, Imphal, Manipur 795 001, India

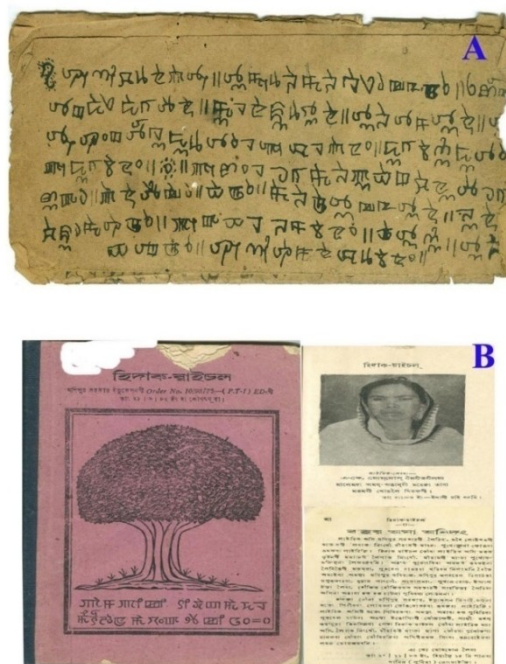
^bBioresources Database and Bioinformatics Programme, Institute of Bioresources and Sustainable Development (IBSD), Takyelpat Institutional Area, Imphal, Manipur 795 001, India

^cPharmacology Laboratory, Natural Product Chemistry and Pharmacology Programme, Institute of Bioresources and Sustainable Development (IBSD), Takyelpat Institutional Area, Imphal, Manipur 795 001, India

*E-mail: lokeshdeb.ibsd@nic.in, lokeshdeb@gmail.com

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Supplementary Data



Supplementary Fig. S1 — Photographs of the ‘Hidak Yachal’ (Manipur Traditional Medicine Formulary) (A) Facsimil of the ancient manuscript ‘Hidak Yachal’. This manuscript described different formulations for Manipur Traditional Medicine in Original Meitei Script. (B) Photographs of the ‘Hidak Yachal’ book that was translated and published by Mrs. A. K. Mommon Meiteileima in Meitei Manipuri language using Bengali script in the year 1984



Fig. S2 — Photograph of (i) *Maibas* and *Maibis* (Male and Female folklore healers of Manipur) attended in 1st Annual Conference of *Apunba Manipur Maiba Maibi Phurup* (AMMMP) (Manipur State Traditional Healers' Association) held on 10th March, 1985. (ii). Late Maring tribe, traditional healer was sharing his traditional knowledge and experiences with delegates and dignitaries in the conference

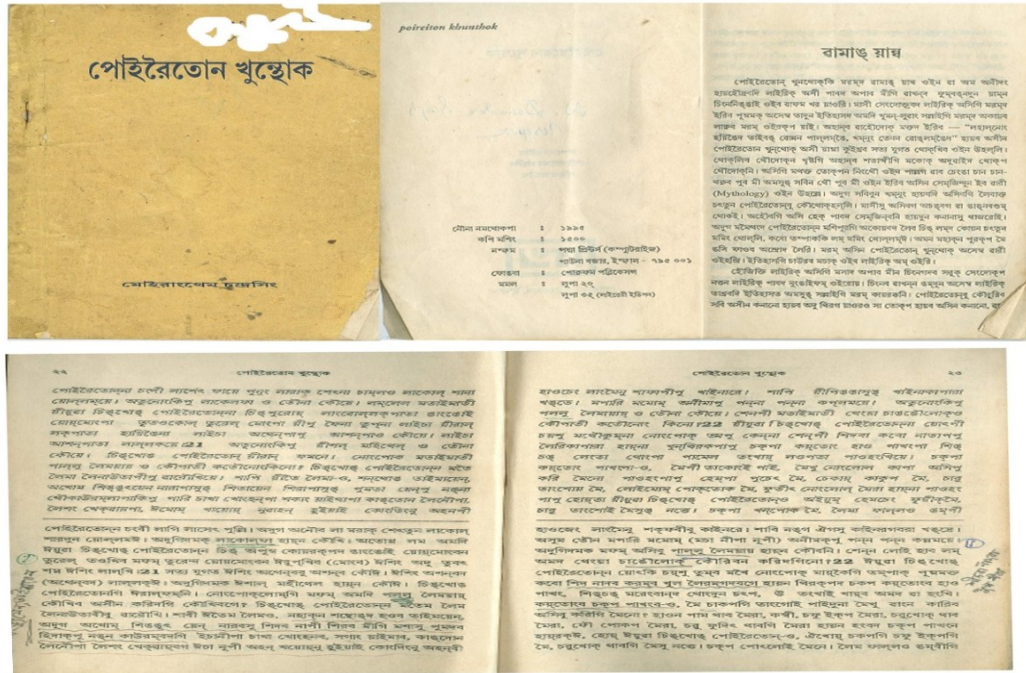


Fig. S3 — Photograph of the ancient manuscript, *Poireiton Khunthok* (*Travelogue of the King Poireiton*) that revealed the rich local health tradition of Manipur during the first century A.D. The book mentioned about several medicinal plants locally available in Manipur. This book edited and published by Pandit Achouba late Moirangthem Chandra Singh in Meitei Manipuri language using Bengali script on the year 1995

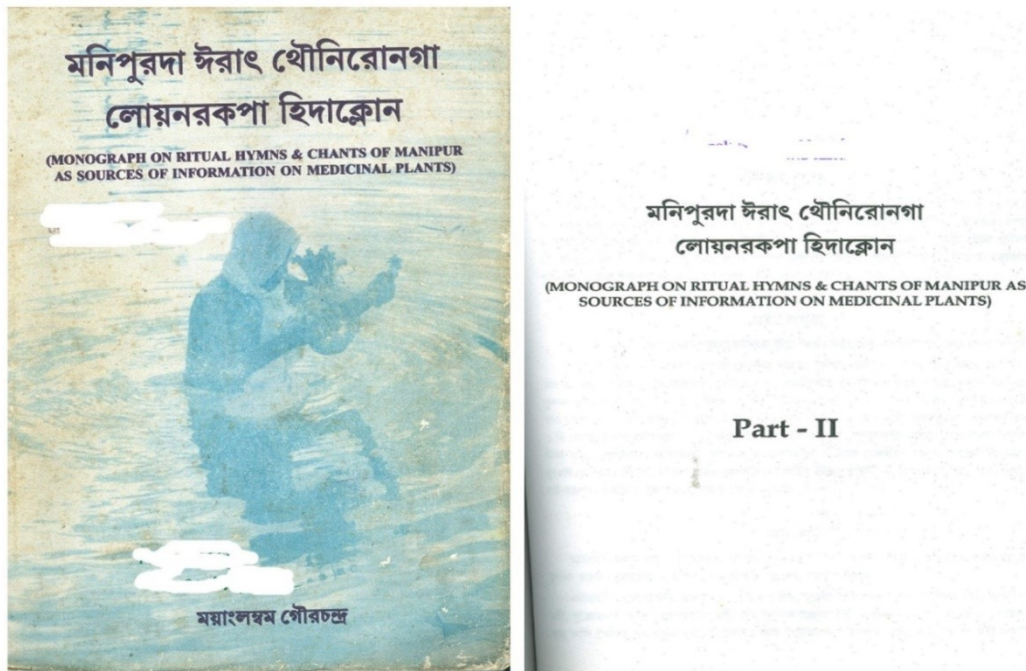


Fig. S4 — Photographs of '*Hidaklon*' (Formulary and Medicinal Plants). This manuscript is a monograph on Ritual Hymns and Chants of Manipur as sources of information on medicinal plants. This manuscript translated and published in two parts (Part-1 and part-2) by Mr. M. Gourachandra on the year 2005 in Meitei language using Bengali script

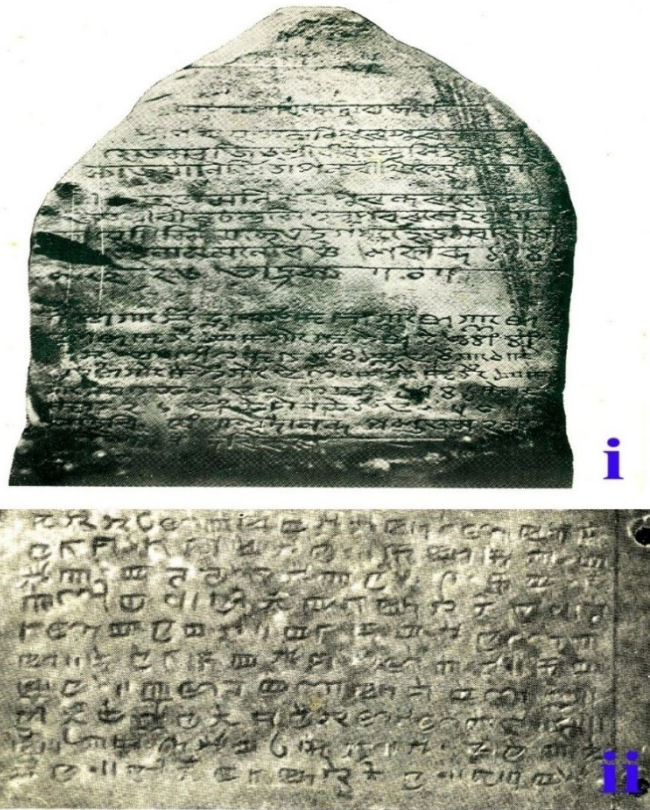


Fig. S5 — (i) Photographs of Stone Inscription found at Konthoujam Laairemma, Imphal West Dist., Manipur, India. (ii) Photographs of Copper Plate of 7th Century A.D



Traditional Maibi Recruited in Charoi Khullen PHSC, Manipur

Fig. S6 — Copy of newspapers The Poknapham (Manipuri) and The Sangai express (English) published on 27th August, 2014 reported about recruitment of Maibi (Female folklore healer of Charoi Khullen, Manipur) in Charoi Khullen Primary Health Service Centre, Manipur for helping medical staffs in safe natural child birth in modern hospital of the rural village

Table S1 — Details of traditional healers interviewed and their formulations

Sl. No.	Name of traditional healer	Age	Community	GPS data	Address	Number of diseases treating	Number of formulation used	Number of bioresources used
1.	Mr. Taothing Panmei Rikhang	70	Rongmei	N 25° 01' 11", E 93° 29' 20.8", Alt: 1158 m	Kunjao ward no.1, Tamenglong District, Manipur	12	10	32
2.	Mr. Adin Pamei	42	Rongmei	N 24° 59' 21.9", E 93° 30' 26.4", Alt: 1241 m	Khonpilong, ward no. 5 (B), Tamenglong District, Manipur	6	8	16
3.	Mr. Khangsiang Rangbuiyang	72	Zemei	N 25° 1' 13.9", E 93° 29' 21.6", Alt: 1172 m	Kunjao ward no.10, Tamenglong District, Manipur.	8	8	24
4.	Mr. Kachakbeang Akeo	46	Zemei	N 25° 01' 14.0", E 93° 29' 22.8", Alt: 1147m	Kunjao ward no.10, Tamenglong District, Manipur.	6	6	13
5.	Mr. Yumlembam Hera Meitei	52	Meitei	N 24° 52' 30.7", E 93° 49' 14.8", Alt: 798 m	Kadangbal Awang leikai, Imphal West, PO -Lamsang, Manipur	11	11	18
6.	Mr. Maibam Nilababu Singh	62	Meitei	N 24° 48' 31.2", E 93° 54' 36", Alt: 749 m	Samusang uku leirak, Imphal West district, Manipur	12	8	19
7.	Mrs. Kangabam Thaba Devi	62	Meitei	N 24°49' 42.14", E 93°54' 00.80", Alt: 779 m	Langol lairembi leikai, PO- lamphel, Imphal West district, Manipur	10	9	26
8.	Mrs. Setur Promila	45	Anal (Kuki)	N 24° 19' 45.5", E 93° 59' 50.2", Alt: 893 m	Hnatham Village, Chandel district, Manipur	10	12	14
9.	Mr. Selsi Shem Lamkang	56	Tangkhum	N 24° 25' 54.2", E 94° 01' 35.3", Alt: 918 m	Lamkang Thamlapokpi, PO Pallel, Chandel District, Manipur	15	15	26
10.	Mr. Khulpuwa Agnam	62	Maring	N 24° 29' 15.5", E 94° 01' 58.2", Alt: 789 m	Kambang khunou, Chandel District, Manipur	9	11	21
11.	Mrs. Hungyo Yaomei	35	Tangkhum	N 25° 04' 55.5", E 94° 21' 44.8", Alt: 1848 m	Hungpung Tungrei, Ukhrul District, Manipur	8	7	20
12.	Mr. Yangmi Kasar Awangsi Worthotmi	41	Tangkhum	N 25° 04' 47.9", E 94° 21' 26.7", Alt: 1793 m	Khaibatang, Hungpung, Ukhrul District, Manipur	14	14	18
13.	Mr. Yanao Lunghar Leiyapam	32	Tangkhum	N 25° 04' 56.5", E 94° 21' 43.9", Alt: 1850 m	Kachipung village, Ukhrul District, Manipur	7	5	5
14.	Mr. Yaikhom Subash Meitei	52	Meitei	N 24° 53' 43.5", E 94° 2' 33.2", Alt: 784 m	Sekta Awang leikai, Imphal East district, Manipur	13	13	35
15.	Mr. Sagolsem Jugeshor Singh	72	Meitei	N 24° 53' 28.8", E 93° 56' 40.9", Alt: 785 m	Mongjam village, Imphal East district, Manipur	10	10	15
16.	Mr. Khaidem Angouchou Singh	62	Meitei	N 24° 51' 42.5", E 94° 3' 10.9", Alt: 754 m	Lamlai makha leikai, Imphal East district, Manipur	6	5	19

17.	Mr. D. Namshachung Kabui	83	Zeliyangrong (Kuki)	N 24° 35' 40.2", E 93° 44' 8.6", Alt: 901 m	Kokadan village, sub-division - Hinglep, PO. Loktak Project, Churhandpur district, Manipur	12	16	41
18.	Mr. Sanlut Lenthang Haokip	47	Zeliyangrong (Kuki)	N 24° 28' 55.3", E 93° 40' 55.4", Alt: 911 m	Thinghangjang village, Churhandpur district, Manipur	7	10	23
19.	Mr. Pr. Paokhokam Singsan	75	Zeliyangrong (Kuki)	N 24° 21' 53.2", E 93° 42' 30.9", Alt: 805 m	Bethal Village, Churhandpur district, Manipur	8	8	10
20.	Mr. Maibam Ibohal Singh (folklore Veterinarian)	67	Meitei	N 24° 41' 14.5", E 93° 51' 50.4", Alt: 770 m	Leimapokpam khunpham Awang leikai, PO & PS-Nambol, Bishnupur district, Manipur	4	4	4 (Animal Diseases)
21.	Mr. Nongmaithem Brojen Singh	55	Meitei	N 24° 35' 46.2", E 93° 46' 38.3", Alt: 764 m	Nachou Awang mayei Leikai, Bishnupur district, Manipur	10	15	17
22.	Mr. Haji Kamal Uddin	78	Meitei Pangal	N 24° 27' 5", E 93° 45' 37.9", Alt: 788m	Kwakta Khuman Thongkha Makha Leikai, Bishnupur district, Manipur	6	6	7
23.	Dr. Angom Shyam	49	Meitei	N 24° 37' 30", E 93° 47' 39.7", Alt: 767 m	Thoubal ward no. 1, PO & PS-14 Bishnupur district, Manipur	14	14	15
24.	Mr. Thangkhojang Kipgen	50	Kuki	N 25° 3' 57.6", E 94° 1' 33.9", Alt: 803 m	Sajang village, saikul, sub-division, Senapati district, Manipur	12	12	15
25.	Mr. Thangkholum Doungel	50	Kuki	N 25° 8' 41", E 93° 58' 24.9", Alt: 999 m	Ward no. 16, kangpokpi, Senapati district, Manipur	9	11	13
26.	Mrs. Hebem Haokip	37	Kuki	N 25° 59' 8.1", E 93° 53' 38", Alt: 872 m	Khengjang Village, Super maina sub-division, Senapati district, Manipur	7	10	12
27.	Mr. L. Lungkhagin Haokip	40	Kuki	N 24° 56' 33.6", E 93° 50' 33.6", Alt: 880 m	Leimakhong bazaar, sadar hill, 10 Senapati district, Manipur	10	14	31
28.	Mrs. Wangjam Shanti Chanu	55	Meitei	N 24° 25' 58.9", E 93° 55' 7", Alt: 766 m	Thonjao Awang Maning Leikai, PO- Kakching & PS-Waikhong, Thoubal district, Manipur	5	8	15
29.	Mr. Laishram Jiban Meitei	37	Meitei	N 24° 25' 23.3", E 93° 55' 52.4", Alt: 779 m	Waikhong Awang Leikai, PO- Kakching & PS-Waikhong, Thoubal district, Manipur	12	11	43
30.	Mr. Wahengbam Mohan Singh	64	Meitei	N 24° 31' 23.1", E 93° 56' 11.3", Alt: 764 m	Hiyanglam waikhom leikai, PO- Wabgai, Thoubal district, Manipur	10	10	15

Table S2 — Documented ethnomedicinal plants studies with statistical indices Frequency of Citation for survey (S) and reference (R)										
Sl. No.	Scientific Name and Specimen No.	Local Name	Family	No. of Informants		Used in Disease condition		Frequency of citation		Folklore Uses documented during the survey
				S	R	S	R	S	R	
1.	<i>Aquilaria malaccensis</i> Lamk IBSD/PC/ES/P/2011/1	Agor	Aquilariaceae	3	3	4	7	10.00	0.80	Gas/acidity, diarrhoea, dysentery, stimulant in sexual debility, Mouth ulcer, Mouth inflammation (<i>Chil le naba</i>).
2.	<i>Calotropis gigantea</i> R.Br. IBSD/PC/ES/P/2011/5	Angkot	Asclepiada0ceae	1	2	6	5	3.33	0.53	Fever, cough, cold, asthma, nausea, vomiting, Poisonous Bite/ Snake-Bite/ Dog Bite (<i>Ngakrana Chikpa</i>)
3.	<i>Withania somnifera</i> (L.) Dunal IBSD/PC/ES/P/2011/7	Aswagandha	Solanaceae	1	5	6	5	3.33	1.33	Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>) etc.
4.	<i>Mussaenda erythrophylla</i> Schumach. &Thonn IBSD/PC/ES/P/2011/10	Baibeapunkho/ hanurei	Rubiaceae	1	2	3	6	3.33	0.53	Gynecological problem, intestinal mass / swelling in intestinal tract, Stomach Problem/ Gastric Ulcer/ <i>Puk Chatpa</i> , Skin diseases/ eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>).
5.	<i>Paederia foetida</i> Linn IBSD/PC/ES/P/2011/11	Banamluai/ oinam	Rubiaceae	8	3	8	17	26.67	0.80	Gynecological problem, gastric problem, Bone fracture (<i>Sarutekpa</i>), Ulcer, Joint Pain (<i>Tang Chikpa</i>).
6.	<i>Ziziphus jujube</i> Mill. Var. Spinosa IBSD/PC/ES/P/2011/14	Boroi	Rhamnaceae	1	1	1	10	3.33	0.27	Headache (<i>Kok Chikpa</i>), Diarrhea
7.	<i>Santalum album</i> Linn. IBSD/PC/ES/P/2011/15	Cha chandan	Santalaceae	1	1	5	3	3.33	0.27	General weakness (<i>eshatinjangba, eshamayengtaba, e-watpa</i>) weakness of infant after delivery, blood purifier, joint pain, arthritis (<i>tang chikpa</i>) gout, muscle pain, Cancer, Mouth ulcer, mouth inflammation (<i>Chil le naba</i>).
8.	<i>Oryza sativa</i> Linn. IBSD/PC/ES/P/2011/16	Chak	Gramineae	1	2	1	13	3.33	0.53	Dysentery (<i>Eton Phaiba</i>), Bone fracture (<i>sarutekpa</i>)
9.	<i>Musa</i> sp. IBSD/PC/ES/P/2011/20	Changbilaphu	Musaceae	1	3	3	18	3.33	0.80	Epilepsy, Cough, Tuberculosis (<i>Lok Thungba</i>), Respiratory Problem, Piles, Kidney problem and Urinary tract problem.
10.	<i>Clerodendrum siphonanthus</i> R.Br. IBSD/PC/ES/P/2011/21	Charoiutong	Verbenaceae	11	1	11	6	36.67	0.27	Tonsillitis (<i>Leithonbi</i>), Liver Enlargement (<i>Phiraknanthaba</i>)
11.	<i>Croton caudatus</i> Geiseler IBSD/PC/ES/P/2011/23	Chingphrei	Euphorbiaceae	3	2	6	6	10.00	0.53	Skin diseases/ eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>) etc.
12.	<i>Saccharum officinarum</i> Linn. IBSD/PC/ES/P/2011/28	Chu angouba	Poaceae	1	16	1	39	3.33	4.27	Bad breathing problem/Halitosis, Respiratory problem.
13.	<i>Cuscuta reflexa</i> Roxb IBSD/PC/ES/P/2011/31	Nongkhanguri/ Cuscuta	Cuscutaceae	1	4	1	21	3.33	1.07	Jaundice (<i>Thongak</i>)
14.	<i>Cinnamomum zeylanicum</i> Blume IBSD/PC/ES/P/2011/32	Dal chini/ ushingsha	Lauraceae	1	1	3	3	3.33	0.27	Stomach problem, gastric ulcer (<i>rukchatpa</i>), Jaundice (<i>Thongak</i>).
15.	<i>Aloe barbadensis</i> Mill. IBSD/PC/ES/P/2011/33	Dirtakumari	Liliaceae	1	4	2	6	3.33	1.07	Skin care, burn injury
16.	<i>Cannabis sativa</i> Linn. IBSD/PC/ES/P/2011/35	Ganja	Cannabaceae	8	3	8	18	26.67	0.80	Piles, typhoid (<i>Marilnaba/ Thirilnaba</i>), intestinal problem, diarrhea, Bone fracture (<i>sarutekpa</i>), Dysentery (<i>etonnaiba</i>), Gynecological problem.
17.	<i>Delonix regia</i> (Boj. ex Hook.) Raf. IBSD/PC/ES/P/2011/36	Gulmohor	Caesalpiniaceae	1	3	1	16	3.33	0.80	Headache (<i>Kok Chikpa</i>),
18.	<i>Meyna laxiflora</i> Robyns IBSD/PC/ES/P/2011/39	Heibi	Rubiaceae	9	4	9	17	30.00	1.07	Fever, Joint Pain, Arthritis (<i>Tang Chikpa</i>), Gout, Muscle pain.
19.	<i>Dillenia indica</i> Linn. IBSD/PC/ES/P/2011/41	Heigri	Dilleniaceae	1	1	1	28	3.33	0.27	Cough, Tuberculosis (<i>Lok Thungba</i>),

20.	<i>Averrhoa carambola</i> Linn. IBSD/PC/ES/P/2011/44	Heinoujom	Averrhoaceae	3	4	3	27	10.00	1.07	Respiratory problem, Jaundice, Cancer, Skin Diseases, Eczma (<i>Khut Hing</i>), Skin Rash (<i>Phuri</i>), Cold Allergy (<i>Maihing</i>), White Patch (<i>V.D. Disease</i>), Skin Infection (<i>ThamnaKhok Lai</i>).
21.	<i>Elaeagnus conferta</i> Roxb. IBSD/PC/ES/P/2011/46	Heiyai	Elaeagnaceae	1	6	4	10	3.33	1.60	Cuts wound, burn injury, Bullet wound, crack heel
22.	<i>Nicotiana tabacum</i> Linn. IBSD/PC/ES/P/2011/47	Hidakmana	Solanaceae	1	6	4	53	3.33	1.60	Expectorant, sedative, emetics, antispasmodic/stomach pain, piles, Tonsillitis, Blocked Nose/ Sinusitis/ Rhinitis, boil (<i>Nai Chaba Apomba</i>). Skin Diseases/ <i>Khut Hing</i> (Eczema)/ <i>Phuri</i> (Rash)/ <i>Maihing</i> / Cold Allergy/ <i>V.D. Disease</i> / White Patch/ Skin Infection/ <i>ThamnaKhok Lai</i> , Skin Cancer/ Wart/ <i>Lairen Sajik</i> , <i>Laiкои</i> / Ringworm, Cuts/ Wound /Burn/ Bullet Wound/ Crack Heel, <i>Saru Chasinba</i> / Leprosy, Osteomalitis, bone fracture
23.	<i>Alocasia indica</i> Schott. IBSD/PC/ES/P/2011/48	Hongu	Araceae	1	7	3	18	3.33	1.87	Cancer, piles, sinusitis, Blocked nose, rhinitis, wart (<i>Lairensajik</i>), Skin cancer, Bruise, Swelling after accident (<i>E-Ashibachangba</i> , <i>Esha chaokhatlaganaba</i>), Boil (<i>Naichabaapomba</i>), Cough, Tuberculosis (<i>Lok Thungba</i>)
24.	<i>Nerium indicum</i> Mill. IBSD/PC/ES/P/2011/54	Kabireiangoub a	Apocynaceae	1	10	5	34	3.33	2.67	Asthma, Diabetes (<i>Eshing-pukchatpa</i>), ear pain, fever, headache, swelling after accidental injury (<i>E-Ashibachangba</i> , <i>Esha chaokhatlaganaba</i>), Paralysis (<i>Makhong Makhut Chingsillakpa</i> / <i>Singli NaoriSonthaba</i>).
25.	<i>Ranunculus sceleratus</i> Linn. IBSD/PC/ES/P/2011/56	Kakyelkhujil	Ranunculaceae	1	8	9	33	3.33	2.13	Joint pain / arthritis (<i>tang chikpa</i>), gout, muscle pain, skin diseases, eczma (<i>khuthing</i>), Skin rash (<i>phuri</i>), cold (<i>mai hing</i>), allergy, white patch, skin infection (<i>thamnakhoklai</i>), Skin Cancer, Wart (<i>LairenSajik</i>)
26.	<i>Spilanthes acmella</i> Murr. IBSD/PC/ES/P/2011/57	Kakyelkhujilla ba	Asteraceae	2	4	3	22	6.67	1.07	Ringworm (<i>Laiкои</i>), Skin Cancer, Wart (<i>LairenSajik</i>)
27.	<i>Schizophyllum commune</i> Fr. IBSD/PC/ES/P/2011/63	Kangla yen	Agaricaceae	2	11	2	11	6.67	2.93	Diabetes (<i>Eshing-pukchatpa</i>), Ulcer, Tonsillitis (<i>Leithonbi</i>)
28.	<i>Mimosa pudica</i> Linn. IBSD/PC/ES/P/2011/64	Kangphalekait habi	Mimosaceae	3	8	3	64	10.00	2.13	Hepatitis, Jaundice (<i>Thongak</i>)
29.	<i>Papaver somniferum</i> Linn. IBSD/PC/ES/P/2011/65	Kani	Papaveraceae	2	9	4	36	6.67	2.40	Ringworm (<i>Laiкои</i>), Joint pain / arthritis (<i>tang chikpa</i>), gout, muscle pain, Cancer
30.	<i>Cinnamomum camphora</i> (L.) J.Presl. IBSD/PC/ES/P/2011/66	Karpurpambi	Lauraceae	2	6	12	9	6.67	1.60	Tonsillitis, Sinusitis, Skin cancer, Wart (<i>Lairen Sajik</i>), Ringworm, Cough, Cuts wound, burn injury, bullet wound, crack heel, Leprosy, Osteomalitis
31.	<i>Plumeria acuminata</i> Ait. IBSD/PC/ES/P/2011/70	Khageleihao	Apocynaceae	12	5	12	21	40.00	1.33	Remedy for pain, cure for itch, fever, diarrhea, Boil (<i>naichabaapomba</i>), Gynecologicalproblem.
32.	<i>Mikania cordata</i> (Burm. f.) B. L. Robinson IBSD/PC/ES/P/2011/71	Khamba yam /Urihingchabi	Compositae	5	6	5	21	16.67	1.60	Piles (<i>Nungshang</i>), Dysentery
33.	<i>Albizia lebbbeck</i> (Linn.) Benth. IBSD/PC/ES/P/2011/75	Khok	Fabaceae	2	6	2	23	6.67	1.60	Blood vomiting, blood in sputum (<i>E-oba</i>)
34.	<i>Ageratum conyzoides</i> L. IBSD/PC/ES/P/2011/76	Khongjainapi	Asteraceae	1	13	1	38	3.33	3.47	Haircare

35.	<i>Anotis foetida</i> Hook. f. IBSD/PC/ES/P/2011/79	Khutchappi	Rubiaceae	3	2	3	2	10.00	0.53	Bruise /swelling after accidental Injury (<i>Ashibachangba/ Esha chaokhatlaganaba</i>), Cancer, General weakness (<i>eshatinjangba / eshamayengtaba / e-watpa</i>) weakness of infant after delivery / blood purifier
36.	<i>Ananas comosus</i> (L.) Merr. IBSD/PC/ES/P/2011/80	Kihom	Bromeliaceae	3	7	3	17	10.00	1.87	Respiratory problem, gynecological problem, Kidney stone.
37.	<i>Alangium chinense</i> (Lour.) Harms IBSD/PC/ES/P/2011/81	Kokan	Cornaceae	2	2	4	10	6.67	0.53	Leprosy (<i>Saru Chasinba</i>), Osteomalitis, Cancer, Hypertension, Dysentery (<i>Eton Phaiba</i>), Malaria, Hypertension, Diarrhea
38.	<i>Iris germanica</i> L. IBSD/PC/ES/P/2011/82	Kombi rei	Iridaceae	1	2	1	16	3.33	0.53	Tonsillitis, Cuts wound, burn wound, Bullet wound, crack heel.
39.	<i>Cissus javana</i> DC IBSD/PC/ES/P/2011/83	Kongouyenlab a	Vitaceae	1	4	1	6	3.33	1.07	Kidney stone
40.	<i>Cissus adnate</i> Roxb. IBSD/PC/ES/P/2011/84	Kongouyen	Vitaceae	1	3	1	29	3.33	0.80	Kidney stone, Diabetes (<i>Eshing-pukchatpa</i>)
41.	<i>Stephania glabra</i> (Roxb.) Miers IBSD/PC/ES/P/2011/86	Koubruyai/ ruiball	Menispermiceae e	1	6	12	22	3.33	1.60	Swelling (<i>Apomba</i>), Inflammation, boils (<i>Naichabaapomba</i>), Diabetes (<i>Eshing-pukchatpa</i>), Male sexual disorder, Skin diseases, Eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), Male sexual disorder, Pus in semen (<i>Ishingpukchatpadaphambiyaoda, Phambichatpa, Phambikangba, PhambiYaoda</i>), Cancer, Mouth ulcer, mouth inflammation (<i>Chil le naba</i>).
42.	<i>Areca catechu</i> Linn. IBSD/PC/ES/P/2011/90	Kwa	Arecaceae	5	11	5	24	16.67	2.93	Sinusitis, Rhinitis, respiratory problem, blocked nose, Skin diseases, Eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>).
43.	<i>Smilax lanceifolia</i> Roxb. IBSD/PC/ES/P/2011/91	Kwamanbi	Smilacaceae	2	3	8	3	6.67	0.80	General weakness (<i>eshatinjangba / eshamayengtaba / e-watpa</i>) weakness of infant after delivery / blood purifier, Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), Cancer
44.	<i>Clerodendrum bracteatum</i> Wall. Ex Walp. IBSD/PC/ES/P/2011/99	Laikuthapanga ngba	Verbenaceae	2	4	2	4	6.67	1.07	Tonsillitis (<i>Leithonbi</i>), Piles, fever, Skin Cancer, Wart (<i>Lairensajik</i>), Ringworm (<i>Laikoi</i>) Sinusitis, Rhinitis blocked nose, cut wound, burn wound, bullet wound, crack heel, Leprosy (<i>Saruchasinba</i>), Osteomyelitis.
45.	<i>Hydrocotyle sibthorpioides</i> Lam. IBSD/PC/ES/P/2011/100	Laiperuk	Apiaceae	2	4	2	12	6.67	1.07	Blood purification, detoxification, Joint pain / arthritis (<i>tang chikpa</i>), gout, muscle pain, Skin diseases/ eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>).
46.	<i>Adenostemma lavenia</i> J.R.Forst. & G.Forst. IBSD/PC/ES/P/2011/101	Lalukok	Asteraceae	2	3	3	3	6.67	0.80	Mouth Ulcer, Mouth Inflammation (<i>Chil le naba</i>), Thorn inside skin (<i>Tingkhong Yuba</i>)
47.	<i>Canthium gracilipes</i> Kurz. IBSD/PC/ES/P/2011/102	Lam heibimakup	Rubiaceae	1	0	1	0	3.33	0.00	Diabetes (<i>Eshing-pukchatpa</i>)
48.	<i>Melothria perpusilla</i> (Blume) Cogn. IBSD/PC/ES/P/2011/104	Lamthabi	Cucurbitaceae	8	2	8	5	26.67	0.53	Liver enlargement/fatty liver (<i>Phirak Nanthaba</i>), Diabetes (<i>Eshing-pukchatpa</i>), Jaundice (<i>Thongak</i>)
49.	<i>Musa acuminata</i> Colla IBSD/PC/ES/P/2011/105	Laphoi	Musaceae	3	2	3	11	10.00	0.53	Piles (<i>Nungshang</i>), Cancer.

50.	<i>Solanum indicum</i> Linn. IBSD/PC/ES/P/2011/107	Leipungkhanga	Solanaceae	2	1	3	1	6.67	0.27	Fever (<i>Nupigi-e-napakhatpa</i>), Mouth Ulcer, Mouth Inflammation (<i>Chil le naba</i>), Blood purifier, detoxification, General weakness.
51.	<i>Cajanus cajan</i> (L.) Millsp. IBSD/PC/ES/P/2011/115	Mairongbiango uba	Fabaceae	1	7	1	17	3.33	1.87	Jaundice (<i>Thongak</i>)
52.	<i>Ziziphus oenoplia</i> (L.) Mill. IBSD/PC/ES/P/2011/117	Makhai	Rhamnaceae	1	3	1	4	3.33	0.80	Cancer, Heart problem, Chest Pain
53.	<i>Bryophyllum pinnata</i> Kruz. IBSD/PC/ES/P/2011/118	Manahidak	Crassulaceae	1	8	1	19	3.33	2.13	Ringworm (<i>Laikoi</i>), Jaundice (<i>Thongak</i>)
54.	<i>Terminalia citrina</i> (Gaertn.) Roxb. IBSD/PC/ES/P/2011/119	Manahi	Combretaceae	3	3	4	12	10.00	0.80	Tuberculosis (<i>Lok Thungba</i>), Piles (<i>Nungshang</i>), Jaundice (<i>Thongak</i>), antidote for wrong medication/detoxification, Iatrogenic, Constipation
55.	<i>Clerodendrum serratum</i> (Linn.) Moon IBSD/PC/ES/P/2011/122	Moirangkhana mbi	Verbenaceae	1	1	3	14	3.33	0.27	Allergic rhinitis, asthma, fever
56.	<i>Allium odorum</i> Linn. IBSD/PC/ES/P/2011/124	Nakuppi	Liliaceae	4	2	4	2	13.33	0.53	Urinary tract problem, kidney problem, Stomach Problem, Gastric Ulcer (<i>Ruk Chatpa</i>)
57.	<i>Melia azedarach</i> Linn. IBSD/PC/ES/P/2011/126	Neem/ sejrak	Meliaceae	1	1	2	17	3.33	0.27	Fever (<i>Nupigi-E-Na Pakhatpa</i>), Diabetes (<i>Eshing-Pukchatpa</i>), Piles (<i>Nungshang</i>).
58.	<i>Tinospora cordifolia</i> (Willd.) Hook. F. &Thoms. IBSD/PC/ES/P/2011/127	NingthouKhongli	Menispermiceae	1	1	5	3	3.33	0.27	Urinary tract problem, kidney problem, stomach problem, gastric ulcer (<i>Puk Chatpa</i>), male sexual disorder (<i>Ishing Pukchatpada Phambi Yaoda/Phambi Chatpa</i>), Pus in Semen, Headache (<i>Kok Chikpa</i>), Migraine, General weakness (<i>Esha Tinjangba/Esha Mayengtaba/E-Watpa</i>), Weakness of infant after birth, and Blood purifier.
59.	<i>Mirabilis jalapa</i> L. IBSD/PC/ES/P/2011/128	Nokakleianganga	Nyctaginaceae	1	4	1	9	3.33	1.07	Gynecological problem
60.	<i>Phaius tankervilleae</i> (L'Her.) Blume IBSD/PC/ES/P/2011/129	Nongmaimani	Orchidaceae	1	3	1	5	3.33	0.80	Cancer
61.	<i>Phlogacanthus thyrsoiflorus</i> (Roxb. ex Hardw.) Mabb. IBSD/PC/ES/P/2011/130	Nongmangkha	Acanthaceae	1	3	6	19	3.33	0.80	Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), Fever (<i>Nupigi-E-Na Pakhatpa</i>), Joint pain, arthritis (<i>tang chikpa</i>), gout, muscle pain, High Blood pressure (Hypertension), Blood in stool, Urine (<i>Dhatu Naba</i>), Paralysis (<i>Makhong Makhut Chingsillakpa/Singli NaoriSonthaba</i>), Piles (<i>Nungshang</i>), Respiratory problem, Jaundice (<i>Thongak</i>).
62.	<i>Adhatoda vasica</i> (L.) Nees IBSD/PC/ES/P/2011/132	Nongmangkhaangouba	Acanthaceae	1	13	3	17	3.33	3.47	Gynaecological Problem, Piles (<i>Nungshang</i>), Fever (<i>Nupigi-E-Na Pakhatpa</i>), Cough
63.	<i>Asparagus racemosus</i> Willd. IBSD/PC/ES/P/2011/134	Nungarei	Liliaceae	1	7	1	15	3.33	1.87	Skin Cancer, Wart (<i>Lairen Sajik</i>), Ring worm (<i>Laikoi</i>), Male sexual disorder (<i>Ishing Pukchatpada Phambi Yaoda/Phambi Kangba/Phambi Chatpa</i>), Pus in Semen
64.	<i>Mentha arvensis</i> Linn. IBSD/PC/ES/P/2011/135	Nungshihidak	Labiatae	1	8	2	17	3.33	2.13	Malaria, Cancer
65.	<i>Dactyloctenium aegyptium</i> (L.) P.Beauv. IBSD/PC/ES/P/2011/146	Pungphai	Poaceae	2	7	2	16	6.67	1.87	Skin Cancer, Wart (<i>Lairen Sajik</i>), Bad Breathing (Halitosis)
66.	<i>Psidium guajava</i> Linn. IBSD/PC/ES/P/2011/147	Pungton	Myrtaceae	1	9	1	20	3.33	2.40	Diarrhea

67.	<i>Datura stramonium</i> Linn. IBSD/PC/ES/P/2011/156	Sagolhidak	Solanaceae	1	5	1	22	3.33	1.33	Piles (<i>Nungshang</i>), Swellings (<i>Apomba</i>), Paralysis (<i>Makhong Makhut Chingsillakpa, Singli Naori Sonthaba</i>)
68.	<i>Tagetes erectus</i> Linn. IBSD/PC/ES/P/2011/166	Sanarei	Asteraceae	2	8	2	9	6.67	2.13	Ligament Injury (<i>Singli Thuppa/Khong Tekpa</i>), Kidney stone
69.	<i>Toona ciliata</i> M. Roem. IBSD/PC/ES/P/2011/172	Tairen	Meliaceae	1	4	4	12	3.33	1.07	Epilepsy (<i>Sarei</i>), Astringent and tonic, dysentery, and wound healer
70.	<i>Brucea javanica</i> (L.) Merr IBSD/PC/ES/P/2011/173	Taitoh/heining	Simaroubaceae	1	4	4	3	3.33	1.07	Cuts wound, Burn injury, Bullet wound, Crack heel
71.	<i>Hedychium marginatum</i> C.B. Clarke IBSD/PC/ES/P/2011/174	Takhetleiangan ba	Zingiberaceae	1	2	1	5	3.33	0.53	Constipation
72.	<i>Drymaria cordata</i> (Linn.) Willd IBSD/PC/ES/P/2011/176	Tandanpambi	Caryophyllaceae	2	9	4	26	6.67	2.40	Sinusitis, Rhinitis, blocked Nose, Epistaxis (<i>Nahi-Taba</i>), Respiratory problem.
73.	<i>Plumbago indica</i> Linn. IBSD/PC/ES/P/2011/180	Telhidakangan gba	Plumbaginaceae	1	5	2	11	3.33	1.33	General weakness (<i>Esha Tinjangba, Esha Mayeng Taba, E-watpa</i>), Weakness of infant after birth, Blood purifier, Blood in stool/ Urine (<i>Dhatu Naba</i>), Backache (<i>Khwang Naba</i>), Psychiatric problem
74.	<i>Bombax ceiba</i> Linn. IBSD/PC/ES/P/2011/182	Terapambi	Malvaceae	1	5	8	25	3.33	1.33	Skin diseases/ eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), mouth ulcer, mouth inflammation (<i>Chil le Naba</i>), Male sexual disorder (<i>Ishing Pukchatpada Phambi Yaoda, Phambi, Kangba, Phambi Chatpa</i>), Pus in Semen
75.	<i>Cynodon dactylon</i> (Linn.) Pers IBSD/PC/ES/P/2011/188	Tingthou	Poaceae	3	8	3	16	10.00	2.13	Epistaxis (<i>Nahi-Taba</i>), Blood vomiting, blood in sputum (<i>E-oba</i>), Infertility
76.	<i>Ocimum americanum</i> Linn. IBSD/PC/ES/P/2011/190	Tulsiamuba	Lamiaceae (Labiatae)	1	2	1	2	3.33	0.53	Fever (<i>Nupigi-E-Na Pakhatpa</i>), Bad Breathing (Halitosis)
77.	<i>Ocimum basilicum</i> Linn. IBSD/PC/ES/P/2011/191	Tulsiangouba	Lamiaceae (Labiatae)	1	7	1	10	3.33	1.87	Fever (<i>Nupigi-E-Na Pakhatpa</i>), Bad Breathing (Halitosis)
78.	<i>Eclipta prostrata</i> (Linn) L. IBSD/PC/ES/P/2011/195	Uchisumbanma na	Asteraceae	3	5	3	46	10.00	1.33	Fever (<i>Nupigi-E-Na Pakhatpa</i>), Typhoid (<i>Maril Naba, Thiril Naba</i>), Mouth ulcer, Mouth inflammation (<i>Chil le Naba</i>), Blood in stool/urine (<i>Dhatu Naba</i>).
79.	<i>Bixa orellana</i> Linn. IBSD/PC/ES/P/2011/201	Ureirom	Bixaceae	2	5	3	30	6.67	1.33	Healing of wounds and burns, prevents scaring and blister
80.	<i>Erycibe paniculata</i> Roxb IBSD/PC/ES/P/2011/207	Urithambal	Convolvulaceae	1	6	2	10	3.33	1.60	Piles (<i>Nungshang</i>), Kidney problem, Gynaecological problem.
81.	<i>Schima wallichii</i> (DC.) Korth. IBSD/PC/ES/P/2011/209	Usoi/Utang	Theaceae	1	8	2	16	3.33	2.13	Poisonous bite, dog bite, snake-bite (<i>Ngakranachikpa</i>), Uterine disorder and hysteria.

Table S3 — List of the plants frequently used

Sl. No.	Local name of plants	Used in no. of formulations	Used by no. of practitioners	Scientific name of the plant	Family
1.	Ganja	5	3	<i>Cannabis sativa</i> Linn.	Cannabaceae
2	Heibi	9	9	<i>Meyna laxiflora</i> Robyns.	Rubiaceae
3	Khagileihao	15	12	<i>Plumeria acuminata</i> Ait.	Apocynaceae
4	Urihingchabi	7	5	<i>Mikania cordata</i> , (Burm. f.) B. L.	compositae
5	Kwa	5	5	<i>Areca catechu</i> Linn.	Araceae

Table S4 List of the Medicinal plants documented during Ethnopharmacological survey along with traditional uses and scientific reports.

Sl. No.	Scientific Name and Specimen No.	Local Name	Family	Folklore Uses documented during the survey	Scientific Report
1.	<i>Aquilaria malaccensis</i> Lamk IBSD/PC/ES/P/2011/1	Lamk Agor	Aquilariaceae	Gas/acidity, diarrhoea, dysentery, stimulant in sexual debility, Mouth ulcer, Mouth inflammation (<i>Chil le naba</i>).	Anti-proliferative activity, anti-tyrosinase inhibitory activity ¹ . Anticancer activity ²
2.	<i>Calotropis gigantea</i> R.Br. IBSD/PC/ES/P/2011/5	Angkot	Asclepiadaceae	Fever, cough, cold, asthma, nausea, vomiting, Poisonous Bite/ Snake-Bite/ Dog Bite (<i>Ngakrana Chikpa</i>)	Anti-inflammatory activity ³ ; antibacterial, antifungal ⁴
3.	<i>Withania somnifera</i> (L.) Dunal IBSD/PC/ES/P/2011/7	Aswagandha	Solanaceae	Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>) etc.	antibiotic, abortifacient, astringent, anti-inflammatory, diuretic, narcotic, sedative ⁵ ; treatment of rheumatoid arthritis, asthma, leucoderma, sexual debility, anxiety neurosis, scabies, ulcers leucorrhoea ⁶ , Anti stress ⁷ .
4.	<i>Mussaenda erythrophylla</i> Schumach. &Thonn IBSD/PC/ES/P/2011/10	Baibeapunkh o/ hanurei	Rubiaceae	Gynecological problem, intestinal mass / swelling in intestinal tract, Stomach Problem/ Gastric Ulcer/ <i>Puk Chatpa</i> , Skin diseases/ eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>).	Anti-urolithiatic activity and Antioxidant activity ⁸ .
5.	<i>Paederia foetida</i> Linn IBSD/PC/ES/P/2011/11	Banamluai/ oinam	Rubiaceae	Gynecological problem, gastric problem, Bone fracture (<i>Sarutekpa</i>), Ulcer, Joint Pain (<i>Tang Chikpa</i>).	Antibacterial ⁹ ; cytotoxic activity ¹⁰ ; antidiabetic, antihyperlipidemic and antioxidant properties ¹¹ , antiulcer properties ¹² .
6.	<i>Ziziphus jujube</i> Mill. Var. Spinosa IBSD/PC/ES/P/2011/14	Boroi	Rhamnaceae	Headache (<i>Kok Chikpa</i>), Diarrhea	Anti-inflammatory activity ¹³ , antimicrobial activity ¹⁴ , for treatment of Pediatric infection ¹⁵ , antibacterial, phytotoxic and haemagglutination activities ¹⁶ , anticancer activity ¹⁷ .
7.	<i>Santalum album</i> Linn. IBSD/PC/ES/P/2011/15	Cha chandan	Santalaceae	General weakness (<i>eshatinjangba</i> , <i>eshamayengtaba</i> , <i>e-watpa</i>) weakness of infant after delivery, blood purifier, joint pain, arthritis (<i>tang chikpa</i>) gout, muscle pain, Cancer, Mouth ulcer, mouth inflammation (<i>Chil le naba</i>).	Antibacterial ¹⁸ , haemolytic activity ¹⁹ , anti-oxidant activity ²⁰ .
8.	<i>Oryza sativa</i> Linn. IBSD/PC/ES/P/2011/16	Chak	Gramineae	Dysentery (<i>Eton Phaiba</i>), Bone fracture (<i>sarutekpa</i>)	Anti-leukemia ²¹ , antibacterial activity ²² , anti-inflammatory and anti-arthritis activity ²³ .
9.	<i>Musa</i> sp. IBSD/PC/ES/P/2011/20	Changbilaph u	Musaceae	Epilepsy, Cough, Tuberculosis (<i>Lok Thungba</i>), Respiratory Problem, Piles, Kidney problem and Urinary tract problem.	Antioxidant activity ²⁴ , glucose homeostasis, antibacterial activity ²⁵ , Peptic ulcer protective activity ²⁶ .

10.	<i>Clerodendrum siphonanthus</i> R.Br. IBSD/PC/ES/P/2011/21	Charoiutong	Verbenaceae	Tonsillitis (<i>Leithonbi</i>), Liver Enlargement (<i>Phiraknanthaba</i>)	Asthma ²⁷ , Antibacterial and free radical scavenging activity ²⁸ .
11.	<i>Croton caudatus</i> Geiseler IBSD/PC/ES/P/2011/23	Chingphrei	Euphorbiaceae	Skin diseases/ eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>) etc.	anti-cancer ²⁹ anti-inflammatory ³⁰ , and anti-ulcer ³¹ , malaria, ardent fever, convulsions, rheumatic arthritis, and numbness ³² .
12.	<i>Saccharum officinarum</i> Linn. IBSD/PC/ES/P/2011/28	Chu angouba	Poaceae	Bad breathing problem/Halitosis, Respiratory problem.	Anti-oxidant activity ^{33,34} , anticancer activity ³⁵ , antibiotic ³⁶ .
13.	<i>Cuscuta reflexa</i> Roxb IBSD/PC/ES/P/2011/31	Nongkhangur i/ Cuscuta	Cuscutaceae	Jaundice (<i>Thongak</i>)	anticonvulsant, muscle relaxant, antioxidant, antihypertensive, cardiogenic, antiviral, and antibacterial ³⁷ , anti-tumour activity ³⁸ , anti-epileptic activity ³⁹ .
14.	<i>Cinnamomum zeylanicum</i> Blume IBSD/PC/ES/P/2011/32	Dal chini/ ushingsha	Lauraceae	Stomach problem, gastric ulcer (<i>rukchatpa</i>), Jaundice (<i>Thongak</i>).	Antiparasitic, effect on blood pressure, glycaemic control and lipids, anti-oxidant activity ⁴⁰ , antimicrobial ⁴¹ , antiapoptotic ⁴² .
15.	<i>Aloe barbadensis</i> Mill. IBSD/PC/ES/P/2011/33	Dirtakumari	Liliaceae	Skin care, burn injury	Antiinflammatory, antioxidant, antimicrobial, anticancer, antidiabetic, immuneboosting, and hypoglycemic properties ⁴³ , antiviral, anti-tumour, antiageing and antiseptic property ⁴⁴ .
16.	<i>Cannabis sativa</i> Linn. IBSD/PC/ES/P/2011/35	Ganja	Cannabaceae	Piles, typhoid (<i>Marilnaba/ Thirilnaba</i>), intestinal problem, diarrhea, Bone fracture (<i>sarutekpa</i>), Dysentery (<i>etonphaiba</i>), Gynecological problem.	Antimicrobial ⁴⁵ , anesthetic and antiphlegmatic ⁴⁶ , spasmolytic, hypnotic, analgesic in mental conditions and to increase resistance to severe physical stress ⁴⁷ .
17.	<i>Delonix regia</i> (Boj. ex Hook.) Raf. IBSD/PC/ES/P/2011/36	Gulmohor	Caesalpinaceae	Headache (<i>Kok Chikpa</i>),	Wound healing activity ⁴⁸ , antioxidant ⁴⁹ , In-Vitro Antioxidant Potential of <i>Delonix regia</i> Leaves ⁵⁰ , antidiabetic ⁵¹ .
18.	<i>Meyna laxiflora</i> Robyns IBSD/PC/ES/P/2011/39	Heibi	Rubiaceae	Fever, Joint Pain, Arthritis (<i>Tang Chikpa</i>), Gout, Muscle pain.	Antioxidant activity ⁵² , abortifacient ⁵³ .
19.	<i>Dillenia indica</i> Linn. IBSD/PC/ES/P/2011/41	Heigri	Dilleniaceae	Cough, Tuberculosis (<i>Lok Thungba</i>),	antileukemic, anti-inflammatory, antioxidant, antiproliferative, antidiabetic, antimicrobial, antifungal, antiarrhythmic, cytotoxic, hepatoprotective ⁵⁴ , anticancer ⁵⁵ , antidiabetic ⁵⁶ .
20.	<i>Averrhoa carambola</i> Linn. IBSD/PC/ES/P/2011/44	Heinoujom	Averrhoaceae	Respiratory problem, Jaundice, Cancer, Skin Diseases, Eczma (<i>Khut Hing</i>), Skin Rash (<i>Phuri</i>), Cold Allergy (<i>Maihing</i>), White Patch (<i>V.D. Disease</i>), Skin Infection (<i>ThamnaKhok Lai</i>).	Anti-inflammatory, Antimicrobial ⁵⁷ , Analgesic ⁵⁸ , Anthelmintic ⁵⁹ , Anti-ulcer ⁶⁰ , Anti-Oxidant ⁶¹ , Hypocholesterolaemic & Hypolipidemic activity ⁶² .

21.	<i>Elaeagnus conferta</i> Roxb. IBSD/PC/ES/P/2011/46	Heiyai	Elaeagnaceae	Cuts wound, burn injury, Bullet wound, crack heel	It is used for Rheumatism, Haematinic, Painkiller ⁶³ , clearance of blood alcohol by increasing hepatic alcohol dehydrogenase and aldehyde dehydrogenase ⁶⁴ .
22.	<i>Nicotiana tabacum</i> Linn. IBSD/PC/ES/P/2011/47	Hidakmana	Solanaceae	Expectorant, sedative, emetics, antispasmodic/stomach pain, piles, Tonsillitis, Blocked Nose/ Sinusitis/ Rhinitis, boil (<i>Nai Chaba Apomba</i>). Skin Diseases/ <i>Khut Hing</i> (Eczema)/ <i>Phuri</i> (Rash)/ <i>Maihing</i> / Cold Allergy/ V.D. Disease/ White Patch/ Skin Infection/ <i>ThamnaKhok Lai</i> , Skin Cancer/ Wart/ <i>Lairen Sajik</i> , <i>Laikoi</i> / Ringworm, Cuts/ Wound /Burn/ Bullet Wound/ Crack Heel, <i>Saru Chasinba</i> / Leprosy, Osteomalitis, bone fracture	analgesic activity, anesthetic activity, angiogenesis inhibition, antibacterial activity, anticonvulsant activities, antiestrogenic effect, antifungal activity, antiglaucomic activity, antioxidant activity, antistress effect antiviral activity, aromatase inhibition, arrhythmogenic effect, carcinogenic activity, Nicotine for treatment of Alzheimer disease, Parkinson disease, depression and anxiety, schizophrenia, attention deficit hyper activity disorder (ADHD), pain and obesity ⁶⁵ , antibacterial, antifungal, antinociceptive, anti- Alzheimer's, anti-helminthic ⁶⁶ . Antibacterial ⁶⁷ , antimicrobial, cytotoxic and antioxidant activity ⁶⁸ , hepatoprotective ⁶⁹ .
23.	<i>Alocasia indica</i> Schott. IBSD/PC/ES/P/2011/48	Hongu	Araceae	Cancer, piles, sinusitis, Blocked nose, rhinitis, wart (<i>Lairensajik</i>), Skin cancer, Bruise, Swelling after accident (<i>E-Ashibachangba</i> , <i>Esha chaokhatlaganaba</i>), Boil (<i>Naichabaapomba</i>), Cough, Tuberculosis (<i>Lok Thungba</i>)	Antioxidant ⁷⁰ , analgesic ⁷¹ , antiulcer ⁷² , antimicrobial ⁷³ , antidiabetic ⁷⁴ , molluscidal ⁷⁵ , hepatoprotective ⁷⁶ , antiviral ⁷⁷ .
24.	<i>Nerium indicum</i> Mill. IBSD/PC/ES/P/2011/54	Kabireiangou ba	Apocynaceae	Asthma, Diabetes (<i>Eshing- pukchatpa</i>), ear pain, fever, headache, swelling after accidental injury (<i>E- Ashibachangba</i> , <i>Esha chaokhatlaganaba</i>), Paralysis (<i>Makhong Makhut Chingsillakpa/ Singli NaoriSonthaba</i>).	Anti-inflammatory ⁷⁸ , antibacterial ⁷⁹ , antibiosis, antiphlogosis, and the relief of articular effusion ⁸⁰ .
25.	<i>Ranunculus sceleratus</i> Linn. IBSD/PC/ES/P/2011/56	Kakyelkhujil	Ranunculaceae	Joint pain / arthritis (tang chikpa), gout, muscle pain, skin diseases, eczma (<i>khuthing</i>), Skin rash (<i>phuri</i>), cold (<i>mai hing</i>), allergy, white patch, skin infection (<i>thamnakhoklai</i>), Skin Cancer, Wart (<i>LairenSajik</i>)	skin care, oral health, and antifungal uses ⁸¹ , antiaging ⁸² , Toothache, insecticidal, colic, gastrointestinal disorders. Dried leaves are strewn around the home to ward off insect pests; a combination of leaf and flower juice is taken for colic ⁸³ , Vasorelaxant (Effect on Blood Flow) and Antioxidant Activity ^{84, 85} .
26.	<i>Spilanthes acmella</i> Murr. IBSD/PC/ES/P/2011/57	Kakyelkhujill aba	Asteraceae	Ringworm (<i>Laikoi</i>), Skin Cancer, Wart (<i>LairenSajik</i>)	

27.	<i>Schizophyllum commune</i> Fr. IBSD/PC/ES/P/2011/63	Kangla yen	Agaricaceae	Diabetes (<i>Eshing-pukchatpa</i>), Ulcer, Tonsillitis (<i>Leithonbi</i>)	Anticancer, antibacterial, antifungal, antioxidant ⁸⁶ .
28.	<i>Mimosa pudica</i> Linn. IBSD/PC/ES/P/2011/64	Kangphaleka ithabi	Mimosaceae	Hepatitis, Jaundice (<i>Thongak</i>)	Anti-hepatotoxic, antioxidant, antivenom, antimicrobial, antifungal, antiviral, aphrodisiac ⁸⁷ .
29.	<i>Papaver somniferum</i> Linn. IBSD/PC/ES/P/2011/65	Kani	Papaveraceae	Ringworm (<i>Laikoi</i>), Joint pain / arthritis (<i>tang chikpa</i>), gout, muscle pain, Cancer	Analgesic, pain disorder ⁸⁸ .
30.	<i>Cinnamomum camphora</i> (L.) J.Presl. IBSD/PC/ES/P/2011/66	Karpurpambi	Lauraceae	Tonsillitis, Sinusitis, Skin cancer, Wart (<i>Lairen Sajik</i>), Ringworm, Cough, Cuts wound, burn injury, bullet wound, crack heel, Leprosy, Osteomalitis	antiseptic, antipruritic, rubefacient, abortifacient, aphrodisiac, contraceptive and lactation suppressant ⁸⁹ , rheumatism, sprains, bronchitis, asthma and muscle pain ⁹⁰ .
31.	<i>Plumeria acuminata</i> Ait. IBSD/PC/ES/P/2011/70	Khageleihao	Apocynaceae	Remedy for pain, cure for itch, fever, diarrhea, Boil (<i>naichabaapomba</i>), Gynecologicalproblem.	Antiinflammatory activity ⁹¹ , antioxidant, antipyretic, antimicrobial activity ⁹² , antimutagen ⁹³ .
32.	<i>Mikania cordata</i> (Burm. f.) B. L. Robinson IBSD/PC/ES/P/2011/71	Khamba yam /Urihingchabi	Compositae	Piles (<i>Nungshang</i>), Dysentery	Anti-ulcer activity ⁹⁴ , It is used in dyspepsia, dysentery and gastric ulcer ⁹⁵ , M. <i>cordata</i> possesses a potent central nervous system depressant action ⁹⁶ , inflammatory activity ⁹⁷ .
33.	<i>Albizzia lebbek</i> (Linn.) Benth. IBSD/PC/ES/P/2011/75	Khok	Fabaceae	Blood vomiting, blood in sputum (<i>E-oba</i>)	Anti-asthmatic activity, antidiarrheal activity, anxiolytic, antiproliferative,anti-allergic ⁹⁸ , antiinflammatory, hepatoprotective, antidiabetic, anticancer activity ⁹⁹ .
34.	<i>Ageratum conyzoides</i> L. IBSD/PC/ES/P/2011/76	Khongjainapi	Asteraceae	Haircare	Antioxidant and radioprotective ¹⁰⁰ , analgesic and prevent co-agulation of whole blood ¹⁰¹ , antitumour ¹⁰² , dermatological problem ¹⁰³ , antiinflammation ¹⁰⁴ .
35.	<i>Anotis foetida</i> Hook. f. IBSD/PC/ES/P/2011/79	Khutchappi	Rubiaceae	Bruise /swelling after accidental Injury (<i>Ashibachangba/ Esha chaokhatlaganaba</i>), Cancer, General weakness (<i>eshatinjangba / eshamayengtaba / e-watpa</i>) weakness of infant after delivery / blood purifier, Bone fracture	Scientific reports not available
36.	<i>Ananas comosus</i> (L.) Merr. IBSD/PC/ES/P/2011/80	Kihom	Bromeliaceae	Respiratory problem, gynecological problem, Kidney stone.	Antioxidant ¹⁰⁵ .
37.	<i>Alangiumchinense</i> (Lour.) Harms IBSD/PC/ES/P/2011/81	Kokan	Cornaceae	Leprosy (<i>Saru Chasinba</i>), Osteomalitis, Cancer, Hypertension, Dysentery (<i>Eton Phaiba</i>), Malaria, Hypertension, Diarrhea	Significant neuromuscular blocking effect ¹⁰⁶ , smooth muscle relaxation effect ¹⁰⁷ .

38.	<i>Iris germanica</i> L. IBSD/PC/ES/P/2011/82	Kombi rei	Iridaceae	Tonsillitis, Cuts wound, burn wound, Bullet wound, crack heel.	Anti-inflammatory activity ^{108,109} , Antifungal activity ¹¹⁰ , Antitumor ¹¹¹ .
39.	<i>Cissus javana</i> DC IBSD/PC/ES/P/2011/83	Kongouyenla ba	Vitaceae	Kidney stone	Antioxidant activity ¹¹² , agent for hair growth ¹¹³ .
40.	<i>Cissus adnate</i> Roxb. IBSD/PC/ES/P/2011/84	Kongouyen	Vitaceae	Kidney stone, Diabetes (<i>Eshing-pukchatpa</i>)	anti-inflammatory ¹¹⁴ and anti-cancer and estrogen receptor α agonist activity ¹¹⁵ .
41.	<i>Stephania glabra</i> (Roxb.) Miers IBSD/PC/ES/P/2011/86	Koubruyai/ruiball	Menispermaceae	Swelling (<i>Apomba</i>), Inflammation, boils (<i>Naichabaapomba</i>), Diabetes (<i>Eshing-pukchatpa</i>), Male sexual disorder, Skin diseases, Eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), Male sexual disorder, Pus in semen (<i>Ishingpukchatpadaphambiyao da</i> , <i>Phambichatpa</i> , <i>Phambikangba</i> , <i>PhambiYaoda</i>), Cancer, Mouth ulcer, mouth inflammation (<i>Chil le naba</i>).	Diabetes, stomach tumors, leprosy, obesity, gout, paralysis, leucoderma, fever, colic, cough, asthma, rheumatism, amoebiasis, purified blood, eye complaint, backache ¹¹⁶ .
42.	<i>Areca catechu</i> Linn. IBSD/PC/ES/P/2011/90	Kwa	Arecaceae	Sinusitis, Rhinitis, respiratory problem, blocked nose, Skin diseases, Eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>).	Anti-inflammation and anti-melanogenesis ¹¹⁷ ; anti-oxidant activity ¹¹⁸ .
43.	<i>Smilax lanceifolia</i> Roxb. IBSD/PC/ES/P/2011/91	Kwamanbi	Smilacaceae	General weakness (<i>eshatinjangba</i> / <i>eshamayengtaba</i> / <i>e-watpa</i>) weakness of infant after delivery / blood purifier, Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), Cancer	Antibacterial and analgesic properties ¹¹⁹ .
44.	<i>Clerodendrum bracteatum</i> Wall. Ex Walp. IBSD/PC/ES/P/2011/99	Laikuthapang angba	Verbenaceae	Tonsillitis (<i>Leithonbi</i>), Piles, fever, Skin Cancer, Wart (<i>Lairensajik</i>), Ringworm (<i>Laikoi</i>) Sinusitis, Rhinitis blocked nose, cut wound, burn wound, bullet wound, crack heel, Leprosy (<i>Saruchasinba</i>), Osteomyelitis.	Leaf Juice is used to treat fever ¹²⁰ .
45.	<i>Hydrocotyle sibthorpioides</i> Lam. IBSD/PC/ES/P/2011/100	Laiperuk	Apiaceae	Blood purification, detoxification, Joint pain / arthritis (<i>tang chikpa</i>), gout, muscle pain, Skin diseases/ eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>).	Effect on in vitro dengue replication ¹²¹ ; Antioxidant and antiproliferative ¹²² .

46.	<i>Adenostemma lavenia</i> J.R.Forst. & G.Forst. IBSD/PC/ES/P/2011/101	Lalukok	Asteraceae	Mouth Ulcer, Mouth Inflammation (<i>Chil le naba</i>), Thorn inside skin (<i>Tingkhang Yuba</i>)	Anti-ulcer activity ¹²³ .
47.	<i>Canthium gracilipes</i> Kurz. IBSD/PC/ES/P/2011/102	Lam heibimakup	Rubiaceae	Diabetes (<i>Eshing-pukchatpa</i>)	Scientific reports not available
48.	<i>Melothria perpusilla</i> (Blume) Cogn. IBSD/PC/ES/P/2011/104	Lamthabi	Cucurbitaceae	Liver enlargement/fatty liver (<i>Phirak Nanthaba</i>), Diabetes (<i>Eshing-pukchatpa</i>), Jaundice (<i>Thongak</i>)	Nematicidal ¹²⁴ ; Root for treating Syphilis ¹²⁵ .
49.	<i>Musa acuminata</i> Colla IBSD/PC/ES/P/2011/105	Laphoi	Musaceae	Piles (<i>Nungshang</i>), Cancer.	Antioxidant ¹²⁶ ; antioxidant, anti-cancerous and anti-inflammatory properties ¹²⁷ ; antimicrobial ¹²⁸ .
50.	<i>Solanum indicum</i> Linn. IBSD/PC/ES/P/2011/107	Leipungkhangga	Solanaceae	Fever (<i>Nupigi-e-napakhatpa</i>), Mouth Ulcer, Mouth Inflammation (<i>Chil le naba</i>), Blood purifier, detoxification, General weakness.	Antioxidant activity ¹²⁹ ; antioxidant and antihelminthic activity ¹³⁰ ; anti-ulcerogenic effects ¹³¹ .
51.	<i>Cajanuscajan</i> (L) Millsp. IBSD/PC/ES/P/2011/115	Mairongbian gouba	Fabaceae	Jaundice (<i>Thongak</i>)	Hypocholesterolemic Effects, Antidiabetic Effects, Antimicrobial Activity, Antibacterial Activity, Neuroactive Properties, Antioxidant Activities, Anticancer Activity, Hepatoprotective Effects, Anthelmintic Activity, Glycemic Activity ¹³² .
52.	<i>Ziziphus oenoplia</i> (L.) Mill. IBSD/PC/ES/P/2011/117	Makhai	Rhamnaceae	Cancer, Heart problem, Chest Pain	Hepatoprotective ¹³³ ; antiulcer activity ¹³⁴ ; hypolipidemic ¹³⁵ .
53.	<i>Bryophyllum pinnata</i> Kruz. IBSD/PC/ES/P/2011/118	Manahidak	Crassulaceae	Ringworm (<i>Laikoi</i>), Jaundice (<i>Thongak</i>)	Antimicrobial ¹³⁶ ; antidiabetic activity ¹³⁷ .
54.	<i>Terminalia citrina</i> (Gaertn.) Roxb. IBSD/PC/ES/P/2011/119	Manahi	Combretaceae	Tuberculosis (<i>Lok Thungba</i>), Piles (<i>Nungshang</i>), Jaundice (<i>Thongak</i>), antidote for wrong medication/detoxification, Iatrogenic, Constipation	Antihelminthic activity ¹³⁸ ; antimicrobial activity ¹³⁹ .
55.	<i>Clerodendrum serratum</i> (Linn.) Moon IBSD/PC/ES/P/2011/122	Moirangkhang ambi	Verbenaceae	Allergic rhinitis, asthma, fever	Hepatoprotective activity, Anticancer activity, Antinociceptive activity, Anti-inflammatory activity, Antioxidant activity ¹⁴⁰ ; antibacterial and wound healing activity ¹⁴¹ .
56.	<i>Allium odorum</i> Linn. IBSD/PC/ES/P/2011/124	Nakuppi	Liliaceae	Urinary tract problem, kidney problem, Stomach Problem, Gastric Ulcer (<i>Ruk Chatpa</i>)	Antioxidant activity ¹⁴² ; antibacterial ¹⁴³ .
57.	<i>Melia azedarach</i> Linn. IBSD/PC/ES/P/2011/126	Neem/sejtrak	Meliaceae	Fever (<i>Nupigi-E-Na Pakhatpa</i>), Diabetes (<i>Eshing-Pukchatpa</i>), Piles (<i>Nungshang</i>).	Antifungal activity ¹⁴⁴ ; antiangiogenic activity ¹⁴⁵ ; antimicrobial activity ¹⁴⁶ .

58.	<i>Tinospora cordifolia</i> (Willd.) Hook. F. &Thoms. IBSD/PC/ES/P/2011/127	NingthouKho ngli	Menispermaceae	Urinary tract problem, kidney problem, stomach problem, gastric ulcer (<i>Puk Chatpa</i>), male sexual disorder (<i>Ishing Pukchatpada Phambi Yaoda/Phambi Chatpa</i>), Pus in Semen, Headache (<i>Kok Chikpa</i>), Migraine, General weakness (<i>Esha Tinjangba/Esha Mayengtaba/E-Watpa</i>), Weakness of infant after birth, and Blood purifier.	Anti-viral infections, Anticancer, anti-diabetes, inflammation, Neurological, immunomodulatory, psychiatric conditions ^{147, 148, 149, 150, 151} .
59.	<i>Mirabilis jalapa</i> L. IBSD/PC/ES/P/2011/128	Nokakleiang angba	Nyctaginaceae	Gynecological problem	Antimicrobial ¹⁵² ; Antispasmodic & Anti-inflammatory Actions ¹⁵³ ; Anti-Diabetic & Cholesterol-lowering Actions ¹⁵⁴ .
60.	<i>Phaius tankervilleae</i> (L'Her.) Blume IBSD/PC/ES/P/2011/129	Nongmaimani	Orchidaceae	Cancer	Scientific report not available
61.	<i>Phlogacanthus thyrsoiflorus</i> (Roxb. ex Hardw.) Mabb. IBSD/PC/ES/P/2011/130	Nongmangkha	Acanthaceae	Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), Fever (<i>Nupigi-E-Na Pakhatpa</i>), Joint pain, arthritis (<i>tang chikpa</i>), gout, muscle pain, High Blood pressure (Hypertension), Blood in stool, Urine (<i>Dhatu Naba</i>), Paralysis (<i>Makhong Makhut Chingsillakpa/Singli NaoriSonthaba</i>), Piles (<i>Nungshang</i>), Respiratory problem, Jaundice (<i>Thongak</i>).	Antidiabetic ¹⁵⁵ ; rheumatism, anaemia and cough ¹⁵⁶ ; Antidiabetic, Hypolipidemic and Hepatoprotective Activity ¹⁵⁷ .
62.	<i>Adhatoda vasica</i> (L.) Nees IBSD/PC/ES/P/2011/132	Nongmangkha aangouba	Acanthaceae	Gynaecological Problem, Piles (<i>Nungshang</i>), Fever (<i>Nupigi-E-Na Pakhatpa</i>), Cough	Antityphoid ¹⁵⁸ ; anti-diabetic ¹⁵⁹ ; abortifacient ¹⁶⁰ .
63.	<i>Asparagus racemosus</i> Willd. IBSD/PC/ES/P/2011/134	Nungarei	Liliaceae	Skin Cancer, Wart (<i>Lairen Sajik</i>), Ring worm (<i>Laikoi</i>), Male sexual disorder (<i>Ishing Pukchatpada Phambi Yaoda/Phambi Kangba/Phambi Chatpa</i>), Pus in Semen	Cytotoxic, antioxidant, tyrosinase inhibitory, antimicrobial activities ¹⁶¹ ; bitter-sweet, emollient, cooling, nervine tonic, constipating, galactagogue, aphrodisiac, diuretic, rejuvenating, carminative, stomachic, antiseptic ¹⁶² .
64.	<i>Mentha arvensis</i> Linn. IBSD/PC/ES/P/2011/135	Nungshihida k	Labiatae	Malaria, Cancer	Antioxidant, antimicrobial, cytotoxic and analgesic activities ¹⁶³ ; spasmolytics, antibacterial agents, and promoters of gas secretion ¹⁶⁴ .
65.	<i>Dactyloctenium aegyptium</i> (L.) P.Beauv. IBSD/PC/ES/P/2011/146	Pungphai	Poaceae	Skin Cancer, Wart (<i>Lairen Sajik</i>), Bad Breathing (Halitosis)	Antibacterial activity ¹⁶⁵ ; antioxidant, antiinflammatory, anticancer and antipyretic properties ^{166, 167, 168} .

66.	<i>Psidium guajava</i> Linn. IBSD/PC/ES/P/2011/147	Pungton	Myrtaceae	Diarrhea	Nticestodal ¹⁶⁹ , analgesic, anti-inflammatory properties ^{170, 171} ; antimicrobial ¹⁷² , hepatoprotective ¹⁷³ and antioxidant activities ¹⁷⁴ .
67.	<i>Datura stramonium</i> Linn. IBSD/PC/ES/P/2011/156	Sagolhidak	Solanaceae	Piles (<i>Nungshang</i>), Swellings (<i>Apomba</i>), Paralysis (<i>Makhong Makhut Chingsillakpa, Singli Naori Sonthaba</i>)	Insecticidal ¹⁷⁵ ; Antimicrobial activity ¹⁷⁶ ; analgesic and antiasthmatic activity ¹⁷⁷ .
68.	<i>Tagetes erectus</i> Linn. IBSD/PC/ES/P/2011/166	Sanarei	Asteraceae	Ligament Injury (<i>Singli Thuppa/Khong Tekpa</i>), Kidney stone	antioxidative and tyrosinase inhibitory effect ¹⁷⁸ ; Anti-inflammatory ¹⁷⁹ ; Larvicidal activity ¹⁸⁰ .
69.	<i>Toona ciliata</i> M. Roem. IBSD/PC/ES/P/2011/172	Tairen	Meliaceae	Epilepsy (<i>Sarei</i>), Astringent and tonic, dysentery, and wound healer	Antimicrobial and antioxidant activity ¹⁸¹ ; Antibacterial activity and also exhibited significant cytotoxicity ¹⁸² ; Gastro protective activity ¹⁸³ .
70.	<i>Brucea javanica</i> (L.) Merr IBSD/PC/ES/P/2011/173	Taitoh/heinimg	Simaroubaceae	Cuts wound, Burn injury, Bullet wound, Crack heel	antitumor and antimalarial effects ¹⁸⁴ ; antidiabetic and antioxidant activity ¹⁸⁵ .
71.	<i>Hedychium marginatum</i> C.B. Clarke IBSD/PC/ES/P/2011/174	Takhetleiang anba	Zingiberaceae	Constipation	Effective in Stomach disorder ¹⁸⁶ ; Antibacterial on urolithiasis inducing flora ¹⁸⁷ .
72.	<i>Drymaria cordata</i> (Linn.) Willd IBSD/PC/ES/P/2011/176	Tandanpambi	Caryophyllaceae	Sinusitis, Rhinitis, blocked Nose, Epistaxis (<i>Nahi-Taba</i>), Respiratory problem.	anti-inflammatory ^{188, 189} ; antitussive ¹⁹⁰ , cytotoxic ¹⁹¹ ; anxiolytic activity ¹⁹² , analgesic, anti-nociceptive and antipyretic properties ^{193, 194}
73.	<i>Plumbago indica</i> Linn. IBSD/PC/ES/P/2011/180	Telhidakanga ngba	Plumbaginaceae	General weakness (<i>Esha Tinjangba, Esha Mayeng Taba, E-watpa</i>), Weakness of infant after birth, Blood purifier, Blood in stool/ Urine (<i>Dhatu Naba</i>), Backache (<i>Khwang Naba</i>), Psychiatric problem	Anti-oxidant activity ¹⁹⁵ ; Anti-ovulatory and estrogenic activity ¹⁹⁶
74.	<i>Bombax ceiba</i> Linn. IBSD/PC/ES/P/2011/182	Terapambi	Malvaceae	Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), mouth ulcer, mouth inflammation (<i>Chil le Naba</i>), Male sexual disorder (<i>Ishing Pukchatpada Phambi Yaoda, Phambi, Kangba, Phambi Chatpa</i>), Pus in Semen	Antiangiogenic activity ¹⁹⁷ antioxidant activity and cytotoxic activity ¹⁹⁸ Inhibitory effects on tube-like formation of human umbilical venous cells ¹⁹⁹ hypotensive and hypoglycemic activities ²⁰⁰
75.	<i>Cynodon dactylon</i> (Linn.) Pers IBSD/PC/ES/P/2011/188	Tingthou	Poaceae	Epistaxis (<i>Nahi-Taba</i>), Blood vomiting, blood in sputum (<i>E-oba</i>), Infertility	Antidiabetic ^{201, 202} , antioxidant and hypolipidemic efficacy ^{203, 204} , healing of minor injuries ²⁰⁵ ; immunomodulatory and hepatic antioxidant ^{206, 207} .
76.	<i>Ocimum americanum</i> Linn. IBSD/PC/ES/P/2011/190	Tulsiamuba	Lamiaceae (Labiatae)	Fever (<i>Nupigi-E-Na Pakhatpa</i>), Bad Breathing (Halitosis)	Antimicrobial activity ²⁰⁸ ; anti-inflammatory ²⁰⁹ analgesic and anti-inflammatory ²¹⁰

77.	<i>Ocimum basilicum</i> Linn. IBSD/PC/ES/P/2011/191	Tulsiangouba	Lamiaceae (Labiatae)	Fever (<i>Nupigi-E-Na Pakhatpa</i>), Bad Breathing (Halitosis)	Antiplasmodial activity ²¹¹ , treatment of various ailments including rheumatism, paralysis, epilepsy, high fever, diarrhea, sunstroke, influenza, gonorrhoea, mental illness, abdominal pains, colds, coughs, measles, and has also antipyretic, antihelminthic, stomachic, anti-emetic, and antimalarial effects ^{212, 213, 214, 215} ; insecticidal ²¹⁶ , nematocidal ²¹⁷ , and fungistatic properties ²¹⁸
78.	<i>Eclipta prostrata</i> (Linn) L. IBSD/PC/ES/P/2011/195	Uchisumban mana	Asteraceae	Fever (<i>Nupigi-E-Na Pakhatpa</i>), Typhoid (<i>Maril Naba, Thiril Naba</i>), Mouth ulcer, Mouth inflammation (<i>Chil le Naba</i>), Blood in stool/urine (<i>Dhatu Naba</i>).	Treatment of snake venom poisoning ²¹⁹ ; anti-inflammatory, anti-fungal and anti-hepatotoxic properties ²²⁰ ; antioxidant activity ²²¹
79.	<i>Bixa Orellana</i> Linn. IBSD/PC/ES/P/2011/201	Ureirom	Bixaceae	Healing of wounds and burns, prevents scarring and blister	Antifungal activity, antibacterial activity ²²² , antimalarial activity ²²³ , and mutagenic activity ²²⁴ ; Antioxidant activity ²²⁵ .
80.	<i>Erycibe paniculata</i> Roxb IBSD/PC/ES/P/2011/207	Urithambal	Convolvulaceae	Piles (<i>Nungshang</i>), Kidney problem, Gynaecological problem.	Antibacterial ²²⁶ .
81.	<i>Schima wallichii</i> (DC.) Korth. IBSD/PC/ES/P/2011/209	Usoi/Utang	Theaceae	Poisonous bite, dog bite, snake-bite (<i>Ngakranachikpa</i>), Uterine disorder and hysteria.	Anti-inflammatory and antinociceptive activity ²²⁷ ; antiplasmodial ²²⁸ .

Table S5 — Folklore uses documented in this survey, folklore uses reported from other part of the world, active principle and commercial perspective of the plants documented during the cross culture ethnopharmacological survey in Manipur, India					
Sl. No.	Name of the plant	Folklore Uses documented during the survey	Folklore Uses in other part of India/world	Active constituents/Principle present	Commercial perspective
82.	<i>Aquilaria malaccensis</i> Lamk	Gas/acidity, diarrhoea, dysentery, stimulant in sexual debility, Mouth ulcer, Mouth inflammation (<i>Chil le naba</i>).	In Tripura, India <i>A. malaccensis</i> used for treatment of Leucoderma & rheumatism ²²⁹ , In Lakhimpur district of Assam, India, Seed oil used on snake bite effected portion of the body ²³⁰ . In Lower Kheng region, Bhutan heart wood used for treatment of nervous system disorders, netive, sedative and refrigerant for heart disorder ²³¹ .	3phenyl-2-butanone, alpha-guaiene, alpha-agarofuran, agarospirol and 10-epi-gama-eudesmol, agarospirol, agarol, and beta agarofuran ^{232, 233, 234} .	Agarospirol is an anti-inflammatory agent ²³⁴ Agar wood/oil used in luxury perfume, fragrance and soap manufacturing industry ²³⁵ .
83.	<i>Calotropis gigantea</i> R.Br.	Fever, cough, cold, asthma, nausea, vomiting, Poisonous Bite/ Snake-Bite/ Dog Bite (<i>Ngakrana Chik pa</i>)	Used for Piles, pneumonia, asthma in Assam ²³⁶ , for antifertility in North Bengal, for easy delivery of child birth in Uttar Pradesh ²³⁷ .	cardenolide glycosides (19-dihydrocalactin, 15 β -dihydroxycalactin, 15 β -hydroxyuscharin, 15 β -hydroxycalactinic acid methyl ester, calactinic acid ethyl ester and 15 β -hydroxycalactinic acid ethyl ester.) iso-giganteol, β -amyrin, gigantean, mudarine, calotoxin, caoutcohoc, resin, palmitic acid, oleic acid, linoleic acid, linolenic acid, stigmasterol, melissyl alcohol and lauraneafroside, 15 β -hydroxycalotropin, 15 β -hydroxycalactin, calactin, calotoxin, calotropin, 16 α -hydroxycalactin, uscharin, frugoside, and coroglaucigenin ^{238, 239}	Calotropin is identified as acardioglycoside for clinical uses (HSDB, 2016), Natural Calotropis latex in preserved and concentrated forms finds many commercial applications. It possesses various proteolytic enzymes which can be used for industrial purposes as well as in leather and tanning industry to remove hair from the hides. Salted fermented latex of Calotropis is used to remove the hair from goatskins for preparation of “nari leather” that is used in book-bindings ²⁴⁰ . 19-dihydrocalactin, calactin and calotropin are antitumor agent ²³⁸
84.	<i>Withania somnifera</i> (L.) Dunal	Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>) etc.	Used to treat malaria and its associated symptoms in Sonitpur district of Assam ²⁴¹ , for male sterility in Raigarh dist. of Chhatisgarh state ²⁴² , for Cardio-Vascular problems in Chikmagalur dist. of Karnataka ²⁴³ , to treat Cough in Jhajjar District of Haryana ²⁴⁴ and to treat snake bite in Chikmagalur dist. of Karnataka ²⁴⁵ .	Alkaloids (ashwagandhine, cuscohygrine, anahygrine, tropine etc.), steroidal compounds, including ergostane type steroidallactones, withaferin A, withanolides A-Y, withasomniferin-A, withasomnidienone, withasomniferols A-C, withsomniferin A, withasomnidienone, withasomniferols A-C, withanone etc., Sitoindosides, isopelletierine, anaferine ^{246, 247, 248, 249} .	Withaferin-A Inhibits Colon Cancer Cell Growth by Blocking STAT3 Transcriptional Activity ²⁵⁰ , Withaferin-A is a leptin sensitizer with strong antidiabetic properties in mice ²⁵¹ , Withaferin A is a potent inhibitor of angiogenesis ²⁵² . Withanolide family have been identified that can sensitize some tumor cell lines to cell death (apoptosis) on subsequent exposure of the cells to pro-apoptotic receptor agonists (PARAS) of the TRAIL “death receptors” ²⁵³ .

85.	<i>Mussaenda rythrophylla</i> Schumacher &Thonn	Gynecological problem, intestinal mass / swelling in intestinal tract, Stomach Problem/ Gastric Ulcer/ <i>PukChatpa</i> , Skin diseases/ eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>)	In Andhra Pradesh state of India, the roots are useful for cough, jaundice, diuretic and when chewed acts as an appetizer ⁸ . Leaf extract topically used for rheumatism and wound healing in Luzon, Philippines ²⁵⁴ .	Flavonoid (5 hydroxy-7, 4'- dimethoxy flavone), Phenolic compounds (3-iso cumaryloxy- cyclopropane-1-oleic acid, and 4- hydroxy-3-methoxy cinnamic acid) and beta-sitosterol, [155].Mussaenosides U(1) and V(2), mussaenosides G(1) and K(2) are two new triterpenoid saponins, mussaenosides A-C, M and N with cyclolanostene type aglycone and aureusidin, iridoid glycosides ²⁵⁶ .	The Chloroform and Ethanol extracts of <i>Mussaendaerythrophylla</i> root produced notable diuretic effect ⁸ . Ethylacetate extract and methanolic extracts have shown potent antioxidant and hepatoprotective activity ^{256, 257}
86.	<i>Paederiafoe tida</i> Linn	Gynecological problem, gastric problem, Bone fracture (<i>Sarutekpa</i>), Ulcer, Joint Pain (<i>Tang Chikpa</i>).	<i>P. foetida</i> leaves have cooked as vegetable and used for dysentery in Majuli island and Darrang districts of Assam, India ²⁵⁸ . Similarly, it is used for treatment of indigestion and loose motion, different joint diseases like rheumatism and gout in Orissa, India ^{259, 260} . The leaves have used for diuretic, diarrhoea, infection in Tripura and for Urinary disorder, kidney stone, digestive problem, to clean stomach, against stomach swelling, diarrhoea, gastritis and loose motion used in Arunachal Pradesh, India. Similarly leaves have used as anti-diabetic in Sikkim state and Darjeeling (West Bengal) state, India and used as anti-dote for snakebite, Rheumatism, gout in Meghalaya state of India ²⁶⁰ .	The iridoid glycosides produced by <i>P. foetida</i> are paederoside (0.084%), asperuloside (0.08%) and scandoside (0.064%). also contains alkaloids paederine A, B and essential oil, volatile compounds linalool. An enzyme splits paederoside to sulphur containing methyl-mercaptan and it is released when the plant tissues are ruptured. The ill smelling principle of <i>P. foetida</i> is due to methyl mercaptan. The other major constituents present in the plant are ursolic acid, β -sitosterol, oleanolic acid, arachidic acid ²⁶⁰ . Vitamine -C ²⁶¹	<i>P. foetida</i> leaves consist considerable high amount of vitamin-C ²⁶¹ . Leave extracts reported for hepatoprotective, antimicrobial, gastroprote ctive, anti-inflammatory, promotes sexual vigour, increase quality of semen, improved body strength and produce a youthful glow ^{262, 263, 260} .
87.	<i>Ziziphusjuju ba</i> Mill. Var. <i>Spinosa</i>	Headache (<i>KokChikpa</i>), Diarrhea	Fruits have used to treat common fevers and for vomiting use the seeds with bar sprouts (<i>Ficus benghalensis</i>) and sugar in Chhattisgarh state, India. In Bastar region of the state use the dried leaves and powdered bark to dress wounds. The aqueous paste of the leaves has applied externally to relieve a burning sensation. Roots have used to treat dysentery; they have given with cow's milk until the patient has cured. Old aged persons used the fresh leaf juice with buffalo's milk to reduce the intensity of smallpox. The fruit has employed as an antidote to aconite poisoning, abdominal pain in pregnancy and externally in poultice and applications for wounds. The traditional healers use	The cyclic peptide alkaloids, maurinine-A, mucronine-D, amphibine-H, nummularine-A and -B, sativanine-A and sativanine-B, frangulanine, nummularine-B and mucronine were isolated from the bark. The cyclic peptide alkaloids sativanine-C, sativanine-G, sativanine-E, sativanine-H, sativanine-F, sativanine-D and sativanine-K isolated from stem bark. The alkaloids coclaurine, isoboldine, norisoboldine, asimilobine, iusiphine and iusirine were isolated from leaves. The seeds also contain cyclic peptide alkaloids sanjoinine, franguloine and amphibine-D and four peptide alkaloids; sanjoinine-B-D-F and - G2. Acylated flavone-Cglycosides (6"-sinapoylspinosin, 6"-	Betulinic acid is widely distributed in all parts of plant. It is a naturally occurring pentacyclic triterpenoid which has demonstrated selective cytotoxicity against a number of specific tumour types. It has been found to selectively kill human melanoma cells while leaving healthy cells alive. In addition, betulinic acid has been found to have antiinflammatory activity ⁴² and antibacterial properties and inhibits the growth of both <i>Staphylococcus</i> <i>aureus</i> and <i>Escherichia</i>

		the fresh leaves of this plant with cumin to treat urinary infections ²⁶⁴ .	feruloylspinosin and 6''pcoumaroylspinosin) also reported. The saponins isolated from the seeds include jujubosides A, B31, A1 B1 and C and acetyljujuboside B32 and the protojujubosides A, B and B133. Sedative flavonoids such as Swertish and spinosin were isolated and reported from fruit and seeds. Puerarin; 6''-feruloylspinosin; Apigenin-6-C-b-Dglucopyranoside; 6''-feruloylisopinosin; Isospinosin and Isovitexin-2''-O-b-Dglucopyranoside these flavonoids isolated and reported. Flavonoids, Quercetine 3-O-0-robinobioside; Quercetine 3-O-rutinoside; Quercetine 3-O- α -L-arabinosyl-(1 \rightarrow 2)- α -L-rhamnoside; Quercetine 3-O-b-D-xylosyl(1 \rightarrow 2)- α -L-rhamnoside; Quercetine 3-O- β -Dgalactoside; Quercetine 3-O- β -D-glucoside; 3',5'-Di-C- β -D-glucosylphloretin; Quercetine 3O- β -D-xylosyl-(1 \rightarrow 2)- α -L-rhamnoside-4'-Oa-L-rhamnoside; Kaempferol 3-O-robinobioside and Kaempferol 3-O-rutinoside are reported in Plant. Discovered a new flavonoid, named zivulgarin, compound. The triterpenic acids have been isolated from the fruits viz. colubrinic acid, alphitolic acid, 3-O-cis-pcoumaroylalphitolic acid, 3-O-transpcoumaroylalphitolic acid, 3-O-cis-pcoumaroylmaslinic acid, 3-O-transpcoumaroylmaslinic acid, oleanolic acid, betulonic acid, oleanonic acid, zizyberenalic acid and betulonic acid. ³⁸ Triterpenic acids have also been extracted from roots. Betulin; Betulinic acid; Ursolic acid; 2 α -hydroxyursolic acid and Ceanothic acid are triterpenes reported from the plants. Some of them have anticancer and anti-HIV properties. ²⁶⁵	coli ²⁶⁵	
88.	<i>Santalum album</i> Linn.	General weakness (<i>eshatinjangba</i> , <i>eshamayengtaba</i> , <i>e-watpa</i>) weakness of infant after delivery, blood purifier, joint pain, arthritis	Leaf paste with those of <i>Chandanam (Santalum album)</i> , mixed with a coconut oil is used as a lotion for treating eczema. In leucorrhoea, stem bark decoction has taken twice a day. During scanty urination, stem bark extract has given twice a day in Krishna district, Andhra Pradesh state, India ²⁶⁶	Sandalwood oil majorly contains sesquiterpene alcohol like alpha and beta – santalols (C ₁₅ H ₂₄ O), bergamotol and their stereoisomers. It also contains lanceol, nuciferol, bisabolol and alpha and beta – santalenes (C ₁₅ H ₂₄), bergamotenes, alpha, beta and gamma-curcumenes, beta-bisabolele and	A-santalol has shown chemo-protective effects and molecular mechanisms on skin cancer developed in both animal models and skin cancer cell lines ²⁶⁷ .

	(<i>tang chikpa</i>) gout, muscle pain, Cancer, Mouth ulcer, mouth inflammation (<i>Chil le naba</i>).		phenylpropanoids (sesquiterpene hydrocarbons). Usually, alpha-santalol is more abundant than beta-santalol. The other constituents include alcohol, santenol(C ₉ H ₁₆ O), and teresantalol (C ₁₀ H ₁₆ O), the aldehydes, nor-tricycloekasantalol (C ₁₁ H ₁₆ O), isovaleraldehyde, the ketones, 1-santenone(C ₉ H ₁₄ O) and Santalone (C ₁₁ H ₁₆ O), the acids, teresantallic acid (C ₁₀ H ₁₄ O) etc. reported in sandalwood oil (Kumar et. al. 2015).Several flavonoids, vicenin-2, vitexin, isovitexin, orientin, isoorientin, chrysin-8-C-β-D-glucopyranoside, chrysin-6-C-β-D-glucopyranoside and isorhamnetin are reported in seed and seed oil of sandal tree ²⁶⁷ .	
89. <i>Oryza sativa</i> Linn.	Dysentery (<i>Eton Phaiba</i>), Bone fracture (<i>sarutekpa</i>)	In Bihar and Jharkhand state of India, <i>Karangarice</i> variety used for dysenteric disorders. In Bihar <i>Jonga</i> , in Chhattisgarh <i>Maharaji</i> and <i>Bhejri</i> variety used for milk production in lactating mother and nutraiting breast-feeding child. In Assam <i>Bora</i> variety of rice used for Jaundice patient and its starchy water used for nutriting very weak patients. In Jharkhand <i>Karhanivariety</i> used as tonic, in epilepsy and in Chhattisgarh for curing paralysis. In Chhattisgarh, <i>Layacha</i> variety used for curing boil occurred on scalpel of newborn baby and used for pregnant women in order to prevent skin infection (Laicha disease) in unborn baby ²⁶⁸ . <i>Njavara</i> rice variety of Kerala used for inflammatory disorder, circulatory, respiratory and digestive problem, paralysis ²⁶⁹ .	Steroids - 7-oxo-stigmasterol, ergosterol peroxide, β-sitosterol, 7-oxositosterol, stigmasterol, (6α,22E)-hydroxy-stigmata-4,22-dien-3-one, (6β,22E)-hydroxy-stigmata-4,22-dien-3-one and 5α,8α-epidioxy24(R)-methylcolesta-6-en-3β-ol ²⁷⁰ . Phenolic Compounds- tocopherols, tocotrienols, and gamma-oryzanol. Phenolic acid- Caffeic, chlorogenic, p-coumaric, ferulic, gallicacids, p-hydroxybenzoic, protocatechuic, syringic and vanillin ²⁷¹ . Carbohydrates, protein, fat, ash, thiamine, riboflavin, niacin, total dietary fibre content ²⁶⁹ .	Rice has shown anti-diabetic related properties on in-vitro and animal models that also found useful for treatment of diabetic complication ²⁷² .Vanillin and coumaric acid from rice have shown potent antioxidant and anti-aging activity ²⁷¹ . Njavara variety of rice was reported for glucose lowering effect, good antioxidant and anti-inflammatory properties on Human subject ^{273, 269} . Oryzanol found in the rice has potent antioxidant property, useful for decreasing plasma cholesterol, lowering serum cholesterol, decreasing cholesterol absorption and decreasing platelet aggregation. Oryzanol has also used for treatment of hyperlipidemia, menopause disorders, to increase the muscle mass, potent anti-inflammatory agent; cardiometabolic protection effect ^{274, 275, 276, 277} .
90. <i>Musa</i> sp.	Epilepsy, Cough, Tuberculosis (<i>Lok Thungba</i>), Respiratory Problem, Piles,	In Assam state of India, <i>Musa balbisiana</i> used for Pinworm infection, Infertility in women, Jaundice, Gout, Gastritis, Health tonic Cough, Dysentery ²⁷⁸ In Mizoram state used as antiseptic ¹⁷⁹ .	<i>Musa</i> spp. contains carotenoids, phenolic acids, flavonoids, vitamin C and E ²⁶ . Bananas are rich source of dopamine, carbohydrates, Glucose, Fructose, sucrose, maltose, starch, xylose, Galactose,	Carotenoids effective for immune-enhancement, reduced risk of degenerative diseases, cancer, cardiovascular diseases, cataract, and

	Kidney problem and Urinary tract problem.	In brazil peel used for burns wound healing, pain killer, anti-inflammatory, fruit and pseudostem for diarrhea, ulcers and aphtas in children. Flowers used for eye problem, pulmonary problem and green banana used for wound healing and cancer ²⁶ .	Arbinose, Mannose, Rhamnose, Lignin, pectin, hemicelluloses, Cellulose, Holo cellulose, Potassium, calcium, magnesium, zinc, copper, boron, silicon, phosphorous, pentosans, starch, proteins, beta-carotene etc. ¹⁸⁰ . Beta-sitosterol, Campesterol, Stigmasterol, Octadeca-9, 12, 15-trienoic acid and Octadeca-9, 12-dienoic acid identified in banana pulp extracts ²⁸¹ . Flavonoids namely, (+)-catechin, (-)-epicatechin and (-)-gallocatechin, procyanidins B1, B2 and B4 and Flavan-3-ols of polymeric nature, known as tannins or proanthocyanidins, identified in banana peel flour ²⁸² .	macular degeneration ²⁶ .
91.	<i>Clerodendrum siphonanthus</i> R.Br. Tonsillitis (<i>Leithonbi</i>), Liver Enlargement (<i>Phiraknanthaba</i>)	In China, korea, Thailand and Japan roots and leaves of <i>C. Trichotomum/C. siphonanthus</i> used in folk medicine as analgesic, antirheumatic, hypotensive and sedative. In Bangladesh, leave decoction used for rheumatoid arthritis and hypertension ²⁸³ .	Cyclohexylethanoids were isolated from the leaves of <i>C. Trichotomum</i> ²⁸⁴ . Lectin (agglutinin) isolated from fruit of <i>C. trichotomum</i> ²⁸⁵ . Trichotomoside ¹⁸⁶ . Diterpenoids (Clerodendrin A, B, C, D, E, F, G, and H) identified in whole plants, Trichotomone, Villosin-C, Mandarone E, Formidiol, Teuvinone etc. in roots, Sugiol, Teuvinone (A, B, F, and H), Cyrtophyllone B in stems of the plant ²⁸⁷ .	Lectins have important biological activities viz. antitumor, immunomodulatory, anti HIV-1 reverse transcriptase inhibitor (anti-pathogenic activity) ²⁸⁸ Trichotomoside protects both gamma-irradiated cells and cells exposed to H ₂ O ₂ (antioxidant properties) ²⁸⁶ .
92.	<i>Croton caudatus</i> Geisel Skin diseases/eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakholai</i>) etc.	In Mizoram state, India, <i>C. Caudatus</i> leaf used for treatment of cancers, indigestion and diarrhea ²⁸⁹ . The <i>Chakma</i> community of Arunachal Pradesh state of India used for treatment of vomiting and ameliorate dysentery and <i>Hmar</i> community in Manipur used the plants for treatment of worm-infested animals like cow, pig, dog, buffalo etc ²⁹⁰ .	Crotocaudin, isocrotocaudin, (two norditerpenes), crotoncaudatin and novel sesquiterpene, crocaudatol isolated from <i>C. Caudatus</i> ²⁹⁰ . Flavonoids, cyanogenetic glycosides, alkaloids and phenolic compounds in leaves and dotriacontamol, bomyrin and beta-sitosterol like compounds present in roots and barks of the plant ²⁹¹ .	Presence of dotriacontamol, bomyrin and beta-sitosterol are used in treatment of ailments related to Calcereous (cancer), as per the reports from the Central Drug Research Institute, Lucknow ²⁹¹ . <i>C. caudatus</i> identified as a potent source of novel anti-leishmanial leads ²⁹⁰ .
93.	<i>Saccharum officinarum</i> Linn. Bad breathing problem/Halitosis, Respiratory problem.	In Haryana, India, fruits, seeds and leaves of <i>S. officinarum</i> used for treatment of pain and bleeding during urination, diabetes, pimples, skin disease, dysentery and headache ²⁹² . In West Singhbhum districts of Jharkhand, India, 100 ml of fresh juice of stem used in alternative day for treatment of anemia ²⁹³ . In Ipasa-Biosphere reserve, Gabon, the Baka pygmies used maceration of <i>Saccharum officinarum</i> stem, Antrocaryonklaineanum bark and Harunganamadagascariensis stem locally in rectal area to treat	The sugarcane (<i>S. officinarum</i>) wax contains long chain fatty alcohols, acids, esters, aldehydes and ketones. Its laos contain Policosanols mainly Octacosanol, long chain aliphatic fatty acids, phytosterols, steroids, higher terpenoids. Stem Juice contains water (70-75%), sucrose (13-15%), fiber (10-15%), Chlorogenic acid, cinnamic acid, flavones. The phenolic compounds present in sugarcane juice viz. hydroxycinnamic acid, sinapic acid, and caffeic acid. The flavones include apigenin, luteolin, tricrin (in	The sugarcane (<i>S. officinarum</i>) wax considered as a potential substitute for the expensive carnauba wax. The molasses has the richest source of phenolic acids as compared to clear juices and syrup. The Brown sugars contains phenolic acids that used commercially in Brazil for its nutraceutical value and other biological activities. The lipophilic

<p>painful periods. The leaf of <i>Saccharum officinarum</i> and <i>Megaphryniumgabonense</i> pounding together and used orally to treat sexual dysfunction. The <i>Saccharum officinarum</i> leaf pounding with <i>Naucleadidderichii</i> and used orally to treat sexual dysfunction²⁹⁴. In Lower Kheng region, Bhutan, Stem used for treatment of hyperdipsia, dehydration, nausea, vertigo, fainting, bile disorder and pain²³¹. In the North Araguaia microregion, Mato Grosso, Brazil, Infusion and juice of stem and tassel used for treatment of dengue and high blood pressure²⁹⁵. In the Ejisu-Juaben Municipality, Southern Ghana, decoction of leaves orally used to treat malaria²⁹⁶. In Dja Biosphere Reserve, Cameroon, Juice or decoction or mecerate of stem used orally for treatment of Jaundice²⁹⁷. In Quissmã City in northern of the of Rio de Janeiro State, Brazil, plant used for treatment of anemia, colic, digestive problem, thrush (dehydration), liver pain, constipation, sinus cracking, itching, wounds, infections, catarrh, bronchitis and fatigue²⁹⁸. In Miskitu, Eastern Nicaragua, decoction and Juice of leaf and stem used orally and topically for treatment of diarrhea, infection and respiratory and pulmonary disorders viz. cold, cough etc.²⁹⁹. In Amoron'i Mania, Madagascar, Zafimaniry clan used leaves for treating emaciation and malaria, stem used to treat diarrhea³⁰⁰. In Ijebu – North Local Government Area, Ogun State, Nigeria, <i>Saccharum officinarum</i> stem and <i>Securidacalolongepedunculatar</i> root grind together and squeeze out juice used one glass daily for treatment of benign prostatic hyperplasia³⁰¹. In Ogbomoso, South Western Nigeria, stem juice used for treatment of diabetes³⁰². In Cravolândia, Bahia, Northeastern Brazil, stalk used to treat hypertension³⁰³. In Dumingag, Zamboanga del Sur, Philippines, roasted stem eaten to treat cough³⁰⁴. In Akoko Region of Ondo-State, Nigeria, leaves and stem used for treatment of headache, Joint pains³⁰⁵. In Parsa district</p>	<p>higher concentration), swertisin, triclin-7-O- neohesperoside -4'-O-rhamnoside, triclin-7-O-methylglucuronate-4'-O-rhamnoside and triclin-7-O-methylglucuronide. Also present acylated flavone glycosides viz. triclin-7-O-β-(6'-methoxycinnamic)-glucoside, luteolin-8-C-rhamnosyl glucoside, triclin-4'-O-(erthroguacylglyceryl)-ether and orientin. The mill syrups contain flavonoid glycosides, triclin-7-(2'-rhamnosyl)-α-galacturonide, orientin-7, 3'-dimethyl ether and iso-orientin-7,3'-O-dimethyl ether. The Mollases contains polyphenolic compounds such as O-glycoside, dehydroconiferylalcohol-9'-O-β-D-glucopyranoside and isoorientin-7, 3'-O-dimethyl ether. The brown sugar contains p-hydroxybenzoic acid, Vanillic acid, syringic acid, ferulic acid and p-Coumaric acid. Also contain volatile substances viz. 1-methyl-2pyrrolidinone, 2,3-butanediol, 4-hydroxybezaldehyde, benzyl alcohol, syringaldehyde, dimethylsulphoxide and benzophenone. The leaves contain policosanols (tetracosanol, Hexacosanol, Heptacosanol, Octacosanol, Nonacosanol, Triacontanol, Dotriacontanol, tetratriacontanol) and D-003 (Hexacosanoicacid, Heptacosanoicacid, Octacosanoicacid, Nonacosanoicacid, triacontanoicacid, Hentriacontanoicacid, Dotriacontanoicacid, Triacontanoicacid, Pentatriacontanoicacid, Hexacotriacontanoicacid). Also contains flavonoids Diosmetin-8-C-glucoside, triclin-7-O-neohesperoside, Vitexin, Orientin, luteolin-8-C-rhamnosyl glucoside and triclin-4'-O-(erthroguacylglyceryl)-ether. Plant also contains saponins, tannins, Stigmasterol, β-sitosterol^{307, 308, 309,310}.</p>	<p>components present in sugarcane wax reported for potent sympathomimetic, antihypercholesterolemic and antithrombotic effect³⁰⁷. The molasses inhibits α-glucosidase and α-amylase enzymes, suggesting a possible antihyperglycaemic effect³⁰⁸.</p>
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94. <i>Cuscutareflexa</i> Roxb (Thongak)	<p>forest of Nepal, Juice of <i>Cuscutareflexa</i> and <i>saccharum officinarum</i> used together to treat jaundice³⁰⁶.</p> <p>The Khampti tribal of Arunachal Pradesh state of India and Garo tribal of Bangladesh used <i>C. reflexa</i> for treatment of diabetes. The people of Gujranwala, Pakistan used for treatment of rheumatism, sexual problems, diabetes, kidney problem and toothache³¹¹. In Uttaranchal state, India, used for bone fracture, lock of jaw. In Kandhamal dist of Orissa state, used with honey for epilepsy, In Tripura state used with coconut water for jaundice, in West Bengal as abortifacient agent and stem juice used for treatment of diarrhea of cows, In Solan district of Himachal Pradesh, used for intestinal problem, for controlling heart beat in weakness and for hair growth. In Assam state used for jaundice. In Madhya Pradesh, India it has used as antihelminthic and epilepsy. It has used for kidney and prostate disorders in China³¹². <i>C. reflexa</i> considered as poisonous/toxic plant caused depression, nausea, vomiting and abortion in Udhampur districts of Jammu and Kashmir state and Southern Aravalli Hills of Rajasthan state of India^{313, 312}. In Satpuda region of Dhule and Jalgaon districts of Maharashtra, India, <i>C. reflexa</i> extract used for treatment of dandruff³¹⁴.</p>	<p>The compounds, dulcitol, mannitol, sitosterol, carotenoids, flavonoids, isorhamnetin-3-O-neohesperidoside, apigenin-7-beta-rutinoside, lycopene, 6,7-dimethoxycoumarin, 6-hydroxy-4-(4-hydroxy-phenyl)-7-methoxycoumarin, quercetin, hyperoside, apigenin-7-O-glucoside, kaempferol-3-O-alpha-rhamnoside, myricetin-3-O-alpha-rhamnoside, reflexin, violaxanthin, lutein, lycopene, carotene, alpha-cryptoxanthin, amarbelin, certic, linolenic, oleic, stearic and palmitic acid, phytosterols in seeds, ascorbic acid in leaves, leuteolic and leuteolic glycosides, quercetin, cuscutin in stem of <i>C. reflexa</i> are identified. In phanerogamic parasite <i>C. reflexa</i> contained caffeic acid and flavonol type of flavonoids. Kaempferol, Quercetin, Myricetin, Cuscutin, beta-sitosterol, Luteolin, caffeic acid, amarbelin, dulcitol, bergenin are isolated from the <i>C. reflexa</i>³¹⁵.</p>	<p><i>C. reflexa</i> capable of promoting follicular proliferation or preventing hair loss in cyclophosphamide-induced hair fall³¹⁶. <i>C. Reflexa</i> reported for persistent blood glucose lowering effect on animal model³¹¹. <i>C. reflexa</i> reported for potent antiarthritic and nephroprotective effect³¹⁷. <i>C. reflexa</i> possess significant antitumor activity in <i>in-vitro</i> and <i>in-vivo</i> models and increased the life span of tumor bearing mice^{38,318, 319}.</p>
95. <i>Cinnamomum zeylanicum</i> Blume (Thongak)	<p>The tribal communities of the Ladakh region in India used Cinnamon for treatment of Kidney and urinary disorders. In Germany it has used for paediatric diabetes³²⁰.</p>	<p>Cinnamon bark contains procyanidins, Eugenol and catechins. In leaves, bark and in their essential oil, cinnamaldehyde (major constituent), alpha-pinene, p-Cymene, Linonene, Linalool, alpha-terpineol, benzyl benzoate is present. In root bark camphor, in fruit trans-Cinnamyl acetate and caryophyllene, in buds Terpen hydrocarbons, alpha-Bergamotene, alpha-Copaene, Oxygenated terpenoids and in flower (E)-Cinnamyl acetate, trans-alpha-Bergamotene and Caryophyllen oxide are present^{321, 322}.</p>	<p><i>C. zeylanicum</i> has shown anti-microbial, anti-parasitic, anti-oxidant and free radical scavenging properties, Anti-cancer, lower blood glucose, serum cholesterol and blood Pressure and suggesting beneficial cardiovascular effects in different <i>in-vitro</i> and <i>in-vivo</i> studies. The mechanism of action for reducing blood glucose includes reduced intestinal glucose absorption by inhibiting enzymes, stimulates cellular glucose uptake, glycogen synthesis, insulin release,</p>

96.	<i>Aloe barbadensis</i> Mill.	Skin care, burn injury	<p>In Gulbarga district of north Karnataka state, India, <i>A. barbadensis</i> leaf mucilage boiled in water with sugar and used as liver tonic; leaf mucilage is also used to treat obesity and constipation³²³. The tribes of Madhya Pradesh and Chhatisgarh state in Central India applied mucilage of <i>Aloe barbadensis</i> leaves on forehead for a week to cure severe headaches³²⁴. In Tripura state of North East India tribes are used dried juice of <i>Aloe barbadensis</i> that mixed with fresh <i>Hibiscus rosa-sinensis</i> flower, latex of <i>Ferulaaassa-foetida</i> and dried powder of <i>Zingiberofficinale</i> rhizome in identical ratio (5 gm each) and half tea spoon of honey. One tea spoon of this mixture given twice a day in empty stomach for 8 days as Contraceptive³²⁵. In north lakhimpur and Dhemaji district of Assam and East Siang district of Arunachal Pradesh of North East India the Mishing community used <i>Aloe barbadensis</i> Pulp of 2-3 leaves ground with 50gm Palm Candy (Talmisri) and given with 250 ml milk for 6-7 days for treatment of Jaundice³²⁶.</p>	<p><i>Aloe vera</i> leaves contains polysaccharides including acemannan (acetylated glucomannan) and Glucomannan. Apart from these other carbohydrate viz. Mannose, Rhamnose, Arabinose, Glucose, Galactose, xilose etc. are present³²⁷. It also contains barbaloin, chrysophanol, glycoside, anthraquinones (aloin and emodin), galactose, mannose and galacturonic acid, aldopentose and proteins with 18 amino acids, aloesone and aloesin, Vitamins (vitamins A (beta-carotene), vitamin C, vitamins B (thiamine), niacin, vitamin B2 (riboflavin), vitamin B12, choline and folic acid), Minerals (calcium, magnesium, sodium, manganese, zinc, potassium, chromium, copper and selenium), steroids (cholesterol, campesterol, β-sitosterol and lupeol), Lignin, and Saponins^{328, 329}</p>	<p>potentiates insulin receptor and inhibit gluconeogenesis by acting on key regulatory enzymes. The major component cinnamaldehyde and trans-cinnamaldehyde reported for antibacterial, antifungal and other therapeutic effects^{40, 321}. The <i>A. barbadensis</i> leaf exudate includes sap, juice or latex used commercially. Leaf exudate, used in laxatives, and leaf mesophyll, used in products applied topically for skin ailments or taken internally for digestive complaints and general wellbeing³³⁰. Apart from its traditional uses scientifically established its hepatoprotective, antiviral and anti-inflammatory, antitumor, wound healing, antidiabetic, hypolipidemic Activity, moisturizing, antiaging, immunomodulatory, laxative and antimicrobial properties^{328, 329}.</p>
97.	<i>Cannabis sativa</i> Linn.	<p>Piles, typhoid (<i>Marilnaba/Thirilnaba</i>), intestinal problem, diarrhea, Bone fracture (<i>sarutekpa</i>), Dysentery (<i>etonphaiba</i>), Gynecological problem.</p>	<p>Treatment of ear and skin diseases, painkilling properties, treatment of hardening and contraction of the uterus, antiparasite, antipyretic properties³³¹. In Uttarakhand state of India its used as intoxicant, analgesic, narcotic, stomachic, antispasmodic, anodyne, sedative etc³³². Especially in Ukhimath block of Uttarakhand state the leave /seed extracts of <i>C. sativa</i> with pepper, cumin seeds, cardamom used for treatment of fever, bronchitis, indigestion, impotency and asthma³³³.</p>	<p><i>C. sativa</i> contains hydrocarbons, sugars, terpenes, steroids, flavonoids, nitrogenous compounds and amino acids. Specially contains C21 terpenophenolic, cannabinoids (Cannabigerol, Cannabidiol, Cannabicyclol, Cannabinodiol, and Cannabitriol etc.), lactones, vitamins etc³³⁴. The (-)-Trans-delta-9 tetrahydrocannabinol (THC, dronabinol), the principal active ingredient of cannabis was identified in 1964³³⁵.</p>	<p>Beside the established therapeutic efficacy of <i>C. sativa</i> as an analgesic, anticancer, antidepressant, antidiuretic, antiemetic, anti-inflammatory etc., the clinical research on <i>C. sativa</i> was rescribed. However, in 1996 onwards medicinal uses of <i>C. sativa</i> products were re-legalized. Now it is used for chronic pain, spasticity, Tourette syndrome and psychoactive effect. Recently pharma</p>

<p>98. <i>Delonix regia</i> (Boj. ex Hook) Raf.</p>	<p>Headache (<i>KokChikpa</i>),</p>	<p>In Tezpur district of Assam, India <i>D. regia</i> raw crushed leaves used for wound healing. In Thiruvavur district of Tamil Nadu, India leaves have used for treatment of constipation, inflammation, arthritis and hemiplegia. In Birbhum district of westbengal, India used as antibacterial agent. In chhatarpur district, Madhya Pradesh, India seeds are used for pyorrhoea, leaves are used (roasted and crushed wrapped in a cloth) as inhaler for scorpion bite patients, infusion of flowers used for asthma and malarial fever, leaves are used for rheumatism and as purgatives. In Chittoor district of Andhra Pradesh, India used flower for dysmenorrhoea. In Bangladesh, decoction of flowers has used for treatment of fever. In Nigeria, flowers are used for as antibacterial agent. In Bangangte region of Cameroon plants used for treatment of peptic ulcer. In African countries aqueous extract of flowers traditionally used as health beverages^{336, 337, 338}.</p>	<p>Leaves contain Kaempferol 3-rhamnoside, Quercetin 3-rhamnoside, Kaempferol 3-glucoside, Kaempferol 3-rutinoside, Kaempferol 3-neohesperidoside, Quercetin 3-rutinoside, Quercetin 3-glucoside, Phytol, Coumarin 7, 8-dihydro-7hydroxy-6-methoxy-8-oxo, Squalene, Vitamin E, Propylparagonidin, Propylparaphinidin. Stem bark contains Lupeol, Carotene, β-sitosterol, Epilupeol, Stigmasterol, p-methoxybenzaldehyde. Flower contains Cyanidin 3-O-glucoside, Cyanidin 3-O-rutinoside, pelargonidin 3-O-rutinoside, Quercetin, Rutin, Quercetin 3-O-glucoside, 2-hydroxy-5-[(3,4,5-trihydroxyphenyl)carbonyl oxy] benzoic acid, 3,4,5-trihydroxybenzoic acid (gallic acid), 3,4-dihydroxy benzoic acid (Protocatechuic acid), Quercetin 3-O-galactoside, Quercetin trihexoside, 3-O-robinobioside, Kaempferol rhamnosylhexoside, Isorhamnetolrhamnosyl-hexoside, Petunidin-3-O-glucosid, Peonidin-3-O-glucoside, Petunidin-3-O-acetyl glucoside, Rubixanthin, Astaxanthin, β-Cryptoxanthin, Lutein, Zeaxanthin^{336,339, 340, 241, 338}.</p>	<p>industries are looking for synthetic cannabinoids and their antagonist [334]. Discovery of our body's own cannabinoid system with specific receptors and endogenous ligands, offered research into the function of the endocannabinoid system and the clinical relevance of cannabis-based medications. Consequently, numerous physiological actions of cannabinoids have established. Currently, however, only one cannabis extract is approved for use. It contains THC and CBD in a 1:1 ratio and was licensed in 2011 for treatment of moderate to severe refractory spasticity in multiple sclerosis (MS)³³⁵. The <i>D. regia</i> leave extract showed cardioprotective effect mediated by TNF-alpha and NO secretions that may act via the anti-inflammatory and vasodilation mechanisms on myocytes³⁴². <i>D. regia</i> seeds yield 18 to 27.5 % fatty oil known as the "pangam" or "karanga" oil of commerce. Its main use is in tanning industry. The oil and its "karjan" possess insecticidal and anti-bacterial properties. The oil also finds use in soap-making, illuminating and pharmaceutical preparations. The oil cake is good fertiliser. The seed cake can also be used in poultry ration to substitute black "til" component of ration. The seed is carminative, purifies and enriches the blood and is used in cases of inflammation, "ear ache" and chest complaint^{338, 343}. Anthocyanin</p>
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				bioflavonoids present in the <i>D. regia</i> ³³⁶ . These are useful for protection from DNA cleavage, estrogenic activity (altering development of hormone-dependent disease symptoms), enzyme inhibition, boosting production of cytokines (thus regulating immune responses), anti-inflammatory activity, lipid peroxidation, decreasing capillary permeability and fragility, and membrane strengthening ³⁴⁴ . Therefore, has high commercial prospective.	
99.	<i>Meynalaxiflora</i> Robyns.	Fever, Joint Pain, Arthritis (<i>Tang Chikpa</i>), Gout, Muscle pain.	In western Ghat region of Maharashtra, India used young fruits of <i>M. laxiflora</i> for treatment of dysentery, in Nashik district of Maharashtra, seeds are used for treatment of kidney stone, leaves used for treatment of goiter or swellings, in North Maharashtra leaves used for abdominal distention. In Golaghat district of Assam, India fruits used as anti-fertility agent, in Tinsukia district of Assam seed used as abortifacient. In Manipur leaves used for blood purification, constipation, for enhancing skin texture, as herbal shampoo, young leaves and fruits used for helmenthiasis and horseness (throat infection). In other part of India leaves used for treatment of diphtheria, indigestion, root paste used for painful urination, stem bark paste used for boils and seed powder used as narcotic agent ^{345, 346, 347, 348} .	<i>M. laxiflora</i> leaf and stem contains carbohydrate, starch, protein, tannins, saponins, and alkaloids. Fruits contain Oxalate, phytate, tannin, and sponin. Seed contains carbohydrate, glycosides, steroids, tannins, saponins, terpenoids, gums, mucilage, fat and alkaloids. Leaves contain a flavonoid (-)-epicatechin-3-O- β -glucopyranoside and essential trace elements Fe, Zn, Cu, Mo, Cr, Mn. Fruit contains Nitrogen, Phosphorus, calcium, Potassium, Manganese, Zinc, Magnesium, Iron, Copper and sodium. Ripe fruit pulp contains phenolic compound and condensed tannin ^{349, 346, 350} .	The flavonoid (-)-epicatechin-3-O- β -glucopyranoside isolated from <i>M. laxiflora</i> shown potential antibacterial efficacy against pathogenic organisms viz. <i>Staphylococcus aureus</i> , <i>Escherichia coli</i> , <i>Klebsiella pneumoniae</i> and <i>Pseudomonas aeruginosa</i> ^{345, 350} .
100.	<i>Dilleniaindica</i> Linn.	Cough, Tuberculosis (<i>Lok Thungba</i>),	<i>D. indica</i> fruit used for treatment of Jaundice, cancer, diarrhea and stomach disorder in Mizoram, for fever, Cough, body weakness, enhanced appetite, Skin lice and clean hair in Arunachal Pradesh, for Dysentery in Assam, and for Cholera in Meghalaya and as Laxative in North Andaman, India. Flower used for Diabetes, dysentery in Arunachal Pradesh. Calyx used for Stomach disorder, Diabetes, Stomachache, Cough, fever in Arunachal Pradesh. Leaf used for Malaria in Vietnam for	<i>D. indica</i> contains Flavonol viz. kaempferol (pericarp, twig, stem bark), Myricetin (stem bark), Quercetin (leaf), dillenetin (pericarp and leaf), Rhamnetin (leaf), Isorhamnetin (Fruit, twig, stem bark), Kaempferide (leaf). Substitute flavonol like Kaempferide 3-O-diglucoside (leaf), 3',5-Dihydroxy-4',3-dimethoxy flavone-7-O- β -D-glucopyranoside (Stem bark) and 5,7-dihydroxy-4'--dimethoxyflavone-3-O- β -D-glucopyranoside (Stem bark).	<i>D. indica</i> extracts inhibited the pathogenic genes present in the tested bacteria and shown antimutagenic property that indicated its application in foods and pharmaceutical industries [352]. The Betulinic acid significantly inhibited prostaglandin E2 due to inhibition of cyclooxygenase-2 (COX-2) enzyme expression involved in biosynthesis of

		<p>diarrhea and Cancer in Mizoram, India. Stem bark used for Diarrhea of domestic animal, Urinary diseases of human, cough, cold, fever and blistering boils in India. Stem bark also used for Sores caused septicaemia in Uttar Pradesh, for Diarrhea, dysentery, Cholera in Meghalaya, for blood cancer in Tripura, India. Root for blood in urine and biliousness in India. Leaf, stem bark has used for Abortion and as an astringent in India. In Bangladesh fruit used for Flatulence, boils, fever, Cough, semen production, Cancer and Hair loss. Stem bark used food poisoning and leaf used for Cancer³⁵¹.</p>	<p>Dihydroflavonol like (+)- Dihydroxykaempferol (Twig), (+)- 3'-methoxy-dihydroquercetin (Stem bark), (+)- Dihydroisorhamnetin (Stem bark), Dihydrokaempferide (leaf) and dihydrokaempferide 7-diglucoside (leaf). Flavan like 4,5,7,3',4'- Pentahydroxy flavan-3-O-β—D-glucopyranoside (Stem bark). Flavon-3-ol like Leucocyanidin (leaf). Flavanone like Naringenin (stem bark, leaf), Naringenin 7-diglucoside (leaf) and Chromane like 3,5,7-Trihydroxy-2-(4-hydroxy-benzyl)-chroman-4-one (leaf). Triterpenoids viz. Lupeol (stem bark, leaf and fruit), Betulin (stem bark, leaf and fruit), Betulin aldehyde (stem bark), Betulinic acid (stem bark, leaf), 3β-Hydroxylupane-13β,28-lactone (Stem bark). Also, β-Sitosterol (Pericarp, twig, stem bark, fruit and leaf), Stigmasterol (stem bark, leaf), Stigmasteryl palmitate (leaf), Cycloartenone (leaf), gallic acid (Twig), 1,8-Dihydroxy-2-methyl-anthraquinone-3-O-β-D-glucopyranoside (stem bark), n-Hentriacontanol (leaf), n-heptacosan-7-one (leaf), n-Honatriacontan-18-one (leaf) were present in the plant³⁵¹.</p>	<p>inflammatory mediators. The plant products contain Betulinic acid was exhibited promising cytotoxic activity against cancer cell lines. <i>D.indica</i> products have been exhibited therapeutic efficacy against huge number of inflammatory, metabolic and immunological disorders on experimental models. Natural mucoadhesive hydrophilic polymer present in the <i>D.indica</i> fruit used in the formulation for drug delivery (in nasal gel, buccal tablet of oxytocin), The aqueous extract of <i>D.indica</i> fruit petals useful as reducing agent for green synthesis of silver nanoparticles³⁵¹.</p>	
101.	<i>Averrhoa carambola</i> Linn.	<p>Respiratory problem, Jaundice, Cancer, Skin Diseases, Eczma (<i>Khut Hing</i>), Skin Rash (<i>Phuri</i>), Cold Allergy (<i>Maihing</i>), White Patch (<i>V.D. Disease</i>), Skin Infection (<i>ThamnaKhok Lai</i>).</p>	<p>In India, <i>A. carambola</i> fruits have used as antipyretic, laxative, appetite stimulant, astringent, antiscorbutic, in Brazil, used as diuretic, antidiabetic, anti-hypertensive, appetite stimulant, anti-diarrheal and in china, used to quench thirst and to enhance the secretion of saliva. In the Ayurveda, ripe fruit have considered as digestive, tonic and causes biliousness. Also mentioned usefulness of the fruits for treatment of throat inflammation, mouth ulcer, toothache, cough, asthma, hiccups, indigestion, food poisoning, colic, diarrhea, jaundice, malarial splenomegaly, haemorrhoids, skin rashes, pruritis, sunstroke, aphrodisiac for both men and women and eye problems^{353, 354, 355, 356}.</p>	<p><i>A. carambola</i> fruit contains Saponins, Alkaloids, Flavonoids, Tannins, vitamins, amino acids, ascorbic acid, oxalic acid, tartaric acid, citric acid, carbohydrates, fats, and proteins. It also contains proanthocyanidins, epicatechin, Gallic acid in Gallotannin, Sterols- β-sitosterol, campesterol, lupeol and Isofucosterol, Fatty acid- Palmitic, oleic, linoleic and linolenic Acid, Minerals- Iron, Calcium, Phosphorous. O-glycosyl flavonoid components: quercetin-3-O-β-d-glucoside and rutin. Flavones- Apigenin-6-C-β-L-fucopyranoside and apigenin-6-C-β-1-fucopyranoside. Lupeol, anthraquinone glucoside, cyanidin-3-O-β-d-glucoside, cyanidin-3, 5-O-β-d-diglucoside, β-amirin. Stem bark contains anisaldehyde, 5-hydroxymethyl-2-furfural, Gallic acid and dihydroabscissic alcohol. Roots contain lignins- Benzyl-1-O-β-D-glucopyranoside,</p>	<p>Serol preclinical studies confirmed the Cardioprotective, Anti-Inflammatory, antidiabetic potential of <i>A. Carambola</i>. The plant is commercially important of presence of bioactive principals viz. quercetin-3-O-β-d-glucoside and rutin. Flavones- Apigenin-6-C-β-L-fucopyranoside and apigenin-6-C-β-1-fucopyranoside. Etc. Star-fruit is a good source of nutritionally and medicinally important natural products beneficial for human health. However, due to the oxalate and caramboxin content in the fruits, it is toxic to patients with renal problems^{360, 356, 361, 359}.</p>

			(+)-5'-methoxyisolariciresinol 3 α -O- β -D glucopyranoside, Glycosides- 3,5-dimethoxy-4-hydroxyphenyl 1-O- β -apiofuranosyl (1" \rightarrow 6')-O- β -D-glucopyranoside and (2S)-2-O- β -D-glucopyranosyl-2-hydroxyphenylacetic acid. Leaves contains C-glycoside flavones (camboloflavone), such as apigenin-6-C- β -l-fucopyranoside and apigenin-6-C-(2''-O-l-rhamnopyranosyl)-l-fucopyranoside ^{355, 353, 358, 359, 356} .		
102.	<i>Elaeagnus conferta</i> Roxb.	Cuts wound, burn injury, Bullet wound, crack heel	In Western Ghat regions of Maharashtra, India <i>E. Conferta</i> fruits used for Rheumatism, haematinic as Painkiller ³⁶² . in Palghar district of Maharashtra fruits used as astringent ³⁶³ . Its roots, leaves and fruits also used for treatment of indigestion in traditional healthcare practices of Tibetan, Mongolian and Uygur. In Yunnan province, South China dried fruits used for relief from effect of alcoholism for hundreds of years ⁶⁴ . In Sharavathi valley of Central Western Ghats, Karnataka, India fruits used in anaemic condition that increases haemoglobin of blood and iron deficiency ³⁶⁴ . In Manali, North western Himalaya, Himachal Pradesh, India fruit and flower used for pulmonary complaints, sores and ulcers ³⁶⁵ . The Kattunaika, Adiya, and Kurichia tribes of Wayanad district in Kerala, India used juice as antidiabetic ³⁶⁶ .	Lycopene, β -carotene ³⁶⁷ , Ca, Fe, Mn, P, carbohydrate and protein ³⁶⁸ , present in fruits of <i>E. Conferta</i> . Seed contains oleic acid, Linolenic acid, Palmitic acid, stearic acid and minerals K, Fe, Zn, Na ²⁷⁰ . Oxalate, Phytate, tannin ³⁷⁰ , and alkaloids ³⁷¹ present in the fruits.	<i>E. conferta</i> fruit powder stimulated hepatic alcohol dehydrogenase and aldehyde dehydrogenase mediated blood alcohol clearances ⁶⁴ . Also, this plant contains commercially viable bioactive compounds viz., β -carotene ³⁶⁷ , Palmitic acid, stearic acid etc. ³⁶⁹ . Therefore, <i>E. conferta</i> fruit is commercially important natural product.
103.	<i>Nicotiana tabacum</i> Linn.	Expectorant, sedative, emetics, antispasmodic/stomach pain, piles, Tonsillitis, Blocked Nose/Sinusitis/Rhinitis, boil (<i>NaiChabaApo mba</i>), . Skin Diseases/ <i>Khut Hing</i> (Eczema)/ <i>Phuri</i> (Rash)/ <i>Maihing</i> / Cold Allergy/ V.D. Disease/ White Patch/ Skin Infection/	Rongmei tribe of Tamenglong district of Manipur state, India <i>N. tabacum</i> leaves applied to insect bites ¹⁸⁶ . In Bishnupur district of Manipur, fresh leaf juice applied in insect bite, leaf ash locally applied in leech bite to stop bleeding, for skin ailment and as sedative and emetics ³⁷² . In Tamilnadu, india leaves decoction used orally for the treatment of snakebite ³⁷³ . In Surguna district of Madhy Pradesh state, India applies warmed leaves on testis to treat hydrocele and oil extracted from leaves have used for treatment of artralgia, gout and lumbago. In Indian traditional healthcare system Ayurveda its used for urinary tract disorder,	<i>N. tabacum</i> leaf contains pyridine alkaloids including nicotine (liquid alkaloid), nicotine, anabaine, anatabine and normicotine. It also contains, tannins, flavonoids, steroids, terpenoids, cardiac glycosides, resins, saponins, quinines, polypeptides, saponins, glucosides, tannin, tannic acid and iso-queritrin, 1-quinic, chlorogenic, caffeic and oxalic acids. Roots contain, Anatabine and normicotine. The flowers contain, Quercetin-3, 3'-dimethyl ether and quercetin-3-Me ether. The Shoot apices and flower buds contain, Gibberellins-nicotiana α , β and γ and gibberellins A and A3. Seed contains cycloartanol, cycloartenol 24-daturadiol and	<i>N. tabacum</i> (ethanolic extract of tobacco smoke, nicotine reduced Colonic lesion size, myeloperoxidase (MPO), Leukotriene B4, interleukin (IL)-1 β in the animal model of colitis ³⁷⁸ . The Japanese Pharmaceutical Affairs law have permitted used of <i>N. Tabacum</i> stems as an excipients in pharmaceuticals, because it contains only small amount of nicotine ³⁷⁹ .

<p><i>ThamnaKhok Lai</i>, Skin Cancer/ Wart/ <i>Lairensajik, Laikoi</i>/ Ringworm, Cuts/ Wound /Burn/ Bullet Wound/ Crack Heel, <i>SaruChasinbal</i> Leprosy, Osteomalitis, bone fracture</p>	<p>Cough, Asthma, itching, as an anti-helminthes, aa analgesic, for dental pain, pain related with eye, as an antidandruff, for scorpion bite, emetic, antispasmodic, diuretic, expectorant, sedative etc. In Iran, crushed leaves's ointment used for baldness, dermatitis, ulcer etc. In, Nepal, leaf juice used externally for Scabies, In Nicaragua, leaves chewed for toothache and externally applied for pain, stings and skin rashed. In Haiti, decoction of dried leaf used orally for bronchitis and pneumonia. In Argentina, leaves used for stomach problem of baby, snake bites etc. In Brazil, dried leaves used as insecticide, ulcerated abscesses, fistulas, sores, inveterate polyps etc. In China, leaf used tobacco with <i>Apocynumvenetum</i> for detoxifying nicotine. In Colombia, Poultice prepared from fresh leaves and used in boils and infected wounds, crused leaves with palms oil used for baldness. In Cuba, leaves extract used orally for dysmenorrhea. In Egypt, smoked of dried leaves and flowers used to relieve asthma and influenza leaves poultice used in rheumatic pain. In Fiji, fresh root has used orally for Asthama and indigestion. In Guatemala, leaves used extranally for myasis, headache and wounds, dried leaves used externally for ringworms, wound, ulcers, bruises sores and stomatitis. Leaf used orally for kidney diseases. In Mexico, exudates from stem and leaf used for gum inflammation^{66, 374, 375.}</p>	<p>solavetivone. Seed oil also contains Cholesterol, cholest-7-enol, 24-methylenecholesterol, campesterol, stigmasterol, sitosterol, 28-isofucosterol, lanosterol, 31-norlanosterol, lanost-8-enol, obtusifoliol, 31-norcycloartenol, Cycloeucaleanol, granisterol, citrostadienol, β-amyrin, lupeol, cycloartanol and 24-methylenecycloartanol^{66, 374, 375, 376, 377}.</p>	
<p>104. <i>Alocasiaindica</i> Schott. <i>Alocasia macrorrhizos</i> (L.) G. Don. <i>Ashibachangba, Esha chaokhatlaganaba</i>, Boil (<i>Naichabaapomba</i>), Cough, Tuberculosis (<i>Lok Thungba</i>)</p>	<p>In Mizoram state, India <i>A. indica</i> used for treatment of Jaundice, rheumatic arthritis, fungal infection, inflammatory diseases, leprotic infection, anasarca, abdomen and spleen diseases³⁸⁰. In Nagaland state, India exuded liquid after cut from rhizome and leave of <i>A. Indica</i> plant usually applied on the snakebite area with cow or buffalo's milk immediately after bite to remove the poison³⁸¹. In Darikal Gaon of Tezpur, Assam, India, Stem juice has applied on the wound for healing³⁸². In hazaribagdistric of Jharkhand, India, leaf and tuber used as</p>	<p>The rootstock of <i>A. Indica</i> contains alkaloids, Tannins, Saponins, Steroids, Phlobatannins, Terpenoids and Flavonoids³⁸⁰. The ethanol extract of <i>A. Indica</i> tuber has also contained minerals includes Sodium, Potassium, Calcium, Magnesium, Manganese, Iron, Cobalt, Chromium, Zinc, Copper. It has contains other compounds include 2(3H)-Furanone, 5-methyl-pentadecane, 2, 4-bis(1,1-dimethylethyl) phenol Pentadecane, 3-methyl-Hexadecane, Pentadecane, 2, 6, 10, 14-tetramethyl, Teradecanoic acid, 1-pentadecene, 1,2-benzenedicarboxylic acid, b,</p>	<p>Hexadecanoic acid, 9,12-Octadecadienoic acid (z,Z)2,3 dihydroxypropyl ester, Linoleic acid ethyl ester, Octadecanoic acid, ethyl ester, Beta-sitosterol etc. Compound identified in <i>A. Indica</i> have been reported for effective against dreaded diseases includes inflamation, Arthritis, Cancer, hepatic disorder, hypercholester etc³⁸⁶. Alocasin, an antifungal protein has demonstrated inhibitory activity on HIV-1 reverse</p>

		astringent, piles, constipation ³⁸³ . In Western Utta Pradesh State of India, A. Macrorrhiza used for treatment of fresh cuts and urinary problem ³⁸⁴ . In Joypurhat district, Bangladesh, leaves and tuber used for treatment of Cough, constipation, kidney disease, stomachic, colic, piles ³⁸⁵ .	Hexadecanoic acid, methyl estert, Dibutyl phthalate, 9-Hexadecenoic acid, Hexadecanoic acid, Tetradecanoic acid, ethyl ester, 1-Octadecene, 9,12-Octadecadienoic acid (z,Z)2,3 dihydroxypropyl ester, 2-Hepten-4-one, 6-hydroxy-2-methyl, Linoleic acid ethyl ester, Ethyl oleate, Octadecanoic acid, ethyl ester, Vitamine E, Campesterol, Stigmasterol and Beta-sitosterol ³⁸⁶ . Alocasin, an anti-fungal protein present in <i>A. Macrorrhiza</i> rhizomes ³⁸⁷ .	transcriptase ³⁸⁷ .
105. <i>Nerium indicum</i> Mill	Asthma, Diabetes (<i>Eshing-pukchatpa</i>), ear pain, fever, headache, swelling after accidental injury (<i>E-Ashibachangba</i> , <i>Esha chaokhatlagana ba</i>), Paralysis (<i>MakhongMakhatChingsillakpa/SingliNaoriSontaba</i>).	In Nagaland, India, <i>N. indicum</i> used as cardiac tonic, for curing ulcer, leprosy, skin diseases. Root bark used for treatment of ringworm infection and used as piscicide ³⁸⁸ . In Kancheepuram district of Tamil Nadu India, Juice prepared from the stem bark has boiled with gijelly oil and two drops have poured into ear to treat ear pain ³⁸⁹ . In Sangli district of Maharashtra, India, leave has used for wound healing ³⁹⁰ . In Morigaondistict of Assam, India leaves and barks juice used for treatment of Dysentery ³⁹¹ . In Assam, stem bark has used for treatment of malaria ³⁹² . In Samburu district, Kenya, hot decoction of leaves and seeds have used for Upper respiratory tract infections, gastro intestinal tract complication ³⁹³ . In Calabria, Sothern Italy, aerial parth of <i>N. Oleander</i> have used to cure malaria ³⁹⁴ . In Iloilo, Philippines, plant had used for treatment of fever, headache, and dermatological problems ³⁹⁵ . In Errachidia province of South-Eastern Morocco, leaf has used for hypertension and diabetes ³⁹⁶ . In Rajshahi District, Bangladesh, leaf decoction used for treatment of swellings, macerated leaves have used for itch and hair falling. The flower has used for inflammation, chronic pains in the muscles and joints, lumbago, headache and Scabies. Roots and root bark have used as diuretic, cardiac tonic, resolvent and attenuant. Root and root bark paste have used externally cancers, on ulcerative penis, chronic abdominal pain and Joint pain. Roots and leaves have also used for skin diseases and	The leaves of <i>N. oleander</i> L. contain two novels cytotoxic pentacyclitriterpenoids <i>cis-karenin</i> (3 β -hydroxy-28-Z-pcoumaroyloxy-urs-12-en-27-oic acid) and <i>trans-karenin</i> (3- β -hydroxy-28-E-p coumaroyloxy-urs-12-en-27-oic acid) as well as two new cardiac glycosides, kancrosidcand ncriumoside. Leaves also contain oleandrin, folineriin, adynerin, digitoxigenin cardiac glycosides in oleander. Seeds contain isoricinoleic acid ³⁹⁸ . From the fresh and uncruised leaves, a pentacyclic triterpene, oleanderocioic acid, two flavonoidal glycosides, quercetin-5-O-[α -L-rhamnopyranosyl-(1-6)]- β -D-glucopyranoside and kaempferol-5-O-[α -L-rhamnopyranosyl-(1-6)]- β -D-glucopyranoside, and a cardenolide, oleandigloside have been isolated ³⁹⁹ . The <i>N. Indicum</i> contains Cardenolides include Thevetin B, 3 β -O-(β -D-Diginosyl)-5 α -card-20(22)-enolide, 3 β -O-(β -D-Sarmentosyl)-14-hydroxy-5 β ,14 β -card-20(22)-enolide, Odoroside B, Glucosyl nerigoside, Neritaloside, Odoroside H, Nerizoside, Odoroside K, 3 β -O-(β -D-Digitalosyl)-14-hydroxy-5 α ,14 β -card-20(22)-enolide, Digitoxigenin, Odoroside A, Nerigoside, 8 β -Hydroxyodoroside A, Oleandringenin sarmentoside, Oleandringenin, Odoroside A gentiobioside, Gentiobiosylnerigoside, Δ 16-Digitoxigenin β -neritrioxide, 16-O-Acetyldigitalinum verum, 3 β -O-[β -D-Glucopyranosyl-(1 \rightarrow 4)- β -D-sarmentopyranosyl]-16 β -acetoxy-14-hydroxy-5 β ,14 β -card-20(22)-	<i>N. oleander</i> has commercially viable and therapeutically active Cardenolides. The most potent compounds include (1). Neritaloside has reported for anticancer property aganist Breast cancer, Prostate cancer, Gastric cancer, Brain cancer, Pancreatic cancer, Renal cancer, Uterus carcinoma and Melanomas. (2). Odoroside H has promising effect against Breast cancer, Gastric cancer, Renal cancer, Lung cancer, Uterus carcinoma and Melanomas. (3). Oleandrin has potential effect against Breast cancer, Lung cancer, Colon cancer, Gastric cancer, Renal cancer, Uterus carcinoma and Melanomas ⁴⁰⁰ . In Phase I clinical trials for cancer treatment in the USA two patented extracts, "Anvirzel", a hot-water extract have shown, the promising results ⁴⁰¹ . The Oleandrin, the principle cardiac glycoside (CG) has presnt in Anvirzel TM . Anvirzel TM , an aqueous extract of <i>N. Indicum</i> plant has exhibited anti-HIV effect. The 10ug/ml of Anvirzel TM inhibited the infectivity of the progeny virus by 73% and 67% for HIV-1 _{III} B and HIV-

		leprosy ³⁹⁷ .	enolide, Oleandrin, Oleandrogenin neribioside /glucosyl nerigoside, Oleandrogenin α -oleabioside/oleandrin monoglucoside, Oleandrogenin β -glucoside, OdorosideG, Odorobioside G, Gentiobiosylodoroside A, 3 β -O-(β -D-Diginosyl)-14,16 β -dihydroxy-5 β ,14 β -card-20(22)-enolide, 3 β -Hydroxy-5 β -card-8,14,16,20(22)-tetraenolide, 12 β -Hydroxy-5 β -card-8,14,16,20(22)-tetraenolide, 3 β -O-(β -D-Diginosyl)-14-hydroxy-5 β ,14 β -card-16,20(22)-enolide, Neriumoside, Neriumoside, 3 β -O-[[β -D-Glucopyranosyl-(1 \rightarrow 6)- β -Dglucopyranosyl-(1 \rightarrow 4)- β -D-diginopyranosyl]-7 β ,8-epoxy-14-hydroxy-5 β ,14 β -card-20(22)-enolide, 3 β -O-(β -D-Diginosyl)-7 β ,8-epoxy-14-hydroxy-5 β ,14 β -card-20(22)-enolide, Δ 16-Dehydroadynerigenin glucosyl Digitaloside, Adynerin, Δ 16-Dehydroadynerin, 5 α -Adynerin, 3 β -O-[[β -D-Glucopyranosyl-(1 \rightarrow 4)- β -Ddiginopyranosyl]-8,14-epoxy- 5 β ,14 β -card-20(22)-enolide, Δ 16-Adynerigenin digitaloside, 3 β -O-(β -D-Diginosyl)-8,14-epoxy- 5 β ,14 β -card-20(22)-enolide ⁴⁰⁰ .	1 _{YU2} , respectively ⁴⁰² .	
106.	<i>Ranunculuss celeratus</i> Lin n.	Joint pain / arthritis (tang chikpa), gout, muscle pain, skin diseases, eczma (<i>khuthing</i>), Skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergy, white patch, skin infection (<i>thamnakhoklai</i>), Skin Cancer, Wart (<i>LairenSajik</i>),	In Garhwal Himalaya, Uttarakhand, India, whole plant of <i>R. Sceleratus</i> have used as Vermifuge and for skin disorders ⁴⁰³ . In Kangra district of Himachal Pradesh, India, powder of leave and roots have giving orally with water to cure Urinary disorder and skin diseases ⁴⁰⁴ . In Mount Taibai, China, plant have used for treatment of Kindly and urethra problem ⁴⁰⁵ . In Sheringal Valley, Dir Upper, KPK, Pakistan, plant have used as purgative, anti-asthmatic and for treatment of fever ⁴⁰⁶ . In Shogran valley, Pakistan, whole plant has used as antispasmodic, diaphoretic, skindiseases, antirheumatic, tonic ⁴⁰⁷ . In Northeastern Italy, it has used as an antirheumatic and antineuralgic agent and in British Columbia, blistering oil used as a counter-irritant. In Turkey and Iraq, it has used as emenagoges and glactogoges. In diffent counties professional beggars used	Tryptamine derivatives present in <i>R. sceleratus</i> ⁴⁰⁹ . Plants also contain Terpenoids, Tannins, Flavonoids, saponins, Alkaloids, Glycosides (γ -lactones mainly ranunculine), steroids (β -sitosterol), Phynolic Glycoside and the strong blistering agent as well as irritant (characteristic topical toxicity of buttercups) compound, protoanemonin or ranunculo ⁴¹⁰ , ⁷⁸ . The plant also contains apigenin, apigenin 4'-O- α -rhamnopyranoside, apigenin 7-O- β -glucopyranosyl-4'-O- α -rhamnopyranoside, tricrin 7-O- β -glucopyranoside, isoscopoletin, tricrin, and Protocatechuyaldehyde ⁴¹¹ .	The “counter-irritant property of <i>R. sceleratus</i> planthas been established pharmacologically ⁷⁸ . The flavonoid, ‘apigenin’ present in the plant has promising anti-cancer effect ⁴¹² .

- to disfigure themselves with blisters for gaining sympathy of peoples⁷⁸. In Miankaleh, Iran, Sap of the plant have used for dyspnea, tuberculosis, jaundice, scrofula, intermittent malarial fever⁴⁰⁸. In China, whole plant has used for promoting blood circulation by removing blood stasis, expelling cold, relieving swelling, removing excessive heat from liver and gall bladder, for curing internal abscess, malaria, scrofula, snake or scorpion venom and acute icteric hepatitis in Chinese traditional medicine system⁸⁰.
107. *Spilanthes acmella* Murr. (Laikoi), Skin Cancer, Wart (Lairen Sajik)
- In North garo Hills, Meghalaya state, India Stem, leaves, flowers of *S. acmella* have used for treatment of toothache⁴¹³. In Travancore region of Kerala state, India, juice of inflorescence of *S. acmella* has used to treat mouth ulcers⁴¹⁴. In Haryana, India whole plant used for Cough. In Hasanur Hills, Erode, Tamil Nadu, India, flower have used for Toothache. In Karnataka, India, Juice of inflorescence have used for mouth ulcer. In Saurashtra region, Gujarat, India flower have used for toothache and dysentery. The Ethiopian traditional healers use the paste of crushed aerial parts for dressing of external injuries. In Nigeria and Sri Lanka, *S. acmella* have used as a sialagogue, as diurectics and to dissolve urinary calculi. In China, *S. acmella* have used for the treatment of snakebite and rheumatic fever. In Brazil, leaves have used for get rid of unpleasant symptoms of the alcoholic hangover. In Betsimisaraka and Tanala people of Madagascar, have used leaves as Soup and as a fortifier for infants. In Indonesia, whole plant has used as an anticancer agent. In Kelantan, Malaysia, pounded flowers have placed in tooth cavities to relieve pain and In Philippines, decoction of roots and leaves is used as gargle for tooth pain. Vhabaniganj village, Bogra District, Bangladesh, leaves and flowers have used for Leucorrhoea, toothache, anti-inflammatory, astringent, stop bleeding from gums, dysentery, antibacterial, and anemia.
- The hexane extract of *S. acmella* contains stigmasterol, choloform extract contain stigmasterol, stigmasteryl-3-O- β -D-glucopyranoside, ethyl acetate extract contains 3-acetylaleuritic acid, vanillic acid, β -sitostenone and methanol extract contains scopoletin, trans-ferulic acid, trans-isoferulic acid and a mixture of sigmasteryl-3-O- β -D-glucopyranoside and β -sitosteryl-3-O- β -D-glucopyranoside⁴¹⁷. This plant contains 'spilanthol' [(2E,6Z,8E)-N-isobutylamide-2,6,8-decatrienamide], the major pungent constituent having insecticidal properties. The Hexane extract of dried flower buds contains Spilanthol, undeca-2E,7Z,9E-trienoic acid isobutylamide, and undeca-2E-en-8,10-diynoic acid isobutylamide. Whole plant contains Spilanthol, N-2-methylbutyldeca-2E, GZ, 8E-trienamide Q α and β -amyrm esters and sitosterol-O- β -D-glucoside. Aerial parts have contained 3-acetylaleuritic acid, β -sitostenone, and mixture of stigmasteryl- and β -sitosteryl-3-O- β -D-glucopyranosides. Roots contain Olean-12-en-3-O-beta-Dgalactopyranosyl (1 \rightarrow 4)-O-alpha-L rhamnopyranoside. Ethyl acetate extract of Whole plant contain Acemellonate N-isobutyl-dodeca-2E,4E,8Z, 10 E-tetraenamide³¹⁶. *S. Acmella* also contains α -Amyrin, β -Amyrin, Limonene, β -Caryophyllene, (Z)- β -Ocimene, Germacrene, Myrecene, Scopoletin etc.⁴¹⁶.
- The principal pungent and bioactive N-isobutylamide compound of *S. acmella*, 'spilanthol' has reported for modulatory effect on chemosensory receptors and ligands associated with these receptors. The Alkylamides have also reported for their action on cannabinoid type-2 receptor dependent and independent and for immunomodulatory effects as chemotaxonomic markers⁴¹⁵. The spilanthol, a secondary metabolite had high industrial potential as well as several biological properties and health effects. *A. oleracea* plant has used as a spice and a food in the northern part of Brazil as well as other countries including India. It also have used for treatment toothaches, so it is called the toothache plant. Spilanthol have reported for analgesic, antinociceptive, antioxidant, anti-inflammatory, , antimutagenic, , anti-wrinkle, antifungal, bacteriostatic, , insecticidal, , anti-malarial, anti-larvicidal against *Aedes aegypti* and *Helicoverpa zea* neonates and anti-molluscicidal effects⁴¹⁸.

		Headache and in colic ⁴¹⁵ . In Chittagong hill tracts of Bangladesh, plant used as poisonous sting and leaves and flowers of the plant have used to treat leucorrhoea in females among tribble people. In India, flower heads have used to treat stammering in children ⁴¹⁶ .		415
108.	<i>Schizophyllu m commune</i> (Eshing-pukchatpa), Fr. Ulcer, Tonsillitis (Leithonbi)	Diabetes In Costal region of West Bengal, India, fruitbody of <i>S. Commune</i> pasted and mixed with water to make soup and used as tonic. In addition, fruitbody mixed with gram flour and fried to make pakora for used as food ⁴¹⁹ . In Manipur, India whole plant used for treatment of diabetes ⁴²⁰ . The <i>S. Commune</i> used as healthy food in Nagaland ⁴²¹ , West Bengal ⁴²² Assam ^{423,424} , Manipur ⁴²⁵ , India and isabela, Philippines ⁴²⁶ . In Mexico, <i>S. Commune</i> have used for treatment of headache, indigestion, inflammation, intestinal pains, Obesity, Rheumatism and weakness ⁴²⁷ . In Tshopo province of Democratic Republic of the Congo, <i>S. commune</i> have used to treat wounds and breast inflammation ⁴²⁸ . In Nigeria, <i>S. Commune</i> have used for treating diabetes and genaraly regarded as health food ⁴²⁹ .	<i>S. Commune</i> contains flavonoids, phenolics, tannin, steroid, terpenoids, alkaloids, saponin, ascorbic acid, β -carotene, lycopene, protein, fat, Carbohydrate, fiber and ash ^{430,423,426,431,432} . Schizines A and B iminolactones (3, 6-dihydro-2H-1, 4-oxazin-2-one derivatives) or alkaloids have been isolated from the plant ⁴³³ . Plants also contains vanillic acid, <i>m</i> -hydroxybezoic acid, <i>o</i> -hydroxybenzeneacetic acid, 3-hydroxy-5-methylbenzoic acid and <i>p</i> -hydroxybenzoic acid ⁴³⁴ . A homodimeric lactose-binding lectin has isolated from fresh fruiting body of the <i>S. Commune</i> ⁴³⁵ . The <i>S. Commune</i> contains a natural polysaccharide called 'Schizophyllan' ^{436,437,438} .	'Schizophyllan' a natural polysaccharide isolated from the <i>S. Commune</i> planthas anticancer, anti tumor, anti-inflammatory and anti-microbial properties ^{436, 437, 438} . The Schizophyllan is an medically important polysaccharides undergone extensive anticancer clinical trials and commercially sold as 'Krestin' ⁴³⁹ . The <i>S. Communes</i> sold in market as healthy food in Nagaland ⁴²¹ , West Bengal ⁴²² , Assam ^{423,424} , Manipur ⁴²⁵ , India and Isabela of Philippines ⁴²⁶ .
109.	<i>Mimosa pudica</i> Linn. Hepatitis, Jaundice (Thongak)	In Tripura, India leaf paste of <i>M. pudica</i> applied on the acne and pimples. Whole plant extract of <i>M. pudica</i> have mixed with bark extract of <i>Urenalobata</i> in equal proportion and used for treatment of jaundice ⁴⁴⁰ . In Narasimha Raja Pura of Chikmagalur district of Karnataka, India leaf extract of <i>M. pudica</i> and <i>C. asiatica</i> mixed with lemon juice and taken orally in empty stomach for treatment of Stomachins /stomach disorders ⁴⁴¹ . In Pathardi areas of Ahmednagar district, Maharashtra, India 2-3 gm of leaf powder of <i>M. pudica</i> mixed in equeal amount of Cordiagarhaf stem bark powder with pinch of salt boiled in a glass of water and the decoction has gargled for relieving pains in gums and teeth ⁴⁴² . In Bhadrak District of Odisha, India, leaves paste of <i>M. pudica</i> used for eczema and handful of entire plant paste has used on cuts and wounds for healing ⁴⁴² . In kandhamal district, Odisha, India,	The 50% ethanol extract (cold maceration) of whole plants of <i>M. pudica</i> contains carbohydrate, alkaloids, proteins, amino acid, tannins, phenolics, flavonoids, steroids, fixed oil, mucilage and saponins ⁴⁴⁵ . The methanolic leaf extract contains Terpenoids, flavonoids, glycosides, alkaloids, Quinines, phenols, tannins, saponins and coumarin ^{446,87} . Roots of the plants contain flavonoids, phytosterol, alkaloids, amino acids, tannins, glycoside and fatty acids. In chromatographic analysis of roots extract showen, that petroleum ether fraction mainly contains flavonoids, phytosterols, alkaloids and amino acids. Acetone fraction contains flavonoids, chloroform fraction contains alkaloids and benzene extract contains essential oils and fatty acids ⁸⁷ . Crocetin dimethyl ester and tannins have present in the plant. The mucilage from seed have combination of D-Xylose and	A compound (<i>JS IV</i>) isolated and identified from the <i>M. pudica</i> plant that shown amylase and Urease enzyme inhibition property ⁴⁴⁸ . The <i>M. pudica</i> seed mucilage found to be a commercially viable sustained release excipient. Several formulation of <i>M. pudica</i> such as Samangaadi Churna, Kutajavaleha, Pusanug Churna, and Bhret Gangadhara Churna has already commercially available ⁸⁷ .

the warmed root paste is plastered with the help of cloth on boils to get relief. The paste of root has fried in castor oil have applied on deep cut wounds to stop bleeding and for healing. The warmed leaf paste has applied around furuncle, abscess and boils to burst and release of pus. The leaf paste has applied on the burst boils and itches for quick healing. The paste of roots fried in ghee has applied on caries teeth for relief from toothache. The leaf past has applied on forehead to get relief from headache and migraine. The leaf paste with honey has given in empty stomach twice a day for 3-4 days for stomachache and intestinal worms⁸⁷. In Jhansi district of Uttar Pradesh, India roots and leaves have crushed and powder used with water orally twice a day to cure loose motion⁴⁴³. In Kurukshetra district, Haryana, India, leaves of plants have used for increasing sexual potency in men. In sagar district of Madhya Pradesh, India leaves and roots have used for piles, fistula, gravel and kidney diseases. Roots have also used orally for remedy of snakebite. In west Bengal, India, root decoction has gargled for gum trouble and toothache⁸⁷. In Punjab and Kashmir, India, seeds used for sore throat, in Concan, India, past of leaves applied to hydrocoeles and glandular swellings, in some part of India plants used as an antifertility agent for birth control, bladder calculi and externally used for edema, rheumatism, myalgia and uterine tumors. Whole plants crushed powder have used for itching and scabies. Leaves have used as bitter tonic, hydrocoele, haemorrhoid, fistula, scrofula, conjuntivities, wound and haemorrhages. Roots have used for leucoderma, vaginopathy, metropathy, ulcer, dysentery, inflammation, jaundices, asthma, small pox, strangury, and fevers. In Philippines, roots have used as diuretics, for treatment of dysentery, dysmenorhea, as aphrodisiac, for bladdr gravel and related urinary disorders. Whole plants decoction has used as antiasthmatic, decoction or D- glucuronic acid 4-O-(3,5-dihydroxybenzoic acid)-b-D-glucuronide. The constituents have further processed and four compounds have been isolated and identified as [1]. 5, 7, 3'4'-tetrahydroxyl-6-C-[a-l-rhamnopyranosyl-(1→2)] beta-D-glucopyranosyl flavones, [2]. 7,8,3',4'-tetrahydroxyl-6-C--[alpha-1-rhamnopyranosyl-(1→2)] beta-D-glucopyranosyl flavone, [3]. 5, 7, 4'-trihydroxy-8-C-[a-l-rhamnopyranosyl-(1→2)] beta-D-glucopyranosyl flavones, and [4]. Catcher. In which, compound [1] was a new compound and compound [2] and [4] were isolated from the plant for first time. Plaants also contains Mimosine (toxic alkaloid), Tyrosine, Mmimosinamine and Mimosinicacid. The plant also contains tubuline and a new class phytohormone turgorines has found to be active in the plant. The periodic leaf movement factors are reportedly the derivatives of 4-o-(b-D-glucopyranosyl-6-sulphate) gallic acid. Fresh tissues have contained nor-epinephrine, d-pinitol (3-mono-methyl ether of inositol), and b-sitosterol.^{447,87}.

	<p>infusion of leaves used for treatment of asthma, diabetes, as expectorant, hypertension, menorrhagia, glandular swelling, sore throat and horseness. Powder of seeds applied to wound and sores. Bruised leaves have applied to bruises, poultice of leaves used for glandular swelling, powdered roots and leaves taken with milk for piles and fistula. In china plats have used for treatment of anxiety and depression. In the Antiles, Guiana and La Reunion, roots have used as vomitive. In indo-china, seeds used as emetic, In Maxico, plants have used for alleviate depression ⁴⁴⁴.</p>		
<p>110. <i>Papaver somniferum</i> Linn.</p> <p>Ringworm (<i>Laikoi</i>), Joint pain / arthritis (<i>tang chikpa</i>), gout, muscle pain, Cancer</p>	<p>In Jodhpur district, Rajasthan, India, Marwari community used poppu seed as demulcent and spasmolytic agent ⁴⁴⁹. In Tirunelveli district, Tamil Nadu, India poppy seeds (<i>P. somniferum</i>), small quantilty of asafoetida (<i>Ferulaassafetida</i>) and 5-10 gm of <i>Senna auriculata</i> flower have used for preparing a paste in hot water and given orally once in a day for two days to cure colic pain ⁴⁵⁰. In East Godavari district, Andhra Pradesh, India <i>P. Somniferum</i> used as demulcent, nutritive, astringent, soporific, sedative, narcotic, anodyne, emollient, stimulant, antispasmodic, aphrodisiac, astringent, mycotic, in diarrhoea to control peristaltic movement ⁴⁵¹. In Anuppur district, Madhya Pradesh, India, flower, fruits and seeds have pain releasing and sleeping effects and useful in irritating cough, pneumonia, ulcers, gastritis and influenza ⁴⁵². In shopiandistrict, Kashmir, India Gujjar and Bakerwal tribe fruit exoarp have mixed with dalchini and salt and a decoction have prepared. One-cup decoction has taken twice a day for a week to cure week. The poppy seed mixed with warm milk and taken early in moring for 15-20 days to improved week memory ⁴⁵³. In Purulia district, West Bengal, India, the yellow secretion from fruits of apling (<i>P. somniferum</i>) along with other ingredients have used for treatment of menstruation with burning sensation (<i>Jwalansutka</i>), pain on hand, legs, and vertebral column</p>	<p>Alkaloids are the chemicals of interest in <i>P. Somniferum</i>. Two major classes of alkaloids present in opium, namely (1) The benzoisoquinoline alkaloids such as Papaverine, Noscapine, narcotine, narceine etc., and (2) The phenanthrene alkaloids such as Morphine, Codeine, Thebaine etc. Seeds contains very popular natural alkaloids namely Morphine, Codine, poppy seed oil contains linolenic acid (cis, cis-9, 12-octadecadienoic acid). Apart from alkaloids, it also contains complex mixture of proteins, sugars, fat, resin, coloring substances, wax, rubber, salts (sulphates), albuminous matter, water and mucilaginous substances. Opium alkaloids associated with several simple organic acids including fumaric acid, lactic acid and the rare meconic acids, malic acid, tartaric acid, citric acid and succinic acid ^{458,459,460}. However, papaverine, narcotine, narceine are poisonous chemical constituents present in the opium palnt ⁴⁶¹. The chemical composition of seed oil of Indian poppy is reported as follows:</p> <p>Palmitic acid (16:0): 8.90–21.48% Stearic acid (18:0): 1.40–10.80% Oleic acid (18:1): 13.22–36.79% Linoleic acid (18:2): 41.00–60.00% Linolenic acid (18:3): 0.00–9.40% Manganese (29 mg/kg) Copper (22.9 mg/kg) Magnesium (15.6 g/kg) Zinc (130 mg/kg) ^{462,463}.</p>	<p>Cultivated poppy (<i>P. somniferum</i>) has great economic value because of the opium latex and also for the edible seed and seed oil. The capsule is the major organ for the opium latex, but the alkaloids are also present in other parts of the plants like stem, leaves, roots, etc. The seeds do not contain any alkaloid, but are rich in edible oil of high quality. The straws of poppy also contain some alkaloids and are variously used in medicine. Opium is used as a narcotic, sedative, antispasmodic, hypnotic, sudorific and antidiarrhoeal. The opium is official in pharmacopoeias of several countries. Opium tincture and camphorated opium tinctures are the most generally used in dosage forms for coughs. Suppositories of opium with lead are employed to relieve rectal and pelvic pains and ointment of opium with gall is applied in haemorrhoids. Opium is also used in veterinary practice. Poppy seeds are free from narcotics and are highly nutritious and taken by preparing various preparations. Poppy seeds are devoid</p>

(*Sutka* Post-delivery weakness/ menstrual disorder), Headache (*Mathasutka*), severe weakness (*Dhukhasutka*), stomach pain (*sutka*), and feeling cold⁴⁵⁴. In Sirumalai Hills of Eastern Ghats, Dindigul district, Tamilnadu, India, Poppy seed oil used orally for 4 days in culinary purposes and free from narcotic action. Seed powder has mixed with hot water and used for treating diarrhoea, dysentery and irritating cough [356] In Mansehra, Khyber Pakhtunkhwa Province, Pakistan, Flower and fruits of have used for treatment of Gynaecological problems (abortifacient, Pregnancy) and in Northern Part of Nara Desert, Pakistan, whole plants of *Corchorus depressus* crushed in water along with equal quantity of poppy seeds (*P. somniferum*), rose flower (*Rosa damascena* Miller), almond (*Prunus amygdalis* Batsch), cardamom seed (*Elettaria cardamomum* (L.) Maton) and candy (*Misri*) and used as a cooling agent in summer. Same formulation also used for treating spermatorrhoea as well as Other male urino genital diseases^{456,457}.

of any narcotic compounds, but have high nutritive value and are used as a food and a source of edible oil. They are used in breads, curries, sweets and confectioneries. Analysis of Indian poppy seeds showed moisture 4.3–5.2%, protein 22.3–24.4%, crude fibre 4.8–5.8%, calcium 1.03–1.45%, phosphorus 0.79–0.89% and iron 8.9–11.1 mg/100 g. Seeds also contain thiamine, riboflavin, nicotinic acid and lecithin. Minor minerals in the seeds include iodine (6 µg/kg). Poppy straw (unlaced capsule) has been made use of in Europe and other places as a source of morphine where it is cultivated mainly for seed and oil. Poppy plants are used in production of paper-pulp to make handmade boards. Poppy plants are sometimes eaten like lettuce leaves. It is grown as a pot herb in Iran. The red poppy flowers are used in medicine for making syrup. The red and lilac flower contains a colouring matter and are suitable for use as indicator. Poppy leaves were at one time in the French Pharmacopoeia. It contains morphine (0.03–0.2%) and other alkaloids in small quantities. Capsule husk is used in tea. Bonda Chai (Bonda tea), prepared by powdered capsules and then brewed with tea, has been prevalent in Punjab and Madhya Pradesh, mainly among truck and lorry drivers and farm labour. Poppy tea has been a common home remedy for many hundreds of years in Europe and is still

			<p>practised in many of these countries. It is considered to be helpful in detoxing the heroin addiction.</p> <p>To make poppy tea, after removing the seeds the poppy capsules are powdered in a coffee grinder or spice grinder into a fine powder. The powder is added to boiling water and stirred into a brew. The brew is left to cool while stirring occasionally and then filtered through a wire mesh strainer. The liquid thus obtained is bitter and taken with licorice or mixed with tea. Stem ground powder is also used to make poppy tea. The leftover pulp can be used again to make another cup of tea by adding boiling water⁴⁶³.</p>
<p>111. <i>Cinnamomu mcamphora</i>(L.) J. Presl.</p>	<p>Tonsillitis, Sinusitis, Skin cancer, Wart (<i>LairenSajik</i>), Ringworm, Cough, Cuts wound, burn injury, bullet wound, crack heel, Leprosy, Osteomalitis</p>	<p>In Himachal Pradesh, Rajasthan, Punjab, Haryana and Uttar Pradesh, India leaves and branches of <i>C. camphora</i> used for treatment of toothache, gum swelling⁴⁶⁴. In Jalaun district of Uttar Pradesh, India, Desi ghee (milk fat), Camphor (<i>C. camphora</i>) and <i>Bhayriya (Urenalobata)</i> are crushed together in equal quantity and applied externally to the neck of livestock (domestic animals) for treatment of Cough, inflammation of the tonsil and elevated body temperature⁴⁶⁵. In West Bengal, India, Camphor used for treatment of measles in humans⁴⁶⁶. In Goa, India <i>C. camphora</i> used externally as anti-rheumatic and anti-spetic⁴⁶⁷. In Bangladesh camphor has been used in herbal formulation for treatment of rheumatic pain⁴⁶⁸. In the volcanic island of Korea <i>C. camphora</i> has been used for various cancers⁴⁶⁹.</p>	<p>The leaf oil of <i>C. camphora</i> contains camphor (18.5%), eucalyptol (16.5%), linalool (11.9%) and 3, 7-dimethyl-1,3,7-octatriene (11.1%), eugenol and isoeugenol that impart it the very harsh odor, cineole, camphene, dipentene, whereas, the twig essential oil has contained eucalyptol (17.2%), camphor (13.2%) and 3,7-dimethyl-1,3,7-octatriene (11.47%), fruit oil contains safrole that thought to be carcinogenic, bark contains cinnamaldehyde that impart it the very peculiar odor and flavour and seed oil contains eucalyptol (20.9%), methyleugenol (19.9%), linalool (14.7%), camphor (5.5%) as major compounds^{89,470,471}. However, <i>C. camphora</i> growing in Taiwan and Japan normally contained very high linalool (80-85%). Whereas, high camphor chemotype plants have been found in India and Sri Lanka and plants growing in Madagascar have high 1,8-cineole (40-50%). Bark oil of plant from China has rich in D-camphor (51.3%), leaf oil also has rich in D-camphor (40.5%), linalool (22.9%), 1,8-cineole (11.3%) and fruit oil has rich in safrole (29.0%), D-camphor (28.1%) and</p>

			linalool (12.8%) ⁴⁷¹ .	range of historical uses in different cultures including the treatment of arthritis and various menstrual disorders ^{89,472} .	
112.	<i>Plumeria acuminata</i> Ait. or <i>Plumeria rubra</i> L.	Remedy for pain, cure for itch, fever, diarrhea, Boil (<i>naichabaapom ba</i>), Gynecological problem.	In Bongaigaon district, Assam, India <i>P. acuminata</i> (50gm) stem used with <i>Justicia adhatodastem</i> (100gm) and <i>Azadirachta indica</i> stem (100gm) and <i>Swertia chirayita</i> stem/leaf (100gm) have crushed and boil together in water. Decoction preserved in a bottle and given two tablespoonsful (for child 1/2 tablespoonful) twice in a day after food for treatment of Jaundice ⁴⁷³ . In Cachar district, Assam <i>P. acuminata</i> leaf has used for treatment of stomach trouble ⁴⁷⁴ . In southern Assam, India, Reang tribe are decanted 10g <i>P. rubra</i> bark paste by dissolving in a cup of water and decoction taken orally twice daily for treatment of dysentery and stomach-ache ⁴⁷⁵ . In Anantapur district, Andhra Pradesh, India used bark for treatment of diarrhoea. In West and South district of Tripura, India leaf and flower used for dysentery. In Assam flowers in a particular dose used for permanent sterilization of female and in other part of the state plants used for birth control. In Car Nicobar Island, India decoction of bark used for amoebic dysentery, Intestinal worm, latex used to cure blisters caused by mosquito bites and sores directly, leaf juice used for fractures. In Shimoga district, Karnataka, India, bark paste used externally for wound healing. In Mayurbhanj district, Orissa, India, juice used for finger nail pain. In Andhra Pradesh, India, stem bark with Neem and roots paste with ghee used for Stomach-ache, bark used for rheumatism. In Jalgaon district, Maharashtra, India, stem bark decoction used for asthma. In Nawalparasi, Nepal, stem bark along with <i>Thevetia peruviana</i> flowers and <i>Achyranthus aspera</i> roots used for stomach-ache and stem bark with jaggery and dead dragonflies used to cure rabies. In Mexico, flower and latex used for toothache, latex for earache, eye-cleaning etc. In South Vietnam, plant used against malaria. In	Leaves contain stigmast-7-enol, lupeol carboxylic acid, lupeol acetate and ursolic acid. Roots contains fulvoplummierin, plumericin, isoplumericin, β -dihydroplumericin and β -dihydroplumericinic acid. The stem contains essential oil (0.04-0.07%) that consists of primary alcohols, geraniol, citronellol, farnesol, phenylethyl alcohol and small amount of aldehyde and ketones ⁴⁷⁷ . Bark contains fulvoplumierin, allamcin, allamandin, plumericin, 15-demethylplumieride, plumieride, alpha-allamcinidin, beta-allamcinidin and 13-O-trans-pcoumaroylplumieride; 2,5-dimethoxy-p-benzoquinone and lignan lirioidendrin. Plant also contains carbohydrate, tannin, steroid, glycoside, flavonoid and a novel lupin alkaloid, Plumerinine ⁴⁷⁶ .	The secondary metabolites, Fulvoplumierin reported for Anti-HIV property. Also, allamcin, allamandin, plumericin, 2,5-dimethoxy-p-benzoquinone, lirioidendrin, isoplumericin and 4-hydroxyacetophenone isolated from the plant have been reported for Cytotoxic and Molluscicidal activity ⁴⁷⁶ .

113. <i>Mikania cordata</i> (Bu rm. f.) B. L. Robinson	Piles (Nungshang), Dysentery	<p>Cameroon, plat used as anticancerous agent. In latin America plant used for subcutaneous mycosis⁴⁷⁶. In Chittagong hill, Bangladesh tribal community have used milky juice of the <i>P.acuminate</i> plant by mixing with coconut oil on rheumatic joints. Also, a poultice of roasted leaves has used for treatment of swellings²⁶³.</p> <p>In South and West district of Tripura, India leaves of <i>M. cordata</i> used as antiseptic on wounds and to stop bleeding, in Dhalai district of Tripura fresh leaves have as pounded and the poultice externally applied over the cut to stop bleeding^{478,479}. In Manipur, India, plant has used for treatment of dog and snake bites⁴⁸⁰. In Akure, Nigeria, leaves, sap and whole plant used for treatment of cough, bronchitis, rheumatic pains, urethritis, diuretic, malaria, jaundice and small pox⁴⁸¹. In kalenga forest, Bangladesh, leaf paste applied externally to cure Cut and wound, leaf juice taken internally to cure diarrhoea and gastric pain. In Shitolpara, Jhalokati district, Bangladesh, <i>M. cordata</i> used to stop bleeding and in Dhamrai sub district plant has used for treatment of bloating, stomachache, helminthiasis, sprain, fracture, cuts and wounds. In Madhuour forest region, Bangladesh, Juice of young shoots has given orally (one cup daily in empty stomach for one month) for treatment of Gastric pain and Ulcer. The jucie also externally applied as an antiseptic on fresh cuts and wonds to stop bleeding^{482,483,484}.</p>	<p>Leave extracts contains alkaloids, steroids, gums, reduced sugars, flavonoids, sponins, cardiac glycosides, amino acids, phlobotannins and tannins. The leaves also contain minerals such as calcium, potassium, magnesium, phosphorus, sulphur, iron, manganese and Zinc^{485,486}. Plants contains sesquiterpene lactones namely deoxymikanolide, also contains melampolides⁴⁸⁷.</p>	<p>Deoxymikanolide (sesquiterpene lactones) isolated from <i>M. cordata</i> plant has significantly inhibited acetic acid-induced writhing in mice⁴⁸⁷. Leaves of the plant have significately exhibited <i>in-vivo</i> antiulcer activity⁴⁸⁸.</p>
114. <i>Albizia lebbek</i> (Lin n.) Benth.	Blood vomiting, blood in sputum (<i>E-oba</i>)	<p>In Nagaur district, Rajasthan, India, <i>A. lebbek</i> leaves used for treatment of Night blindness, decoction of flower and leaves used for weakness and bleeding, paste of stem bark used for boils, pimples and ulcer, seed paste used for piles, seed and Pods used for diabetes, powder of roots bark used for Gum, teeth, leprosy and bronchitis, oil of seed used for leukoderma [489]. In Khetawas, Jhajjar district, Haryana, India, plants used for eye diseases, male fertility disorders and snake bite</p>	<p>The seed and leaf of <i>A. lebbek</i> contains higher parcentage of essential (42.19 and 50.16%) and non-essential (57.81 and 49.80%) amino acids respectively. Leaf contains minerals viz. potassium, sodium, calcium, magnesium and Zinc. Leaf and seed contain vitamin C, B-carotene. Leaf, seed and pericarp contains lipodal matter as methyl ester of fatty acids, linoleic acid and seed and leaf contains unsaponified component maily β-Sitosterol as well as protein and condensed</p>	<p>Planet Ayurveda™ has a commercial product, ‘Aller-G Care Capsules’ that contains <i>Curcuma longa</i>, <i>Azadirachtaindica</i>, <i>Albizia lebbek</i> and <i>Withaniasomnifera</i>. According to theAyurveda, <i>Albizia lebbek</i>plant has balances all the three doshas i.e. Vata, Pitta and Kapha (http://www.planetayurveda.com/shirish.htm, 2018). In India Natural</p>

		<p>²⁴⁴. In Vellore district, Tamilnadu, India, leaf paste has externally used to cure eczema ⁴⁹⁰. In Udham Singh Nagar district, Uttarakhand, India, juice of crushed leaves is applied topically on boils ⁴⁹¹. In Jhalokati district, Bangladesh, leaf, root, bark and fruit have used for treatment of Asthma, coughs, thyroiditis (inflammation of thyroid), night blindness, diabetes, toothache, insect and animal bite ⁴⁸³. In Benin City, Edo state, Nigeria, leaves have squeezed and the juice applied to the eye as eye eyedorp (one drop, twice daily) for treatment of night-blindness ⁴⁹².</p>	<p>tannins. The plant also contains glycosides, terpenoids, steroids, saponins, alkaloids, anthraquinones, phenolics, flavonoids, volatile oil, tannins, gum and lipids. Seeds contain albigenin (triterpene), lebbekinin (triterpene saponin) and macrocyclic spermine alkaloids budmunchiamines L₁-L₃. Bark contains albizinin (phenolic glycoside), (-) epicatechin, procyanidin B-2, procyanidin B-5, procyanidin C-1 (flavanols), echinocystic acid and β-sitosterol, albizziasaponin A, B, and C (saponins). Leaves contain three non-protein aminoacids those have uncommon to any plants. Mature leaves contain keto acids viz. phosphoenol-pyruvate, glyoxylate, oxaloacetate and α-oxoglutarate, but flowers contain these keto acids except α-oxoglutarate. Flowers contain saponins including lebbekinin-D, lebbekinin-F, lebbekinin-G and lebbekinin-H. The flowers also contains glycoside of echinocystic acid (lebbekinin A and C) and glycosides of oleanolic acid (lebbekinin B) and acacic acid (lebbekinin E). The wood contains melacacidin, melanoxetin, 3'-O-methylmelanoxetin, (-) 2, 3-cis-3,4-cis-3-O-methyl melacacidin, saponin, lebbekinin E. The Oil contains sterols (mainly β-sitosterol), methyl sterols, triterpene, tocopherol, total hydrocarbons, carotenoids, cycloeucaenol, 24-ethylphenol, cycloartenol, β-amyrin and α-tocopherol ^{493,494}.</p>	<p>Remedies Pvt. Ltd, Bengalore has a commercial herbal product of <i>A. lebbeck</i> as an anti-allergic agent ⁴⁹⁵</p>
115. <i>Ageratum conyzoides</i> L.	Haircare	<p>In Arunachal Pradesh, India, <i>A. conyzoides</i> whole plant used to treat fresh wound and for blood clotting ⁴⁹⁶. In Mizoram, India, plants used for treatment of Cholera, Stomach ache, Ulcer, leprosy, ophthalmia, wound, cuts and sores ⁴⁹⁷. In North-Sivasagar, Dibrugarh and Tinsukia districts, Assam, India, leaf and flower smashed and applied to cut injury ⁴⁹⁸. It is used to relieve toothache ⁴⁹⁹. In North Cachar hills district, Assam, Mandwi, Tripura and in Yavatmal district, Maharashtra, India, crushed leaves have used to treat cuts and wounds ^{500,501,502}. In Jorhat, Assam, India,</p>	<p>The leaves of <i>A. conyzoides</i> contains 0.11 - 0.58% essential oil, root contains 0.03-0.18%, water distillation of the fresh flowers contains 0.2% oil and petroleum ether extract of the seed contains 26% oil. GC-MS analysis of the essential oil conformed presence of 20 monoterpenes (6.4%), 20 sesquiterpenes (5.1%), three phenylpropanoids and benzenoids (2.33%). The sabinene, β-pinene, β-phellandrene, 1,8-cineole, limonene, terpinen-4-ol, α-terpineol, linalool, α-pinene, eugenol and methyleugenol have reported as most abundant</p>	<p>The Brazilian Drugs Central recommended this <i>A. conyzoides</i> plant as an antirheumatic agent ⁵⁰⁵. Human clinical trial has been conducted on <i>Ageratum conyzoides</i> (L.) L. aqueous extract with arthrosis patients. The results shown analgesic effect in 66% patients and improvement in articulation mobility in 24% patients without side effects ⁴⁹¹.</p>

leave paste used on cuts and wounds to stop bleeding and plant juice used to treat jaundice⁵⁰³. In Udham Singh Nagar district, Uttarakhand, India, leaf juice used topically on cuts to stop bleeding and whole plant decoction used orally to cure leprosy, 2ml thrice a day⁴⁹¹. In Mato Grosso, Brazil, infusion used for Pain, labor pain, stomach, swelling in pregnant women, rheumatism and cough⁵⁰⁴. In Brazil, leaves and whole plants also used for treatment of colic, cold, fever, diarrhea, burn wound. In central Africa, plant used for treatment of pneumonia, wound and burns. In Cameroon and Congo, it used for treatment of fever, rheumatism, headache and colic. In Reunion, the whole plants used as an antidiarrheal agent⁵⁰⁵. In Bangladesh, plant used for treatment of cloudy urination in women, epilepsy, wounds, stomachache, syphilis, diabetes, indigestion, abortifacient, virility, itch and also as insect repellent, astringent, and insecticide⁵⁰⁶. In Baham, Cameroon, flower of the plant used for female infertility⁵⁰⁷.

monoterpenes present in the oil. The β -caryophyllene, caryophyllene epoxide, β -sesquiphellandrene, δ -cadinene and τ -cadinene have reported as major sesquiterpenes hydrocarbons components. The β -caryophyllene reported as a main sesquiterpenes from the oil from Cameroon and Pakistan. The ageratochromene, 6-methoxyquinoline-1-oxide, β -caryophyllene oxide and β -sinensal reported as the main oxygenated sesquiterpene hydrocarbons components. Ocimene have reported in Nigerian plant (in trace amount) and oil from Indian plant (5.3%). The Chromene, chromone, benzofuran and coumarin compounds have reported from the essential oil of the plant. The 7-methoxy-2,2-dimethylchromene, 6,7-dimethoxy derivative, ageratochromene, ageratochromene dimer, 2-(2-methylethyl)-5,6-dimethoxybenzofuran, 14-hydroxy-2H β , 3-dihydroeuparine, 6,7,6,7-tetramethoxy-2,2,2, 2-tetramethyl-3(4')-dehydro-3'-4S-bi chroman, 3-(2'-methyl propyl)-methyl-6,8-dimethoxychrom-4-one and 2-(2'-methylprop-2'-enyl)-2-methyl-6,7-dimethoxychroman-4-one have been reported as most common components. Plants have been reported to contain mostly polyoxygenated flavonoids. The ageconyflavone A, ageconyflavone B and ageconyflavone C, 5-methoxynobiletin, linderoflavone B, 5,6,7,3,4,5'-hexamethoxyflavone, 5,6,8,3',4',5'-hexamethoxyflavone, eupalestin, nobiletin, 5,6,7,5'-tetramethoxy-3',4'-methylenedioxyflavone, sinensetin, 5,6,7,8,3', 5'-hexamethoxyflavone, 5,6,7,8,3'-pentamethoxy-4'-hydroxyflavone and 5,6,7,8,3',5'-hexamethoxy-4-hydroxyflavone. The triterpenes, friedelin and the major sterols viz. β -sitosterol, stigmasterol as well as minor sterols, brassicasterol, dihydrobrassicasterol, spinasterol, dihydrospinasterol have been reported from the plant. The leaves also contain a rare sterol, stigmat-7en-3 β -ol. The Alkaloids,

			lycopsamine, echinatine and two isomeric pyrrolizidine alkaloids have been reported from the plant. The other components viz. sesamin, aurantiamideacetate, fumaric acid, caffeic acid, phytol, HCN and hydrocarbons have been reported from the plants. The seed oil contains oleic acid, palmitic, steric, linoleic, linolenic and hexadecenoic acids. Leaves contain 4.69% protein, vitamin-B, fructose, ribose and amino acids. Flowers contain vitamin A, fructose, ribose, glucose, vitamin - B and 9.37% protein ⁵⁰⁸ .		
116.	<i>Anotisfoetid</i> aHook.f.	Bruise /swelling after accidental Injury (<i>Ashibachangba</i> / <i>Esha chaokhatlagana</i> / <i>ba</i>), Cancer, General weakness (<i>eshatinjangba</i> / <i>eshamayengtaba</i> / <i>e-watpa</i>) weakness of infant after delivery / blood purifier	In Chandel (<i>Maring</i> tribe) and Thobal districts, Manipur, India topically used paste of root of <i>A. foetida</i> for treatment of bone fracture and boils ^{509,510} .		
117.	<i>Ananascomosus</i> (L.) Merr.	Respiratory problem, gynecological problem, Kidney stone.	In Nagaland, India, leave and fruits (decoction and Raw) of <i>A. comosus</i> used for treatment of jaundice ⁵¹¹ . In Indo-state, Nigeria, fruit used for treatment of typhoid fever, cough, digestive problem. The rhizome of <i>A. comosus</i> along with rhizome of <i>Aframomummelegueta</i> , <i>Carica papaya</i> , <i>Jatropha curcas</i> and <i>Physalis angulate</i> grounded and soaked in alcohol for 24 hrs. and 100ml given three times in a day before meal for 5 days to treat post natal care, Malaria, Irregular menstrual flow, infertility [305]. In Minas Gerais, Brazil, plant used for kidney problem ⁵¹² . In Western Uganda, fruits feel (by squeezing or boiling) orally used for treatment of excessive bleeding (gynaecological morbidity ailments) in Women ⁵¹³ . In Benue state, Nigeria, Idoma people used decoction of <i>A. comosus</i> fruits for treatment of common cold. The <i>A. comosus</i> fruits and <i>Carica papaya</i> fruits maceration (soak) used for treatment of malaria, fever and common cold ⁵¹⁴ . In Ogun state,	<i>A. comosus</i> peel contains phenols, flavonoid and alkaloid. Plant also contains gallic acid, gentisic acid, syringic acid, vanillin, ferulic acid, sinapic acid, isoferulic acid, o-coumaric acid, protocatechuic acid, tyrosine, syringaldehyde, genistin, taxifolin, 3-hydroxybenzoic acid, 4-hydroxybenzoic acid, chlorogenic acid, epicatechin, quercitrin, transmethoxycinnamic acid, kaempferol, myricetin, chavicol, tyramine, p-coumaroylquinic acid and arbutin ^{517,418} .	<i>A. comosus</i> peel extract reported as anti-rheumatic agent ⁵¹⁹ Pineapple is a rich source of vitamin C vitamin B1, vitamin B6, copper and dietary fibre. Cooked peel cleans blood and alleviates swellings. Juice helps to cure cystitis, and fevers. Pineapple has act as a digestive aid and a natural anti-inflammatory fruit ⁵²⁰ .

		Nigeria, <i>A. comosus</i> , <i>Cymbopogon citratus</i> , <i>Citrus medica Citrus sinensis</i> , <i>Mangifera indica</i> and <i>Vitex doniana</i> boiled together in water or macerated in fermented maize and used one cup three times in a day for treatment of typhoid fever ⁵¹⁵ . The plant also used for treatment of acute irritative cough ⁵¹⁶ .		
118. <i>Alangium chinense</i> (Lour.) Harms	Leprosy (<i>Saru Chasinba</i>), Osteomalitis, Cancer, Hypertension, Dysentery (<i>Eton Phaiba</i>), Malaria, Hypertension, Diarrhea	In China used in folk medicine as analgesic, antirheumatic and muscle relaxant ⁵²¹ . In Hunan herbal medicine it is used for snake bites, circulation, contraception, hemostasis, numbness, poison, rheumatism, and wounds ⁵²² .	6'-O-galloylsalicin; 4',6'-di-O-galloylsalicin; 4',6'-O-(S)-hexahydroxydiphenoylsalicin; 4',6'-O-(R)-hexahydroxydiphenoylsalicin Pyrocatechol 1-O-beta-D-xylopyranosyl (1-->6)-beta-D-glucopyranoside (Itoh et al., 2000). Anabasin (8-1) major alkaloid, Venoterpine (8-2), Ankorine (8-3), Cephaeline (8-4), Psychotrine (8-5) ⁵²¹	Anabasin exerted a significant neuromuscular blocking effect on isolated rat diaphragm preparations. This action could be partly antagonized by neostigmine. On rat denervated diaphragms, anabasin inhibited the muscular response to acetylcholine. Anabasin had a depolarizing effect on isolated frog sartorius muscle. At a concentration of 0.83 μg/ml, it first increased and then decreased the frequency of end-plate potentials but did not alter the nerve terminal potential. Intravenous injection of anabasin caused muscle relaxation in rabbits which lasted more than 1 h. Smooth muscle was only slightly relaxed. In a clinical study, i.v. infusion of anabasin at single doses of 0.25 -0.4 mg/kg caused muscle relaxation in more than 300 patients. In some patients, this effect lasted longer than 180 min ⁵²¹ .
119. <i>Iris germanica</i> L.	Tonsillitis, Cuts wound, burn wound, Bullet wound, crack heel.	In Campania, Southern Italy, rhizome grated, boiled and topically used to treat chilblains ⁵²³ . Traditionally in different countries, the root used as diuretic, emetic, expectorant and mildly purgative. Juice from the root have also used as powerful cathartic and used for the treatment of dropsy, complaints of the lungs, coughs, hoarseness, bronchitis and chronic diarrhoea. Use of root product in large doses, have reported to cause nausea, vomiting, purging and colic ⁵²⁴ .	The rhizomes of <i>I. germanica</i> contains isoflavonoid glycoside includes iridin A, irilone 4'-methyl ether, 5,4'-dihydroxy-6,7-methylenedioxyisoflavone (irilone), irisolidone, irigenin S, irigenin, irilone 4'-O-β-D-glucopyranoside, iridin S, iriside A and iridin. The rhizomes also contain sitosterol and stigmasterol, benzene derivatives, 6,6-ditetradecyl-6,7-dihydrooxepin-2(3H)-one, 1-(2-(6'-hydroxy-2'-methylcyclohex-1'-enyloxy)-5-methoxyphenyl) ethenone, 4-hydroxy-3-methoxyacetophenone,	The compounds Iridin A, irisolidone and irigenin present in <i>I. germanica</i> have reported for α-amylase inhibitory effect ⁵²⁵ . The dried roots of the plants contain essential oil of violent fragrances. The roots have used for making toothpastes and cosmetics ⁵²⁷ . In 1821 Frederick G.S. reported in his supplement to the pharmacopoeia that <i>I. germanica</i> externally

			<p>irisolone, irisolidone and 2-acetoxy-3,6-dimethoxy-1,4-benzoquinone, 2,4,6,4'-tetrahydroxybenzophenone, Acetovanillon (4-hydroxy-3-methoxyacetophenon), rigenin, tectorigenin, dihydroquercetin-7.3'-dimethylether, α-amyrinand β-amyrin, iridal-typetripenes, namely, iripallidal, iriflorental, α-irigermanal, γ-irigermanal, isoiridogermanal, 16-O-acetyl-isoirigermanal and α-dehydroirigermanal, Iridal triterpenoids isolated from the rhizome included irisgermanicals A, B and C, isoiridogermanal, 16-O-acetylisoiridogermanal, a-irigermanal, g-irigermanal, a-dehydroirigermanal, iridal, iriflorental and iripallidal, Irisolidone-7-O--Dglucoside etc ^{426,525,526,110, 524}.</p>	<p>used for repelling eruptions ⁵²⁸. Peeled rhizomes of <i>I. germanica</i> (orrisroots) have used as flavouring agent in ice cream, confectionery and baked foods. In France, starch of <i>I. germanica</i> root have used in famine food for extending bread flour, after removal of the bitter element ⁵²⁴.</p>	
120.	<p><i>Cissusjavan</i> aDC Synonym: <i>C. sicyoides</i></p>	<p>Kidney stone</p>	<p>In Aizawl, Mizoram, India, leaves have chewed for teeth set on edge through eating acidic fruit, paste of roots mixed with salt and applied as poultice for treatment of tumors, decoction of roots, stems and leaves used for treatment of inflamed kidneys ⁵²⁹. In SegaraAnakan Area of Sempu Island, East Java, Indonesia, leaves of <i>C. javana</i> used for treatment of stomach ache ⁵³⁰. In Brazil, <i>C. sicyoides</i> L. used for treatment of diabetes (known as insulin plant or <i>cipo-puca</i>). In Mexico used as anti-inflammatory agent ⁵³¹.</p>	<p>Plants contain amino acids, alkaloids, flavonoids, saponins, tannins and phenolic compounds and fruits have rich content of anthocyanins ⁵³¹. Leaves contains Stigmasterol, Stigmasterol glucoside, Onocer-7-ene 3α,21β-diol, b-amyrin-[olean12(13)-en-3-one], alcohol (<i>Cissusjavanol</i>) and also high content of calcium (2960 mg/100 g), magnesium (465 mg/100 g) and iron (520 mg/100 g) ⁵³².</p>	<p>Aqueous extracts decreases 45% of elevated glucose level in experimental animals after 60 days treatment that regulated by biomarkers including hepatic glycogen, C-reactive peptide etc. ⁵³¹.</p>
121.	<p><i>Cissusadnat</i> aRoxb. (<i>Eshing-pukchatpa</i>)</p>	<p>Kidney stone, Diabetes</p>	<p>In Bakura district, West Bengal, India <i>C. adnataroots</i> paste with termite mound's soil have bandaged for treatment of bone fracture ⁵³³. In Anpara, Sonebhadra, Uttar Pradesh, India, root (40gm) of <i>C. adnate</i> have crush, mixed with cup of water and given twice for 4 days as blood purifier ⁵³⁴. In Bangladesh, bark, leaves, roots and stem of the plant have used for treatment of boil, bruise, bubo, epilepsy, fever, food poisoning, gastric tumour, gingivities, gout, hemi-paralysis, hysteria, jaundice, lipoma, mental disorder, neck pain, obstructive labour, paralysis, paratyphoid, pregnancy complication, rheumatism, snake bite, diuretics, syphilis, blood purifier, elephantiasis and ureterolithiasis</p>	<p>Triterpenoid (Onocer-7-ene 3α,21β-diol), flavonoid (apigenin 8-C-α-D-glucopyranoside/adnatoside), apigenin (β-amyrin [olean-12(13)-en-3-one]) reported in methanolic extract of leaves (Warjeet et. al., 2011). Plants also contains Vitisinol B, (+)-ϵ-viniferin, vitisinol C, vitisinol D, (-)-viniferal, ampelopsin C, miyabenol A, (+)-vitisin A, (+)-vitisin C ⁵³⁶.</p>	<p>The ethanol extract of <i>C. adnata</i> leaves have reported for strong antioxidant, antibacterial, anthelmintic and antinociceptive activities with lower toxicity ⁵³⁵.</p>

535,536,537					
122.	<i>Stephania glabra</i> (Rox b.) Miers	Swelling (Apomba), Inflammation, boils (Naichabaapomba), Diabetes (Eshing-pukchatpa), Male sexual disorder, Skin diseases, Eczma (khuthing), skin rash (phuri), cold (maihing), allergic disease, white patch, Skin infection (thamnakhoklai), Male sexual disorder, Pus in semen (Ishingpukchatp adaphambiyaoda, Phambichatpa, Phambikangba, PhambiYaoda), Cancer, Mouth ulcer, mouth inflammation (Chil le naba).	In Himachal Pradesh, India, stem and tubers of <i>S. glabra</i> used for treatment of asthma and intestinal disorder ^{538,539} . In Meghalaya, India plants have used as anthelmintic agent ⁵⁴⁰ . In Sikkim and Darjeeling Himalayan (West Bengal), India, tribes have used decoction (20-25 ml) with milk two to three times daily for 1-2 weeks to treat diabetes ⁵⁴¹ . In Dinajpur district, Bangladesh, paste of stem of <i>S. glabra</i> and <i>Cissusquadrangularis</i> applied topically to treat bone fracture or sprains 2-3 times daily for several days ⁵⁴² . In Chittagong Hill Tracts, Bangladesh, tribal people have used juice of leave root of the plant for treatment of Urinary trouble and fever ⁵⁴³ . Root: Diabetes, stomach tumors, leprosy, obesity, gout, paralysis, leucoderma, fever, colic, cough, asthma, rheumatism, amoebiasis, purified blood, eye complaint, backache ¹¹⁶ .	<i>S. glabra</i> tuber contains 11-hydroxypalmatine, palmatine, dehydrocorydalmine, and stepharanine (alkaloids), Gindarudine (a morphine alkaloid), N-Desmethylcycleanine (bisbenzylisoquinoline alkaloid), capaurine and corynoxidine (tetrahydroprotoberberine alkaloids), corydalmine, stepholidine, stepharine, jatrorrhizine, palmatrubine, tetrahydropalmatine, gindaricine, magnoflorine, pronuciferine, roemerine, 4',5,7-Trihydroxy-8-C-glucosylisoflavone, Cepharamine, tuduranine, Glabradine, Pronuciferine and cycleanine ^{544,545,546,547,548} .	Gindarudine (a morphine alkaloid) isolated from <i>S. glabra</i> tuber have significant analgesic and anti-pyretic effect on experimental animals ⁵⁴⁵ . The Anthracene Monohydrate alkaloid from the tubers of <i>S. glabra</i> effective for treatment of diabetes mellitus ⁵⁴⁹ .
123.	<i>Areca catechu</i> Linn.	Sinusitis, Rhinitis, respiratory problem, blocked nose, Skin diseases, Eczma (khuthing), skin rash (phuri), cold (maihing), allergic disease, white patch, Skin infection (thamnakhoklai).	In Manikbond, Charangi area of Karimganj district and Chotosalganga of Cachar district, Assam Chorei tribes have soaked nuts in water overnight and used for bating to cure skin rashes and boils. It also used as diuretic ⁵⁵⁰ . In Khamam district, Andhra Pradesh, India, tribes have used paste of stem bark (5 gm) orally with a cup of water once in a day till cure rheumatism ⁵⁵¹ . In Wayanad, Kerala, India, roots of <i>A. catechu</i> grind to a fine paste and applied over the ulcerated area to cure oral ulcer/sore mouth ⁵⁵² . In fringe villages of Chilapatta Reserve forest, West Bengal, India, nuts with betel leaf have masticated to get relief from gastric problems. Young roots of <i>A. catechu</i> and flowers of <i>Hibiscus rosasinensis</i> have crushed together to extract juice. The juice has sieved, added with salt, lightly boiled and consumed twice daily for 3-4 days by women to cure periodic problems of women ⁵⁵³ . The Marwari community, inhabitants of	Arecanut contains 20% polyphenol (mostly flavonols viz. 10% catechin, 2.5% epicatechin, 12% leucocyanidin and other complex flavonoids), 0.5% alkaloids (arecoline, arecaidine, guvacoline and guvacine), 15-17% fat (19.5% lauric acid, 46.2% myritic acid, 12.7% palmitic acid, 1.6% stearic acid, 0.3% decanoic acid, 6.2% oleic acid, 5.4% dodecenoic acid, 0.3% tetradecenoic acid, and 7.2% hexadecenoic acid), minerals (0.05% calcium, 0.13% phosphorus and 1.5% iron), Vitamin B6, Vitamin C, a series of dimeric, trimeric and tetrameric procyanidins ⁵⁶¹ . Fermenol, Arundoin, Mixture of stigmasterol, b-sitosterol, Lauric acid, Benomyl ⁵⁶² .	The Alkaloid arecoline is major constituents of <i>A. catechu</i> for most of their biological effects. However, adverse effects of oral ingestion of <i>A. catechu</i> , causing oral submucous fibrosis (OSF), oral submucous cell carcinoma ⁵⁶³ .

Jodhpur District, Rajasthan, India, uses specially prepared food by mixing *Acacia senegal* (Gum raw powderd 250 g), *Areca catechu* (nut raw powder 15g), *Asparagus racemosus* (root powder 15 g), *Chlorophytum borivilianum* (root powder 30g), *Citrullus lanatus* (Seed powder 30g), *Coriandrum sativum* (seed powder 100g), *Cucumis melo* (seed powder 30gm), *Dactylorhiza hatagirea* (Tuber powder 15 gm), *Elettaria cardamomum* (seed powder 20gm), *Papaver somniferum* (Poppy seed whole 50 gm), *Piper longum* (fruit and root powder 15 gm), *Piper nigrum* (seed powder 15 gm), *Smilax china* (root powder 30 gm), *Symplocos racemose* (bark powder 20 gm), *Trachyspermum ammi* (seed powder 75gm), *Trapanatans* (flour of dried kernels 500gm roasted in 100 g of ghee), *Withania somnifera* (Root powder 40 gm), *Zingiber officinale* (Rhizome powder 50gm), *Raw sugur* (300 gm) and *Gee* (boiled butter 400gm) to make 2kg of formulation. Generally, one *ladoo* (approximately 50gm mixture have taken in hand and rolled to form like ball that can be stored for 60 days in airtight container) have given twice daily, at the time of breakfast and evening high tea for prophylaxis and management of postpartum complications⁵⁶⁶ In Terai and Duars region, West Bengal, India Rajbanshi community have crushed roots of the *A. catechu* together with equal quantity of *Cuscuta reflexa* (whole plant) and mixed with sufficient cold water and filtered. One cup of extract given per day in empty stomach for 21 days (non-veg viz. meat, fish, egg restricted during treatment) for treatment of dysmenorrhea⁵⁵⁴. In Buldhana district, Maharashtra, India stem and leaves of *A. catechu* used for wound healing⁵⁵⁵. In Kurigram district, Bangladesh, roots of *A. catechu* and bark of *Azadirachta indica* boiled together in water used for gargling 2-3 times daily for 3 weeks to treat bleeding from gums, swelling of gums, tingling sensation in gums,

		foul odor in mouth ⁵⁵⁶ . In Gazipur district, Bangladesh, juice of tender fruits of <i>A. catechu</i> used as laxative. The roots of <i>A. catechu</i> , <i>Mangifera indica</i> , <i>Aegle marmelos</i> and <i>Syzygiumcumini</i> paste together and used for tooth problem. The juice of unripe fruit used as stimulant ⁵⁵⁷ . In Sylhet region, Bangladesh the Khasia tribe used tender leaves and fruits for treatment of ulcer, tooth ache, dysentery, joint ache and intestinal worm ⁵⁵⁸ . In Khulna district, Bangladesh, roots of <i>A. catechu</i> crushed with pith of <i>Ananascomosus</i> and the juice orally taken for treatment of stomach pain and helminthiasis ⁵⁵⁹ . In Poncokusumo district, Malang, East Java Province, Indonesia, young stem, fruit used for protection of teeth, dysentery, as cosmetic and wormy ⁵⁶⁰ .			
124.	<i>Smilax lanceifolia</i> R oxb.	General weakness (<i>eshatinjangba / eshamayengtaba / e-watpa</i>) weakness of infant after delivery / blood purifier, Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>mathing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), Cancer	In Malaysia, Jah Hut peoples used crushed leaves of <i>S. lanceifolia</i> for treatment of pricking pain ⁵⁶⁴ . In Thoubal district of Manipur, Meitei community used boiled extract of root for treatment of diabetes ⁵⁶⁵ . In Taiwan, plants used for treatment of urticaria ⁵⁶⁶ .	α -L-rhamnose, β -sitosterol, β -siosterol-D-glucoside, Onocer-7-ene-3 α ,21 β -diol, Adnatoside (Apigenin 8-C- α -D-glucopyranoside), (Neotigogenin), Stigmasterol glucoside, alkaloids, anthraquinone glycosides, terpenoids, phlobotanin, flavonoids, saponin ⁴⁶⁵ .	The plant could be useful for the future research in antibiotics against Methicillin resistant <i>S. aureus</i> ¹¹⁹ .
125.	<i>Clerodendrum bracteatum</i> Wall. Ex Walp.	Tonsillitis (<i>Leithonbi</i>), Piles, fever, Skin Cancer, Wart (<i>Lairensajik</i>), Ringworm (<i>Laikoi</i>) Sinusitis, Rhinitis blocked nose, cut wound, burn wound, bullet wound, crack heel, Leprosy (<i>Saruchasinba</i>), Osteomyelitis.	In Mizoram, India this plant is used for treating diarrhoea ⁵⁶⁸ , Mizo ethnic group of Lunglei district, Mizoram leaves were ground, squeezed and the water was consumed for dysentery and diarrhea ⁵⁶⁹ . In goalpara district of Assam, India, juice of this plant is used for fever and as brain tonic ⁵⁷⁰ . Karbi, Adivasi, Bodo, Mishing, Shan tribes of Assam used Leaf extract to cure diarrhea ⁵⁷¹ .	Alkaloid, flavonoid, terpene, glycoside, phenolic compound and steroid present in the plant. Steroid compound 3-hydroxy 8,10,13,17, 17-penta -methyl -16-propyl -hexadecahydro -naphtho {1,2-g} indole-6-yl)-2-methyl propanone (C ₂₈ H ₄₇ O ₂ N) present in the root of <i>C. bracteatum</i> ⁵⁷² .	Steroid compound C ₂₈ H ₄₇ O ₂ N have antibacterial potetial ⁵⁷² .
126.	<i>Hydrocotyle</i>	Blood	In western Chitwan, Nepal plant	Oleanane-type triterpenoidal	The genistein isolated

	<i>sibthorpioides</i> Lam.	purification, detoxification, Joint pain / arthritis (<i>tang chikpa</i>), gout, muscle pain, Skin diseases/eczema (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>)	juice used as a diuretic and febrifuge ⁵⁷³ . Chinese people of the Hakka ethnic group use it to treat several diseases, including adenolymphitis, herpes zoster and cholecystitis ¹²¹ . It also has some folkloric uses in the treatment of several other minor illnesses including fever, edema, detoxication, throat pain, psoriasis and hepatitis B virus infections in China ^{574,575}	saponins, hydrocosisaponins A-F, saponin, hydrocotyloside VII ⁵⁷⁴ , Genistein ⁵⁷⁵ , Asiaticoside ⁵⁷⁸ . Also, it contains terpenoids includes α -Pinene, Camphene, β -Pinene, Ocimene, β -Caryophyllene, α -Humulene, trans- β -Farnesene, Phytol, Stigmasterol etc. ⁵⁷⁶ , and l-sesamm ⁵⁷⁷ .	from <i>H. Sibthorpioides</i> plantsexerts a preventative effect to ameliorate developing liver injury and even liver fibrosis induced by chronic alcohol administration in rats ⁵⁷⁵ . Asiaticoside isolated from <i>H. sibthorpioides</i> efficiently inhibit hepatitis B virus (HBV) replication both in vitro and in vivo, and asiaticoside may be a major bioactive ingredient in <i>Hydrocotylesibthorpioides</i> ⁵⁷⁸ . Asiaticoside prevents amyloidogenesis that precedes neurodegeneration in patients with Alzheimer's disease ⁵⁷⁹ .
127.	<i>Adenostemma alavenia</i> J.R. Forst. & G. Forst.	Mouth Ulcer, Mouth Inflammation (<i>Chil le naba</i>), Thorn inside skin (<i>Tingkhang Yuba</i>)	In Andaman and Nicobar island, India decoction of <i>alavenia</i> leaves gargled for treating severe toothache ⁵⁸⁰ . In Katchal Island, <i>alavenia</i> leaves mixed with leaves of <i>Blumeabalsamifera</i> and <i>Ocimum sanctum</i> in equal proportions that pounded in pig blood and taken two to three spoonfuls each time twice a day during chronic chest pain ⁵⁸¹ .	11-hydroxylated kauranic acids present in the plants including <i>ent</i> -11 α -hydroxy-15 α -acetoxycaur-16-en-19-oic acid, <i>ent</i> -11 α ,15 α -dihydroxycaur-16-en-19-oic acid, (16R)- <i>ent</i> -11 α -hydroxy-15-oxokauran-19-oic acid, and <i>ent</i> -11 α -hydroxy-15-oxo-kaur-16-en-19-oic acid ⁵⁸² . Its also contains 11-oxygenated kauran-19-oic acids, adenostemmoic acids A-G, glycosides, paniculosides II & III and adenostemmosides A-G ⁵⁸³ .	<i>ent</i> -11 α -hydroxy-15-oxokaur-16-en-19-oic acid and adenostemmoic acid B has cytotoxicity against L-5178Y culture cell and prolonged the survival of L-5178Y cell infected mice ⁵⁸³ .
128.	<i>Canthium gracilipes</i> Kurz	Diabetes (<i>Eshing-pukchatpa</i>)	No record found	No record found	No record found
129.	<i>Melothriapepusilla</i> (Blume) Cogn.	Liver enlargement/fatty liver (<i>PhirakNanthaba</i>), Diabetes (<i>Eshing-pukchatpa</i>), Jaundice (<i>Thongak</i>)	In Purulia district of West Bengal, India root used for treating Syphilis ¹²⁵ . Used for treating Jaundice, Kidney problem, fever, diarrhoea in Manipur, India ⁵⁸⁴ .	The flavonoids, cardiac glycosides, triterpenes, steroids and tannins present in the plant ^{585,586} .	<i>M. perpusilla</i> extracts have exhibited hepatoprotective and hypoglycemic effects in animal studies ^{584,586} .
130.	<i>Musa acuminata</i> Colla	Piles (<i>Nungshang</i>), Cancer.	In Arunachal Pradesh, India, young leaves used as Poultice in burns injury and boiled flowers eaten with salt and oil for curing joint pain and to improve blood circulation, In Manipur and Mizoram, India, tender leaves used for dressing wounds and blistered skin, in Kerala, India, ash of burned leaves inhaled by asthma patients, in Assam, West Bengal, Meghalaya, India, root used as	Anigorufone, Apigenin, β -Sitosterol, Dopamine, Episesami Methoxyanigorufone, Naproxen, Phenylphenalenones, Pyranone Sesamin. Fruits contains Vitamin-C, Thiamine, Riboflavin, Niacin, β -Carotene, α -Carotene, Cryptoxanthin, Sodium, Potassium, Calcium, iron, Magnesium, Zinc, Malic acid, Oxalic acid, Citric acid, Alkaloids, Saponins, tannins, terpenes, flavonoids (quercetin,	The plant exhibited antimicrobial effect ⁸ , and leishmanicidal activity ⁵⁹⁰ .

		anthelmintic ⁵⁸⁷ . In Tripura, India, Fruit, leaf, flower used for allergy, infections, bronchitis, dysentery ⁵⁸⁸ .	proanthocyanidins, catechin) pro-vitamin carotenoids, Banana Lectin (Ban-Lec), Banana thaumatin-like protein (Ban-TLP), Banana endo-β1,3-glucanase, anthroquinones, cardiac glycosides, carbohydrates, glycosides, proteins, Phenols, epicatechin, ellagic acid, caffic acid etc. ⁵⁸⁹ .		
131.	<i>Solanum indicum</i> Linn.	Fever (<i>Nupigie-napakhatpa</i>), Mouth Ulcer, Mouth Inflammation (<i>Chil le naba</i>), Blood purifier, detoxification, General weakness.	In Assam, India bark used for treatment of Peptic ulcer ⁵⁹¹ .	Carotene, carpesterol, solanocarphone, diosgenin, β-sitosterol, lanosterol, solavetivone, solafuranone, scopoletin N-(ptranscoumaroyl) tyramine, N-trans-feruloyltyramine, indiosides, phytosterols, steroidal glycosides, steroidal glycoalkaloids, Flavonoids fatty acid ⁵⁹² .	Hpatoprotective,anthelminic,antimicrobial,antioxidant activity ⁵⁹³
132.	<i>Cajanuscajan</i> (L) Millsp. (<i>Thongak</i>)	Jaundice	Zeliang tribe of Nagaland, India used decoction (20 leaves in 500 mL water boiled for 20 min) of <i>C. cajan</i> leaves as gargle for treatment of tonsil, oral ulcers and bed odour of mouth. The decoction also used orally (20 ml) twice a day for jaundice. About 30-40 tender pods boiled with one liter buffalo milk and taken with normal meal to induce lactation in woman ³⁸¹ . In Raipur, Chattisgarh, India, leaves and seeds used for as wound healer and abortifacient ⁵⁹⁴ . In Bhowraguri Village of Kokrajhar District, Assam, India cooked leaves used orally for treatment of diabetes ⁵⁹⁵ . In Susunia hill of Bankura district, West Bengal, India paste of leaves used orally for treatment of Jaundice ⁵⁹⁶ . In South-western Nigeria leaves of <i>C. cajan</i> used as poultice (topically) and concoction (orally) for treatment of Cancer ⁵⁹⁷ . In Quissma City in northern of the of Rio de Janeiro State, Brazil plants used for treatment of Ulcers, Sores, airways problem and also as anti-haemorrhagic, diuretic agent ²⁹⁸ . In Bangladesh, leaf juice used for treating gout, jaundice, diabetes and seed paste used as energy booster as well as stimulant ^{598,599} .	Plants contain Cajanol ⁶⁰⁰ , Cajachalcone ⁶⁰¹ , Longistylin A and C ⁵⁹⁷ . Cajaninstilbene acid ⁶⁰² . Flavonoids distributed in different parts of the <i>C cajan</i> plant. Leaves contains Apigenin, vitexin, Isovitexin, Apigenin-6,8-di-C-α-r-arabinopyranoside, Luteolin, Orientin (flavones), Quercetin, Isorhamnetin (flavonols), Naringenin, Pinostrobin (flavanones), Pinostrobin chalcone and Biochanin A (Isoflavone). Roots and stems contain Biochanin A, Cajaisoflavone, Genistein, Z'-Hydroxygenistein, Isogenistein 7-glucoside, Cajanin, 4'-O-methylcajanin, Formononetin, Cajanol (also present in leaves and seed), Cajanone, 2'-O-Methylcajanone (Isoflavones),Cajaflavanone (flavanones) ⁶⁰³ .	Longistylin A and C present in the methanolic leaves extract of <i>C. cajan</i> responsible for cytotoxic effect on cancer cells ⁵⁹⁷ . Cajanol isolated from roots is a novel anticancer agent ⁶⁰⁰ . Cajachalcone isolated from methanol extract of leaves have potent antimalarial effect ⁶⁰¹ .
133.	<i>Ziziphusoena</i> (L.) M	Cancer, Heart problem, Chest Pain	In Hasanur hills, Erode District, Tamil Nadu, India, bark and fruit paste along with cumin orally to treat diarrhea traditional knowledge on medicinal plants used by the Irula tribe of ⁶⁰⁴ . In Paderu Division,	Plants contains cyclopeptides of the 5(13)-zizyphine-A type (zizyphine A-C,F,and K),4(14)-amphibine-B type (zizyphine H), 4(14)-amphibine-F type (zizyphine G),4(14)-frangulanine-type (franguloline), 4(15)-	Ziziphine N and Q, alkaloids isolated from <i>Z. oenoplia</i> exhibited significant antiplasmodial activity against the parasite <i>Plasmodium falciparum</i> ⁶⁰⁷ .

		Visakhapatnam District, Andhra Pradesh, India, bark and stem used for treatment of acidity ⁶⁰⁵ . In Rewa district, Madhya Pradesh, India, ripe fruits are eaten to control dysentery and also relief from burning sensation during urination ⁶⁰⁶ .	mucronine-A type (abyssinine A–B and zizyphine D–E) and 5(14)-amphibine-B type (amphibine B and mauritine D) and Ziziphine N and Q ⁶⁰⁷	
134.	<i>Bryophyllu mmpinnatum</i> (Laikoi), (Lam.)Kruz. Jaundice (Thongak)	In Malappuram district, Kerala, India, tribal communities used <i>B. pinnatum</i> for treatment of Snake bite ⁶⁰⁸ . In assam, India, leaf used for treatment of Epilepsy, inflammation ²⁷ . In Akwa Ibom state, Nigeria, leaves of the plant used externally (Crushed and applied) for treatment of Scorpion sting, insect bite, boils, bruise, skin ulcer, burns ⁶⁰⁹ . In Rawal town, Pakistan, leaves used for treatment of wound and Insect bites ⁶¹⁰ . In Trinidad, leaves used for treatment of Common cold & cough, High blood pressure, diabetes, Asthma and Kindly stones ⁶¹¹ . In Barisal district, Bangladesh, leaf used for treatment of gastric problem, Gallbladder stone ⁶¹² . In South-Western Nigeria, fruit used for treatment of Haemorrhoids ⁶¹³ . In Plateau State, Nigeria, leaves decoction used orally for treatment of anxiety ⁶¹⁴ .	In ethanolic extract contains Saponins, Flavonoids, Steroids, Alkaloids, Tannins, Cardiac glycosides, Reducing sugars, Hexadecanoic acid, methyl ester (11.08%), Hexadecanoic acid, ethyl ester (18.08%), 9,12-Octadecanoic acid, (z,z)-methyl ester (21.64%), 9-Octadecenoic acid, methyl ester, (2.95%), Linoleic acid ethyl ester, 9,12-Octadecadienoic acid, ethyl ester ^{615,616} . Leaves also contains astragalol, 3,8-dimethoxy-4,5,7-trihydroxyflavone, friedelin, epigallocatechin-3-o-syringate, luteolin, rutin, kaempferol, quercetin, quercetin-3-L-rhamnosido- L-arabino furanoside; quercetin-3-O diabinoside, kaempferol-3-glucoside, kaempferol-3-O - α -L-arabinopyranosyl (1 \rightarrow 2) α -L-rhamnopyranoside, quercetin-3-O- α -L-arabinopyranosyl (1 \rightarrow 2) α -L-rhamnopyranoside and 4',5'-dihydroxy-3',8-dimethoxy flavone-7 O- β -D-glucopyranoside. The plant contains α -amyrin, α -amyrinacetate, β -amyrin, β -amyrinacetate, bryophollone [8], bryophollone, taraxerol, Ψ -taraxasterol, pseudo taraxasterol, 18- α -oleanane, friedelin, glutinol. The cardienolide and steroidal contents includes β -sitosterol, bryophyllol, bryophynol, bryophyllin B (Antitumor), bryophyllin A [1] (bryotoxin C, bufadienolide 1,3,5-orthoacetate) with potent cytotoxicity, a insecticidal bufadienolide bryophyllin C and bersaldegenin-3-acetate, bryotoxin A, bryotoxin B, bersaldegenin-1,3,5-orthoacetate, campesterol, 24-ethyl-25-hydroxycholesterol, isofucosterol, clionasterol, codisterol, peposterol, 22-dihydrobrassicasterol, clerosterol, 24-epiclerosterol, 24-ethyl- desmosterol, 25-methyl-5 α -ergost-24-en-3- β -ol, ergosta-5-24-	Quercetin-3-o- α -L-arabinopyranosyl (1 \rightarrow 2)- α -L-rhamnopyranoside showed anti allergic activity in rats. Bersaldegenin- 1, 3, 5-orthoacetate inhibited growth of several cancer cell lines ⁶¹⁷ .

			<p>dien-3-β-ol, 25-methyl-ergosta-5-24 -dien 3-β-ol, 5α-stigmast-24-en-3-β-ol, (24s)-stigmast-25-en-3-β-ol, (24r)-5α-stigmasta-7-25-dien-3-β-ol, (24s)-5α-stigmasta-7,25 dien-3-β-ol, 24(R)-stigmasta-5,25-dien-3β-ol, stigmasterol, patuletin, 3-O-(4-O-acetyl-α-L-rhamnopyranosyl)-7 O-(2-O-acetyl-α-L-rhamnopyranoside) patuletin, 3-O-α-L- rhamno pyranosyl-7-O-(2-O-acetyl-α-L-rhamnopyranoside) patuletin, 3-O-(4-O-acetyl-α-L-rhamnopyranosyl)-7-O rhamnopyranosidepatuletin are isolated from aerial parts. Fatty Acids, Minerals and Others. Fatty acid fraction includes palmitic acid (89.3%), stearic acid (10.7%), traces of arachidic and behenic acid. Plant also contains HCN, oxalic acid, citric acid, isocitricacid, oxaloacetate, malic acid and succinic acid. The plant is rich in vitamins and aminoacids; ascorbic acid, riboflavin, thiamine, niacin, pyridoxine, glycine, cysteine, casein hydrolysate, glutamic acid, protein hydrolysate, methionine, tyrosine, phenylalanine ⁶¹⁷.</p>	
135.	<p><i>Terminalia citrina</i> (Gaertn.) Roxb.</p> <p>Tuberculosis (<i>Lok Thungba</i>), Piles (<i>Nungshang</i>), Jaundice (<i>Thongak</i>), antidote for wrong medication/detoxification, Iatrogenic, Constipation</p>	<p>In Upper Subansiri district of Arunachal Pradesh, India, fruit used for treatment of constipation and gastric problem ⁶¹⁸. In Bhola district, Bangladesh, fruit with other medicinal plants used for blood purification, scabies, eczema, itches, joint pain, rheumatism, piles ⁶¹⁹. In Mashhad, Iran, used fruit as purgative, liver tonic, antihemorrhoids and also for treatment of constipation ⁶²⁰.</p>	<p>Plants contain Triterpenes, flavonoids, tannins ⁶²¹. Leaves contain α-keto tetrahydrofuran lignan glucosides (terminalosides Q to W) ⁶²².</p>	<p>Isolated compounds from <i>T. citrina</i>, Terminaloside R inhibited estradiol-enhanced cell proliferation in T47D and MCF-7 cells at concentrations of 0.01 mM and 0.1 mM, respectively. On the other hand, terminaloside T, cell proliferation selectively in T47D cells at a concentration of 0.01 mM ⁶²².</p>
136.	<p><i>Clerodendrum serratum</i> (Linn.) Moon</p> <p>Allergic rhinitis, asthma, fever</p>	<p>Used in malarial fever, nervous disorder and ophthalmic complaint, As blood purifier used by Bhilalatribals of Buldhana district, Maharashtra, As febrifuge and in fever (in children also) used by West Dinajpur tribals of Bengal, Purulia district tribals of West Bengal, Visakhapatnam district tribals and Western part of Andhra Pradesh, Snake bite used by Boudh district of Odisha, Applied over the dog bite wound used by Wayanad district of Kerala state, Applied to cure fever, as a</p>	<p>Bark contains Oleanolicacid, Queretaroicacid and Serratogenic acid (Terpenoids), Bauer-9-en-3-one. Leaves contains Serratin, Lupeol (Terpenoids), α-spinasterol (Sterols), 7-β-coumaroyl-oxyugandoside and 7-β-cinnamoyl-oxyugandoside (Iridoids), (+)-catechin, Caffeic acid, Ferulic acid, Acteoside and Martynoside (Phenyl propanoids), Luteoline 7-O-β-D-glucuronide, Luteolin, Scutellarein, Apigenin (Flavonoids). Roots contains Ursolic acid, Icosahydricpicenic</p>	<p>The aerial parts and roots of <i>C. serratum</i> reported for potential anti-rheumatic activity ⁶²⁴. Methanolic extract of <i>C. serratum</i> roots reported for alpha glucosidase inhibitory potential. Many clinical reports reported for remarkable antiasthmatic effects of a classical Ayurvedic formula "<i>Bhar- angyadi</i>" that containing <i>C. serratum</i> as a major</p>

		febrifuge and in hiccough used in North Cachar hills district of Assam, For stomach disorder and diarrhea used in Poba reserved forest region of Assam, Applied on cuts, itching, rashes lesions in erysipelas and wounds to mitigate the glandular swellings and hasten the wound healing used by the people of Nilgiris region of Tamilnadu, Buldhana district of Maharashtra, Konkan region ⁶²³ .	acid, (Terpenoids), γ -sitosterol (Sterols). Stem contains Ursolic acid, Bauer-9-en-3-one (Terpenoids), β -sitosterol, Spinasterol, Spinasteryl- β -D-glucopyranoside (Sterols), 5-hydroxy-7,4-dimethoxy flavones (Flavonoids) and Sucrose (disaccharide). Twigs contains Bauer-9-en-3-one (Terpenoids), Spinasterol, Spinasteryl- β -D-glucopyranoside (Sterols) and Sucrose (disaccharide). Aerial parts contain Se-saponin A (Terpenoids), Stigmasterol, Bis(2-ethylhexyl) phthalate, Serratumin A (Sterols), Serratoside A, Serratoside B (Iridoids), Acteoside, Martynoside, Serratumoside - A and Myricoside (Phenyl propanoids) and Flavonoid namely 40,5,7-trihydroxy-flavone ⁶²³ .	ingredient. Sachdev et. al. was the first group of scientists who experimentally studied the antihistaminic potential of <i>C. serratum</i> . A crystalline polyhydric alcoholic fraction of <i>C. serratum</i> root identified that cause a delayed secondary fall in blood pressure accompanied with broncho constriction and that inhibited by the anti-histaminic drugs ⁶²³ .
137. <i>Allium odorum</i> Linn.	Urinary tract problem, kidney problem, Stomach Problem, Gastric Ulcer (<i>RukChatpa</i>)	In Longleng district, Nagaland, India leaves used for treatment of Urinary problems ⁶²⁵ . In Manipur, India leaf decoction is taken for urinary disorder and leaf paste is applied on head for improving hair growth ⁶²⁶ .	Dimethyl sulfide, dialylsulfide, methylalylsulfide, dimethyl trisulfide, diallyl disulfide, methylallyl trisulfide, and dimethyl tetra sulfide, , steroid/triterpenoid, sodium, potassium, phosphor, magnesium, mangan, vitamine A, B1, B2, C, sulphur, quersetin-3-glicoside, glucose, galactose, ferulic acid, pcoumaric acid, malic acid, citric acid, and linoleic acid , saponins, Tannins, Phenols, Flavonoids, Volatile oil, Amino acids and alkaloids present in the plant ^{627,628,629} .	A formulation prepared from <i>Allium Odorum</i> , <i>Allium sativum</i> , <i>Tinosporacordifolia</i> , <i>Adhatodavastica</i> and <i>Tridaxprocumbens</i> to treat coccidiosis and Pantent published under International Patent Classification – WIPO/PCT ⁶³⁰ . The formulation with 4% w/v <i>Allium odorum</i> leaves extract using mint flavour was the most liked formula ⁶²⁹ .
138. <i>Melia azedarach</i> Linn.	Fever (<i>Nupigi-E-Na Pakhatpa</i>), Diabetes (<i>Eshing-Pukchatpa</i>), Piles (<i>Nungshang</i>).	In kerala India bark, leaves and flower oil used as antidiarrhoeal, deobstruent, diuretic. In Bangladesh, bark and leaves used for rheumatic pain, used in fever, nausea, vomiting, general debility, loss of appetite, stomachache, tooth pain, scabies. In East Africa, stem bark infusion and root bark used to treat gonorrhoea, malaria, parasitic worms (anthelmintic), In Pakistan, dried ripe fruit used as external parasiticide and pericarp of fruit used for diabetes etc. ⁶³¹ .	Plants contain terpenoids, flavonoids, steroids, acids, anthraquinones, alkaloids, saponins, tannins. Roots of the plant contains terpenoids and limonoids like 6-Acetoxy-7a-hydroxy-3-oxo14 β , 15 β -epoxymeliac-1.5-diene, 6-Acetoxy-3 β -hydroxy-7-oxo14 β , 15 β -epoxymeliac-1,5-diene-3-0- β -D-glucopyranoside, Azecin-1, Azecin-2, Azecin-3, Azecin-4. Flavanoids like Apigenin-5-O- β -D-galactopyranoside; Steroids like 24-Methylenecydoartanol, 24-Methylenecydoartanone, 4-Stigmastanen-3-one, 4-Campestene-3-one β -Sitosterol, β Sitosterol-B-D-glucoside; Acids like Trans-cinnamic acid, Vanillic acid (4-Hydroxy-3-methoxy benzoic acid). Root bark contain terpenoids and limonoids like 12-	<i>M. azedarach</i> , an ayurvedic medicine in India and Unani medicine in Arab countries as an antioxidative, analgesic, anti-Inflammatory, insecticidal, rodenticidal, antidiarrhoeal, deobstruent, diuretic, antidiabetic, cathartic, emetic, antirheumatic and antihypertensive ⁶³¹ .

O-Acetyl azedarachin-A, 12-OAcetyl azedarachin-B, 1-Acetyl-3-tigloyl-11-methoxy meliacarpinin, 12-O-Acetyl trichilin-B, 2 α -Acetyl-29-deacetyl-29- isobutyrylsendanin, Azedarachin-A, Azedarachin-C, 1Cinnamoyl-3-acetyl-11-methoxy meliacarpinin, 1-Cinnamoyl-3-hydroxy-11-methoxy meliacarpinin, 1-Deoxy-3-methacrylyl-11- methoxy meliacarpinin, 1-Deacetyl nimbolinin-B, 1,12-Diacetyl trichilin-B, 7,12-Diacetyl trichilin-B, 29-Isobutyl sendanin, Meliacarpinin, E, Nimbolidin-B, Salannal, Salannin, 1-Tigloyl-3-acetyl-11-methoxy meliacarpinin, 1-Tigloyl-3,20-diacetyl-11-methoxymeliacarpinin, 3-Tigloyl-1,20-diacetyl-11-methoxymeliacarpinin, Trichilin-B, Trichilin-D, Trichilin-H. They also contain steroids like 6- β -Hydroxy-4-canpesten-3-one, 6- β -Hydroxy-4-Stigmasten-3-one, Azeclarachol

Fruits contain terpenoids and limonoids like 6-Acetoxy-14,15-epoxy-3,11- dihydroxymeliaca-1,5-diene-7-one, Amoorastatin, Amoorastone, Azedirachtin-A, 1-Cinnamoyl-3, 11-dihydroxy-meliacarpinin, 1Cinnamoylmelianolone, 1-Cinnamoyl melianone, Compositin, Compositolide, 1-O-Deacetyl ohchinolide-B, 29-Deacetyl sendanin, 1-Deacetyl nimbolinin-A, 3-Deoxymelianone, 21,23: 24,25-Diepoxy-tirucall-7-ene-21-ol, 3-Epimelianol, 3-Epimeliantriol, Gedunin, 12- α -Hydroxyamoorastatin, Meliandiol, Melianol, Melianolone, Melianone, Melianoninol, Meliantriol, Meliatoxin-A1, Meliatoxin-A2, Meliatoxin-B1, Meliatoxin-B2, Nimbolidin-A, Nimbolinin-A, Nimbolinin-B, Ohchinal, Ohchinin, Ohchinin acetate, Ohchinolal, Ohchinolide-A, Ohchinolide-B, Sendanal, Sendandal, Sendanin, 3-O-Tigloylohchinin, Vilasinin. 21- β -Acetoxymelianone, Methyl kulonate, 3- α -Tigloylmelianol.

They also contain acids like Stearic acid (octadecanoic acid), Trans-cinnamic acid. Leaves contain terpenoids and limonoids like 1-Cinnamoyl-3-acetyl-11-hydroxy

			<p>meliacarpin, 1-Cinnamoyl3-methacrylyl-11-hydroxy meliacarpin, Deacetyl salannin, 1,3- Dicinnamoyl-11-hydroxy-meliacarpin, α-Pinene, β-Pinene, αTerpinene, α-Terpineol, Kaempferol-3-O-β-rutinoside, Kaempferol-3-L-rhamno-D-glucoside, Rutin. They also contain acids like Palmitic acid (hexadecanoic acid). Stem bark contain terpenoids and limonoids like 7a-Acetoxy-14β,15β-epoxygedunani-ene-3-O-β-D-glucopyranoside, 12-Acetoxyamoorastatin, Amoorastatin, Fraxinellone, 12-Hydroxyamoorastatin, 3-Hydroxy eupha-7,24-diene-21,16-olide, Kulactone, Kulinone, Kulolactone, Methylkulonate, α-Pinene, β-Pinene, α-Terpinene, α-Terpineol. They also contain flavonoids like 4', 5-Dihydroxy flavone-7-O-u-L-rhamnopyranosyl-(1-4)-β-D-glucopyranoside, Anthraquinone like 1,3,5,8-Tetrahydroxy-2-methyl anthraquinone; 8-Me ether, 3-O-α-L-rhamnopyranoside, 1,5-dihydroxy-8-methoxy-2-methyl-anthraquinone-3-O-α-L-rhamnopyranoside, 1,8-dihydroxy-2-methyl anthraquinone-3-O-β-D, galactopyranoside. Stem wood contain terpenoids and limonoids like Melianin-A, Melianin-B Seeds contain terpenoids and limonoids like 3 β, 7aDihydroxy-21,23-epoxy-apotirucalla-14,24-diene-21-one, Meldenin. They also contain steroids like Campesterol, Cholesterol, Stigmasterol and acids like Linoleic acid, Oleic acid (9-octadecenoic acid), Linolenic acid⁶³¹.</p>		
139.	<p><i>Tinosporaco rdifolia</i>(Will d.) Hook. F. &Thoms.</p>	<p>Urinary tract problem, kidney problem, stomach problem, gastric ulcer (<i>PukChatpa</i>), male sexual disorder (<i>IshingPukchatp adaPhambiYaoda/PhambiChatpa</i>), Pus in Semen, Headache</p>	<p>The pills are prepared from the paste of stem of the <i>Guduchi</i> (<i>T. cordifolia</i>) and the roots of <i>Bhatkatiaya</i> (<i>Solanum surattense</i>) in Baiga, living in the interior areas of Naugarh and Chakia blocks of Varanasi district, Uttar Pradesh. The whole plant is used by the tribals of Mumbai and its neighboring areas and the fishermen along the sea coast, Powdered root and steam bark of <i>T. cordifolia</i> with milk for cancer in The tribals of Khedbrahma region in north</p>	<p>The plant contains Berberine, Palmatine, Stem Tembetarine, 0.012%), Magnoflorine, 0.075%), Choline, Tinosporin, Isocolumbin, Palmatine, Root Tetrahydropalmatine, Magnoflorine, 18-norclerodane glucoside Stem Furanoid diterpene glucoside, Tinocordiside, Tinocordifolioside. Cordioside, Cordifolioside A, Cordifolioside B27, Syringin, Syringin-apsiosylglycoside, Palmatosides C31, Palmatosides F31, Cordifolioside A, Cordifolioside B,</p>	<p>A formulation prepared from <i>Allium Odorum</i>, <i>Allium sativum</i>, <i>Tinosporacordifolia</i>, <i>Adhatodavasica</i> and <i>Tridaxprocumbens</i> to treat coccidiosis and Patent published under International Patent Classification – WIPO/PCT⁶³⁰.</p>

	(<i>KokChikpa</i>), Migraine, General weakness (<i>Esha Tinjangba/Esha Mayengtaba/E- Watpa</i>), Weakness of infant after birth, and Blood purifier.	Gujarat , Two drops of juice of leaves of allied species or <i>Guduchi</i> (<i>T. sinensis</i>) are dropped in the affected ear used in Local people of Patiala (Punjab), Juice of stem orally with honey in The inhabitants of Badala (UP), Paste of whole plant used as plaster in fracture by Mundas of Chhota Nagpur ⁶³² .	Cordifoliside C, Cordifoliside D, Cordifoliside E, Clerodane derivatives and [(5R,10R)-4R-8R- dihydroxy-2S-3R,16- diepoxy- cleroda-13 , 14-dieno-17,12S: 18,1S-dilactone and Tinosporon, Tinosporides and, Jateorine, Columbin, b -sitosterol, d- sitosterol, 20b- Ecdysterone, Makisterone A, Giloinsterol . Octacosanol, Heptacosanol, N- trans-feruloyl tyramine as diacetate, Giloin, Giloinin, Tinosporic acid. Cordifellone, Tinosporidine, Cordifol, hydroxy- 3-methoxy-benzyl)- tetrahydrofuran. Jatrorrhizine ⁶³³ .	
140. <i>Mirabilis jalapa</i> L.	Gynecological problem	In Gulbarga district, Karnataka, warmed leaf used as poultice over abscesses; promot wound healing, root paste applied over inflamed parts ³²³ . In Ilam district, Nepal, root of the <i>M. jalapa</i> used orally for treating uterine diseases of women ⁶³⁴ . The Tharu and Magar communities of western Nepal, used leaf juice as demulcent and applied over boils ⁶³⁵ . In China, Maonan people used root Boiled with meat and drunk the soup for treating leucorrhoea, abnormal menstruation, prostatitis, metrorrhagia ⁶³⁶ .	Plant contains alkaloids, flavonoids, phenols, steroids, triterpenes, glycosides, tannins, saponins and lignins.Plant also contains β -sitosterol-D-glucoside and β -amyrin-3-O- α -L-rhamnosyl- O- β -D-glucoside, arabinose, campesterol,daucosterol and dopamine, d-glucan, hexacon-1-ol, indicaxanthin, isobetanin, 6- methoxyboeravinone, C- methylabronisoflavones, miraxanthins, n-dotriacontane, n nonacosane, n-pentacosane, n- triacontane, 3'-Methylenebis (4- hydroxycoumarin, N-D-alpha- Phenyglycine, laminaribitol, 3- (4-(dimethylamino) cinnamoyl) 4- hydroxycoumari. Four rotenoids,mirabijalone A–D, boeravinone C and F, together with 9-O-methyl-4-hydroxyboeravinone B and 1, 2, 3, 4-tetrahydro-1- methylisoquinoline-7, 8-diol also isolated from the plant ⁶³⁷ .	Plant contains Pharmacologically active compounds include active compound-3,3'- Methylenebis (4- hydroxycoumarin) N-D- alpha- Phenyglycine,laminaribi itol-3-(4-(dimethylamino) cinnamoyl), 4- hydroxycoumarin. Due to it high adsorption properties it may useful in cosmetic and pharmaceutical indurties. It may also suseful in the food industries due to flavour/essences and other fuctional substances ⁶³⁷ .
141. <i>Phaiustanke rvilleae</i> (L'Her.) Blu me	Cancer	In Arunachal Pradesh, India, Pseudobulbs used for treatment of swellings of hands and legs and also used poultice for curing pain of abscess ⁶³⁸ . Local people of Cherrapunji, Meghalaya, India used Pseudobulbs for treatment bone fractures and dysentery ⁶³⁹ . In Nepal, dried tubers of <i>P. tankervilleae</i> commonly used as tonic in traditional healing system ⁶⁴⁰	Not reported	<i>P. tankervilleae</i> , a medicnal and aromatic orchid has high market value ⁶³⁸ .
142. <i>Phlogacanth usthysifloru</i> s(Roxb. ex Hardw.) Mabb.	Skin diseases/ eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch,	In Tripa, Papum pare, Lower Dibang valley district, Arunachal Pradesh, India, leaf water decoction used for treatment of stomach ache and scabies ⁶⁴¹ . In Assam, India, Inflorescence boiled or baked with dried fish or meat	Leaves contains alkaloids, saponins, phytosterols, phenols, tannins, flavonoids, coumarins, and diterpenes. More specifically, Aspidocarpine, Ajmaline, Harmin, Hydroquinidine, Bilobalide, 1-	The flower extract significantly reduced elevated blood glucose level, serum cholesterol and increase liver glycogen in experimental animals ⁶⁴⁵ . Ajmaline

	<p>Skin infection (<i>thamnakhoklai</i>), Fever (<i>Nupigi-E-Na Pakhatpa</i>), Joint pain, arthritis (<i>tang chikpa</i>), gout, muscle pain, High Blood pressure (Hypertension), Blood in stool, Urine (<i>Dhatu Naba</i>), Paralysis (<i>MakhongMakhi</i>), Piles (<i>Nungshang</i>), Respiratory problem, Jaundice (<i>Thongak</i>).</p>	<p>and eaten as chutney for treating stomach ache. Whole plant used in fever, skin disease, abdominal tumour, chronic bronchitis, asthma, dysentery, haemoptysis, painful swellings, neuralgia, scabies, malaria and whooping cough. Fruit and Leaf ash is used in fever by Jaintia tribe of Meghalaya and Karbi tribe of Assam. Flowers used as antidote to pox; prevents skin diseases like scabies, sore; used in jaundice. Aerial portion used for making curry and eaten orally to cure allergy used by the people of Meghalaya and Assam⁶⁴². In Andro village of Manipur, India, leaves of <i>P.thyrsiflorus</i>, <i>Scutellariadiscolor</i> and <i>Swertiachirata</i> 40 g each boiled together in two litres water in a closed vessel and the steam so liberately exposed to abdominal portion. 5 ml of the concoction also given orally once a day for 3 days. Leaf of <i>P. thyrsiflorus</i>, <i>S. discolor</i> and tender shoot of <i>Arundo donax</i> in the ratio 40 g each boiled in 2 litres of water and the steam liberated exposed to all body parts for a week period for treatment of irregular menstrual problem in women⁶⁴³.</p>	<p>naphthalenecarboxaldehyde, Sparteine, L-Histidine and Terbutylazine-2-hydroxy present in the leaves as major compounds⁶⁴⁴. Flower contains, flavonoid, phenol, tannin, saponin, steroid and trace amount of alkaloid⁵⁴⁶.</p>	<p>present in the plants have potent anti-arrthmic effect⁶⁴⁶.</p>
143.	<p><i>Adhatodava sica</i> (L.) Nees</p> <p>Gynaecological Problem, Piles (<i>Nungshang</i>), Fever (<i>Nupigi-E-Na Pakhatpa</i>), Cough</p>	<p>In Jaunsar-Bawar hills, Uttar Pradesh, India, Leaf decoction or ash with honey used for treatment of cough, asthma and tuberculosis⁶⁴⁷. In Gurgaon district, Haryana, India, leaf of <i>A. zeylanica</i>, roots of <i>Glycyrrhiza glabra</i> and twigs of <i>Azadirachtaindica</i> extract together and used for bronchial troubles⁶⁴⁸. Gorakhpur, Kushinagar and Maharajganj district of Uttar Pradesh, India, powdered roots of <i>A. vasica</i> used for treatment of malaria⁶⁴⁹. In Chandrapur district, Maharashtra, India, leaf decoction used for treatment of asthma, diarrhea, dysentery, fever, vomiting, cough, as a throat emollient. Flowefer used for eye disorder and roots extract used for treatment of stiffness of neck⁶⁵⁰. In Satpuda region of Dhule and Jalgaon districts of Maharashtra, India, <i>A. vasica</i> leaves used for treatment of asthma, diarrhea, dysentery, throat emollient and checks bleeding. Flowers used for eye disorder. Root extract used for</p>	<p><i>A. vasica</i> leaves contains alkaloids, thepyrrolo [2, lb]quinazoline alkaloids <i>lvasicine</i>, <i>l-vasicinone</i>, <i>l-vasicol</i>, <i>anisotine</i>, <i>3-hydroxyanisotine</i> and <i>vasnetine</i>^{658,659}. The roots containterpenoids, flavonoids, tannins, cardiac glycosides, alkaloids, reducing sugars and saponins^{660,661}.</p>	<p>Alkaloid present in <i>A. vasica</i> has potent anti-inflammatory effect⁶⁵⁹. <i>Vasicine</i>, <i>Vasicinone</i> and <i>Vasicinol</i> present in the plant have shown effect as potent Bronchodilator that justified folklore used of the plant for treatment of the asthma⁶⁶¹.</p>

		stiffness of neck ³¹⁴ . In west Midnapur district, West Bengal, India, leaves and bark used for Chronic cold and cough, piles, leprosy, diabetes ⁶⁵¹ . In coastal district of Odisha, India, 10ml leaf juice with 10 ml honey used three times in a day to cure chronic cough ⁶⁵² . In Tumkur district, Karnataka, India, one cupful of decoction of <i>A. vasica</i> leaves, <i>P. nigrum</i> and <i>A. sativum</i> used for treatment of malaria ⁶⁵³ . In Dehradun, Uttarakhand, India, leaves, flower, fruit, root used for treatment of cold, cough, whooping cough, chronic bronchitis and asthma ⁶⁵⁴ . In Rewa district, Madhya Pradesh, India, leaves used for treatment of persistent cough and as an insecticide ⁶⁰⁶ . In Khordha district, Odisha, India, a handful leaves boiled in 5000 ml water and women bath with cold filtered decoction for treatment of body swelling after child delivery (post natal care). Few flowers fried with Ghee, mixed with desired amount of honey and used for treatment of cough/cold. A handful of leaves and Piper longum boiled in water and used decoction twice a day with honey for treatment of fever ⁶⁵⁵ . In Bangladesh, green leaves used for treatment of Cough, cold ailments, asthma, dysentery ⁶⁵⁶ . In Talash valley, Northern Pakistan, leaves decoction used for treatment of Tuberculosis and asthma ⁶⁵⁷ .		
144.	<i>Asparagus racemosus</i> Willd. Skin Cancer, Wart (<i>LairenSajik</i>), Ring worm (<i>Laikoi</i>), Male sexual disorder (<i>IshingPukchatpa</i>) <i>PhambiYaoda</i> / <i>PhambiKangba</i> / <i>PhambiChatpa</i>), Pus in Semen	In Chhattisgarh, India, root of <i>A. racemosus</i> used for treatment of internal pain, tumors and also used as tonic ⁶⁶² . In Yercaud hill, Tamil Nadu, India, plant tuber pastes topically used for treatment of snake bite ⁶⁶³ . In Rewa district, Madhya Pradesh, India, tuberous roots boiled and women are used for seven days to increase lactation ⁶⁰⁶ . In Dehradun, Uttarakhand, India, roots are used for treatment of stomach infection, cold and also used as blood purifier ⁶⁵⁴ . In Dhenkanal district of Odisha, India, 5 gm tuberous root powder mixed with 10 gm of suger candy and used for one month for treatment of blood in urine or related urinary troubles ⁶⁶⁴ . In Livingstone, Southern Province,	<i>A. racemosus</i> contains steroidal saponins (shatvarins i.e. Shatvarin I-VI), among those Shatvarin I found as major glycoside. Oligospirostanoside (mmunoside), Polycyclic alkaloid (Aspargamine A), Isoflavones-8-methoxy-5, 6, 4-trihydroxy isoflavone-7-0-beta-D-glucopyranoside, Cyclic hydrocarbon (racemosol, dihydrophenantherene), Furan compound (Racemofuran), Carbohydrates (Polysaccharides, mucilage), Flavanoids (Glycosides of quercetin, rutin and hyperoside are present in flower and fruits), Sterols (Roots contain sitosterol, 4, 6-dihydroxy-2-O (-2-hydroxy isobutyl) benzaldehyde and undecanyl cetanoate), Kaepfrol (Kaepfrol	Racemoside A, racemoside B and racemoside C present in the fruits and roots of the <i>A. racemosus</i> plant exhibited potent Anticarcinogenic and antioxidant effect. Racemofuran, asparagamine A and racemosol present in the root of the plant have reported for Immunostimulant, gastroduodenal ulcer protective and anti hepatotoxic potential. 8-methoxy-5,6,4'-trihydroxyisoflavone-7-O-β-dglucopyranoside present in the root

		Zambia, whole plant is boiled and decoction used for treatment of Pneumonia, cough, diarrhoea, and syphilis ⁶⁶⁵ . In Khordha district, Odisha, India, root powder with suger candy juice used at bed time for treatment of Spermatorrhoea ⁶⁶⁵ .	along with Sarsapogenin in woody portions of tuberous roots) also present in the plant. Trace minerals present in roots-zinc (53.15), manganese (19.98 mg/g), copper (5.29 mg/g), cobalt (22.00 mg/g) along with calcium, magnesium, potassium zinc and selenium. Essential fatty acids-Gamma linoleinic acids, diosgenin, quercetin 3-glucourbnides, vitamins A, B1, B2, C, E, Mg, P, Ca, Fe, and folic acid,Oligofurostanosides(curillins G and H) and spirostanosides (curilloside G and H) found in the plant ^{666,667} .	reported for antitussive, antidiarrhoeal, antiulcerogenic potential and also effective in diabetic retinopathy ⁶⁶⁷ .
145. <i>Mentha arvensis</i> Linn.	Malaria, Cancer	In Satpuda region of Dhule and Jalgaon districts of Maharashtra, India, <i>M. arvensis</i> plant used as stomachic, anthelmintic and diuretic. It also used to cure bad taste of mouth, indigestion, constipation and worms ³¹⁴ . In Uttarakhand, India, leaves used as anthelmintic and antiemetic ⁶⁶⁸ . In Sangina Pakistan, whole plant orally used as Carminative, Stomachic, Diuretic, Stimulant ⁶⁶⁹ . In Khyber Pakhtunkhwa, Pakistan, leaves used for treatment of diarrhoea and dyspepsia. Decoction used as mouth wash ⁶⁷⁰ . In Talagang, Punjab Province, Pakistan, fresh keaves grinded with small pieces of peel tomato and green chilli with 1-2 teaspoon of salt and paste used before meals for treatment of gastric problems. Also, fresh leaves juice used (half cup in a day) for treatment of stomach acidity ⁶⁷¹ . In Goias, Brazil, Leaf used for treatment of Flu Soothing and insomnia ⁶⁷² . Malakand district, Pakistan, leaves used for treatment of diarrhea and fever ⁶⁷³ . In Mato Grosso, Brazil, levaea syrup used for tertment of flu ²⁹⁵ .	<i>M. arvensis</i> leaves ethanolon extract contains Tannins, Flavones, flanonol, xantones, flavanonols, flavanones and steroid ⁵⁷⁴ . Leaves essential oil contains α -Pinene, β -Pinene, Sabinene, β -Myrcene, D-Limonene, 1,8-Cineole, <i>trans</i> - β -Ocimene, <i>cis</i> - β -Ocimene, Terpinolen, Linalool, Menthol, α -Terpineol, Menton, Izomenton, <i>cis</i> -3-Hexynylisovalerate and pulegone, Methyl acetate, somenthol, β -Caryophyllene, Decyl anhydride, 1-Decanol, α -Tepineol, Germacrene D and Piperitone ⁶⁷⁵ . Its also contains ethanol-insoluble conjugates of caffic, ferulic and p-coumaric acids. Acetone fraction contains acylated anthocyanins containing p-coumaric acid and caffeic acid. Plant contains higher amount of xanthophylls, suckers cantains 3- <i>O</i> - β -sitoseryl-glucopyranosyl- (1 α \rightarrow 2)-fructofuranoside and sucrose. flower extract contailsLinarin (acacetin-7- <i>O</i> -beta-d-rutinoside). Stem oil contains 78.16% menthol, shoot have β -caryophyllene oxide and α -phellandrene and terpinolene present in stolon (stem and leaf) oils. The leaves and stem contain glycolipids mainly Monogalactosyl diglycerides, digalactosyl diglycerides and phospholipid, Phosphatidylcholine. Linolenic, palmitic acid present in leaves and other tissues ⁶⁷⁶ .	Aqueous extract of <i>M. arvensis</i> (0.1 mg/ml) had a significantly attenuated histamine release from rat peritoneal mast cells activated by compound anti-DNP immunoglobulin E (IgE) as well as anti-DNP IgE-mediated TNF-alpha production. The results suggested that extractpotentially inhibited immunologic and non-immunologic stimulation-mediated anaphylactic reactions and TNF-alpha production from rat peritoneal mast cells. Pnat extract also capable of inhibit human platelet aggregation induced by arachidonic acid as well as by adenosine diphosphate without effecting the platelet activating factor ⁶⁷⁶ .
146. <i>Dactylocteni umaegyptiu m</i> (L.) P.Beauv.	Skin Cancer, Wart (LairenSajik), Bad Breathing (Halitosis)	In Barrak valley, Assam, India, the fresh plant juice used for treatment of fever ⁶⁷⁷ . In JambudiaVidi at Saurashtra region, Gujarat, India, plant externally used for treatment of ulcer, wounds and as vermifuge.	<i>D. aegyptium</i> plant contains carbohydrates, proteins, amino acids, terpenoids, alkaloids, saponins, tannins, flavonoids, steroids, fixed oils and phenols. Specifically, the aqueous extract	Ethanolic extract of <i>D. aegyptium</i> had shown significant antifertility potential on experimental female animals ⁵⁸⁴ . The ethyl acetae and n-hexane

	<p>Decoction of seeds or grains used for pain in kidney⁶⁷⁸. In Wayanad district, Kerala, India, plants used for treatment of worm infection, wounds, kidney pain and ulcer⁶⁷⁹. In Andro, Imphal East district, Manipur, India, the tender leaves are crushed along with <i>Centellaasiatica</i> and the juice mixed with honey is used daily in the morning as a very good tonic. The whole plant boiled with the leaves of <i>Toonaciliata</i>, <i>Setariapumila</i>, <i>Eupatorium cannabinum</i> and <i>Phragmites karka</i> and the decoction is used for bath to cure skin diseases and skin allergy. The whole plant crushed with the tender shoots of <i>Ecliptaprostrata</i>, <i>Centellaasiatica</i>, <i>Agave cantala</i>, <i>Eryngium foetidum</i> and the extract used for treatment of severe typhoid fever, ulcers and other stomach complaints⁶⁸⁰. In Nilgiris, Tamil Nadu, India, whole plant and seed used for treatment of dysentary, inflammation and urinary diseases⁶⁸¹. In Hafizabad district, Punjab, Pakistan, <i>D. aegyptium</i> root, seed and whole plant paste orally or topically used for treatment of Kidney stone, uterus problem, stomachache, wounds and ulcer¹⁰. In Kotli district, Pakistan, plants extract used for wound healing⁶⁸².</p>	<p>contains carbohydrates, proteins, amino acids, saponins, flavonoids and tannins. Hydroalcoholic extract contains carbohydrates, proteins, amino acids, saponins, flavonoids, tannins, terpenoids and alkaloids. Ethanolic extract contains carbohydrates, proteins, amino acids, saponins, flavonoids, tannins, terpenoids and alkaloids. Ethylacetate extract contains flavonoids, tannins, terpenoids and alkaloids, while, chloroform and n-hexane extracts had Terpenoids. Plant also contains cynogenic glycosides, oxalic acid oxalates, glutamic and aspartic acids, cystine and tyrosine 5-hydroxypyrimidine-2,4 (3H,5H)-dione; 6'Glyceryl asyngangoside, and 2 amino, 2 methyl, (5,6 di hydroxymethyl), 1,4 dioxane P. hydroxy benzaldehyde, triclin, P. hydroxy benzoic acid, vanillic acid, β-sitosterol-3-O-β-D-glucoside, asyngangoside adenine, uridine and sucrose^{683,684}.</p>	<p>extract have exhibited potent cytotoxicity against hepatocellular carcinoma cells (HepG-2), colon carcinoma cells (HCT-116) and breast carcinoma (MCF-7) human tumor cell lines⁶⁸⁴.</p>
<p>147. <i>Psidium guajava</i> Linn Diarrhea</p>	<p>In Arunachal Pradesh, India, Monpa ethnic group used leaves raw/decoction with citrus fruit juice and salt for treatment of diarrhoea and cough⁶⁸⁵. Dinalupihan, Bataan, Philippines, the Ayta communities orally used decoction of leaf, peel and fruit of <i>P. guajava</i> for treatment of Diarrhea, stomach ache, dizziness, toothache, cleaning of the uterus after pregnancy, phlegm, colds, indigestion, oral sores and wounds⁶⁸⁶. In the Mountainous Regions of Nepal, hot water extract of dried leaves used for control of blood glucose level [687]. In Bayabas, Sablan, Benguet Province, Luzon, Philippines, leaves decoction, ashed, freshly eaten/chewed, applied as poultice, steam bath for treatment of diarrhoea, cough, skin allergy, fever,</p>	<p><i>P. guajava</i> leaves contains alkaloids, Tannins, Anthocyanines, Ascorbic acid, Cardiac glycosides, Tri-terpenoids as well as phenolics and flavonoid compounds viz. gallic acid, Catechin, Chlorogenic acid, Caffeic acid, Epicatechin, Rutin, Quercitrin, Isoquercitrin, Quercitrin, Kaempferol, Luteolin^{694,695}. Volatile oil of the leaves of <i>P. guajava</i> contains α-Pinene (1.53%), Benzaldehyde (0.83%), p-Cymene (0.52%), Limonene (54.7%), 1, 8-Cineole (32.14%), b-cis-Ocimene (0.28%), c-Terpinene (0.38%), α-Terpineol (1.79%), b-Caryophyllene (2.91%), α-Humulene (0.77%), Monoterpenes Hydrocarbons (58.24%), Sesquiterpenes Hydrocarbons (3.68%), and 33.93% Monoterpenes Oxygenated compounds⁶⁹⁶. Leaves of the plant also contains</p>	<p>In two randomized clinical trials on human, the consumption of <i>P. guajava</i> fruit for 12 weeks had reduce blood pressure by an average 8%, decrease total cholesterol level by 9%, decrease triglycerides by almost 8% and increase HDL cholesterol by 8%. The effects were attributed to the high potassium and soluble fiber content of the fruit. In another clinical trial on 62 infants with infantile rotaviral enteritis, the recovery rate was 3 days in those treated with <i>P. guajava</i>, and diarrhoea ceased in a shorter period than controls. It was concluded in that</p>

		athlete's foot, wound, scabies, asthma, toothache 688. In BarkinLadi Local Government Area, Plateau State, Nigeria, entire plant used for treatment of diarrhea ⁶⁸⁹ . In Tarlac province, Central Luzon, Phillipines, leaves decoction and bark extract tea used for treatment of diabetes ⁶⁹⁰ . In Kakamega county, western Kenya, bark root and fruit boiled extract used orally for treatment of sexual transmitted infection and nausea ⁶⁹¹ . In Nhema communal area, Zimbabwe, decoction of leaves drunk for treatment of cough, flu and fever ⁶⁹² . In central region of Togo, leaves decoction used for treatment of diabetes ⁶⁹³ .	guajanoicacid, β -sitosterol, uvaol, oleanolic acid and ursolic acid ⁶⁹⁷ .	particular study that guava has 'good curative effect on infantile rotaviral enteritis. Also, in a double-blind clinical trial of a Phytodrug (QG-5) developed from <i>P. guajaba</i> , leaf showed a decrease in duration of abdominal pain, which is attributed toantispasmodic effect of quercetin present in leaf extract ⁶⁹⁸ .	
148.	<i>Datura stramonium</i> Linn.	Piles (<i>Nungshang</i>), Swellings (<i>Apomba</i>), Paralysis (<i>MakhongMakhatChingsillakpa, SingliNaoriSont haba</i>)	In Niti valley of Alaknanda catchment in Centrel Himalaya, Uttarakhand, India, Bhotiya community used seed paste for treatment of Rheumatism by rubbing 5gm on effected joint, twice in a day ⁶⁹⁹ . In Taindol village, Jhansi district, Uttar Pradesh, India seed and root used for the treatment of Pain, Asthma, Boil, fever, Headache, Glaucoma, Mothion Sickness, Rattlesnake bites, Respiratory tract infection, Sores, Sprains, Swelling, Toothache, Tumors, Urinary difficulties, Urinary tract infection ⁷⁰⁰ . In North Shewa Zone of Oromia Regional state, Ethiopia seed and leaf used for treatment of Toothache and Dandruff ⁷⁰¹ . In Hawassa Zuria district, Southern Ethiopia, Sidamapeople orally used fresh leaf juice for treatment of Malaria and Ticks parasite infection ⁷⁰² . In Oba town in Idemili South Local Government Area, Anambra State, Nigeria, leaf, bark, root and stem used for treatment of diabetes and Hypertension ⁷⁰³ .	The <i>D. stramonium</i> contains saponins, tannins, carbohydrates, proteins, alkaloids and glycosides. The major tropane alkaloids hyoscyamine predominate in stems and leaves of young plants. Apart from hyoscyamine plants also contains atropine, scopolamine like alkaloids. Plants also contains 3-phenylacetoxy-6,7-epoxynortropane, 7-hydroxyapoptropine, scopoline, 3-(hydroxyacetoxy) tropane, 3-hydroxy-6-(2-methylbutyryloxy) tropane, 3a-tigloyloxy-6-hydroxytropane, 3, 7-dihydroxy-6-tigloyloxytropane, 3-tigloyloxy-6-propionyloxytropane, 3-phenylacetoxy-6,7-epoxytropane, 3-phenylacetoxy-6-hydroxytropane, aponor scopolamine, 3a, 6a-ditigloyloxytropane, 7-hydroxyhyoscyamine, Hygrine, 3a, 6a-Ditigloyloxy-7-hydroxytropane, 6-Hydroxyhyoscyamine, Pseudotropine, 3a-Tigloyloxytropane, Hydroxy-6-tigloyloxytropane, Phenylacetoxytropane, 3-Tigloyloxy-6-(2-methylbutyryloxy) tropane, Hyoscyamine, 3-Tigloyloxy-6-isovaleroyloxy-7-hydroxytropane, Scopolamine, Tropinone, Scopine, 6-Hydroxyacetoxytropane, 3,6-Diacetoxytropane, 3-Tigloyloxy-6-acetoxytropane, 3-Tigloyloxy-2-methylbutyryloxytropane, 3a, 6a-Ditigloyloxytropane, 3-Acetoxy-6-isobutyryloxytropane, 3-(2	The ethanol extract found suitable to manage the two-spotted spider mite as a repellent/acaricidal. Ethanolic extract of the plant exhibited significant anti-inflammatory activity. The ethanolic extract of leaves exhibited mosquito repellency properties. However, plant product used for treatment of asthma in mother during prenatal development caused permanent damage to the foetus due to continuous release of acetylcholine and consequent desensitization of nicotinic receptors ¹⁷⁷ .

149. <i>Tagetes erectus</i> Linn.	Ligament Injury (<i>SingliThuppa/KhongTekpa</i>), Kidney stone	In Kashipur, Uttarakhand, India, fresh leave used for treatment of deafness and eczematous condition ⁷⁰⁴ . In Dubri wild life sanctuary of Sidhi District, Madhya Pradesh, India, two teaspoonful of leave juice orally used with honey for few days to treat irregular menstruation ⁷⁰⁵ . In Buldhana district, Maharashtra, India tribal population used leaves and flower for wound healing ⁵⁵⁵ . In western Taloda tehsil, Nandurbar district, Maharashtra, India, crushed leaves paste externally applied at evening for seven days for treatment of Ringworm ⁷⁰⁶ . In Samudrapur Tahsil of Wardha district, Maharashtra, India, leave juice pour in ear to treat Ear infection ⁷⁰⁷ . In Chiapas, Mexico leaves of the plant used for treating diarrhea and stomach pain ⁷⁰⁸ . In Laguna, Philippines, pounding leaves used as poultice for treatment of wounds ⁷⁰⁹ . In Rangamati district, Bangladesh, the Chakma Indigenous community used 1-2 teaspoonful of leaf juice twice daily for 5 days to treat piles ⁷¹⁰ .	Phenylpropionyloxy) tropane, Littorine, 6-Hydroxyapoaotropine, 3a, 6a-Ditigloyloxy-7-hydroxytropane, 3-Tropoyloxy-6-acetoxytropane, 3,6-Dihydroxytropane, 3aTigloyloxytropane, 3-Tigloyloxy-6-propionyloxy-7- hydroxytropane, 3á-Apotropoyloxytropane, Aposcopolamine, 3a, 6a-Ditigloyloxytropane, 3-(3'-Acetoxytropoyloxy) tropane, 3á-Tigloyloxy-6-hydroxytropane, Tropine, 3-Acetoxytropane, 3-Hydroxy-6-acetoxytropane, 3-Hydroxy-6-methylbutyryloxytropane, 3-Tigloxy-6-isobutyryloxytropane, Aponorscopolamine, 7 Hydroxyhyoscyamine, Meteloidine, 3a, 6a-Ditigloyloxytropane ¹⁷⁷ .	Twenty-two naturally occurring phytoconstituents were isolated from the various fractions of ethanolic extract of flower of <i>T. erecta</i> . They were β – sitosterol, β -daucosterol, 7-hydroxysitosterol, lupeol, erythrodiol, erythrodiol-3-palmitate [711], 1-[5-(1-propyn-1-yl)-[2,2-bithiophen]-5-yl]-ethanone, α - terthienyl, quercetageiti, quercetageitin- 7- methyl ether, quercetageitin-7-O-glucoside, kaempferol, syringic acid, gallic acid, 3- β -galalctosyldisyringic acid, 3 α galalctosyldisyringic acid, 6-ethoxy-2,4- dimethylquinoline, oplodiol, (3S,6R,7E)-hydroxy-4,7-megastigmadien-9-one, palmiti, ethylene glycol linoleate, and n-hexadecane. identified from the stem as leaves of <i>Tageteserecta</i> plant as 4'- methoxy-eupatolitin-3-O-glucoside, kaempferitrin, rutin, betasitosterol, daucosterol and gallic acid. About 19 phytochemicals were identified from methanol extract sample of leaves of <i>T. erecta</i> . The major bioactive compound present are Tetra decanoic Acid, 2,6,10-Trimethyl 14 – ethylene – 14 – Pentadecme, N – Hexadecanmic acid, 15-Hydroxy penta decanoic acid and Stigmaterol. About 31 phytochemicals were identified from methanol extract sample of flowers, the major compounds	The reported bioactivities of the plant used for industries, specially in food industries it may as natural antioxidant and antimicrobial preservatives in active packaging system ⁷¹³ .
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			were hexadecanoic acid, 7-Tetra decenal (z), Vitamin E and Norolean – 12 – ene. The major biocomponent of flowers of <i>T. erecta</i> is carotenoid; includes all trans and cis isomers of zeaxanthines (5%), all trans and cis isomers of lutein, and lutein esters (88%) ⁷¹² .	
150.	<i>Toonaciliate</i> M. Roem. (<i>Sarei</i>), Astringent and tonic, dysentery, and wound healer	Epilepsy In Lwali village, Pauri Garhwal, Uttarakhand, India, bark of the <i>T. ciliate</i> used for healing wounds ⁷¹⁴ . In Tehri Garhwal district (Western Himalayas), Uttarakhand, India, bark used for treatment of Chronic infantile, dysentery, cough, bronchitis, intermittent fever, leprosy, skin, ulcer ⁷¹⁵ . In Sargodha District, Pakistan, Crused bark paste externally used to treat ulcer. Chewing flower to promote menstrual discharge. Decoction of bark used as gargle. Dried leave powder used internally with table salt and water once daily for treatment of diabetes ⁷¹⁶ . In Khyber Pakhtunkhwa, Pakistan, leaves used for treatment of fever, diabetes, skin infection, dysentery, wounds and ulcer ⁷¹⁷ .	Plant contains Coumarin glycosides, flavonoids, phytosterol, Phynol, tenins, triperpenoids, Limonoids, Ca, P, Mn, Zn, Ni, Fe, K and Mg ⁷¹⁸ .	The plant products exhibited Cytotoxic, anti-ulcer, antibacterial and antimicrobial effect ⁷¹⁸ .
151.	<i>Bruceajavanica</i> (L.) Merr Cuts wound, Burn injury, Bullet wound, Crack heel	In Lipis district, Pahang state, Malaysia, decoction of stem bark used for treatment of malaria ⁷¹⁹ . In the West coast and Interior of Sabah, Malaysia, ripe fruit used to treat malaria and Stomach-ache, fruit used for treating Influenza ⁷²⁰ . In Phatthalung Province, Peninsular Thailand, whole plant decoction used for treatment of malaria ⁷²¹ . In Bengkulu, Indonesia, <i>Mukomuho</i> ethnic people used plant to treat malaria ⁷²² .	Stems of <i>B. javanica</i> contains quassinoids, brujavanol C and brujavanol D and brujavanol A. The stems also contain bruceine E, 5a,14b,15b-trihydroxyklaineaneone, bruceine D, bruceine H and bruceine F. Roots contains brujavanol B, 11-dehydroklaineaneone, 15b-hydroxyklaineaneone, 14,15b-dihydroxyklaineaneone and 15b-O-acetyl-14-hydroxyklaineaneone ⁷²³ . Twigs containfourteen compounds Brujavanone A-N ⁷²⁴ . Seeds contains quassinoid, yadanziolide S and yadanziolide B. seeds also contains flazin, bruceine D, bruceoside A, yadanzigan, glycerol 1,3-bisoleate azelaic acid, (±)-8-hydroxyhexadecanoic acid, vanillin ⁷²⁵ .	The bruceine D, and bruceine H isolated from stems of <i>B. javanica</i> have exhibited potent antimalarial activity against <i>Plasmodium falciparum</i> ⁷²³ .
152.	<i>Hedychium marginatum</i> C.B. Clarke Constipation	In Sadar hill, Senapati district, Manipur, India, rhizome and leaves used as Carminative, stimulant, tonic and also to treat bronchitis ⁷²⁶ . In Tupul area of Tamenglong district, Manipur, India decoction of rhizome internally used to treat stomach complains ¹⁸⁶ .	The plant contains Alkaloids, Proteins, Phynols-Tannins, Flavonoids, Saponins, Glycosides, Steroid, Terpenoids and Oils ⁷²⁷ .	The amount of trace elements viz. Zinc, Iron molybdenum, found in the rhizome saple of the plant those elements necessary for the normal function of the immune system in human ⁷²⁸ .
153.	<i>Drymariacordata</i> (Linn.) Sinusitis, Rhinitis,	In Coimbatore district, Tamil Nadu, India, juice of plant used	The Plant, <i>D. cordata</i> contains alkaloids (pyrrolizidine), Saponins	Stigmasterol present in the <i>D. cordata</i> have been

) Willd	blocked Nose, Epistaxis (<i>Nahitaba</i>), Respiratory problem.	externally to treat wound ⁷²⁹ . In Bongaigaon district, Assam, India, leaf of <i>Phyllanthus fraternus</i> Webster, <i>Hydrocotyle Sibthorpioides</i> Lamk, <i>Centella asiatica</i> (L.) Urban, <i>Leucas plukenetii</i> (Roth) Spreng, <i>Centipeda minima</i> (L.) A. Br & Asch and <i>Drymaria cordata</i> Willd. crushed together and boiled with half liter water. The decoction mixture orally used with pinch of salt 3 tablespoon thrice a day before food for 5-8 days continuously to treat jaundice. 1-2 table spoonful dosage advisable for children or adolescence man or women. Patients have specially instructed to drink hot water after taking every dose and not allowed to take curd, spicy food, fish, meat, turmeric, only boiled food advisable during treatment ⁴⁷³ . In Upper Assam, India, extract of bark of <i>Mangifera indica</i> Linn and whole plant of <i>D. cordata</i> along with small amount of lime orally used thrice daily in the empty stomach for treatment of Jaundice ⁵⁹¹ . In Kamakhya Hills, Assam, India whole plant paste externally locally used to treat breast tumor ⁷³⁰ . Dhemaji district, Assam, India, <i>D. cordata</i> plant boiled with <i>Paedaria scandens</i> leaves in 1:1 ratio and filtered used twice a day during menstruation to treat fertility problem ⁷³¹ . In Arunachal Pradesh, India paste of plant externally applied on forehead to treat headache. In West Kameng district, warm leaves inhaled to treat headache. Adi tribes used leaves for treatment of skin diseases and ring worm. In Dibang valley, Mishrni tribes used the plant for treatment of tooth ache. In Assam, India, the roasted in banana leaves and used for treating gastrointestinal trouble. The tender shoots used for treating asthma and sinusitis. In Manipur, India, plant used to treat dysentery. In Meghalaya, India, plant used for treatment of dysentery, skin diseases, burns wound, stomach problems. In Nagaland, India, Plant used for treating snake bite, mouth diseases, to remove caterpillar hair from the body. In Sikkim, India, Bhutia, Lepcha and	(pentacyclic triterpenoid type), Cordatamine, cordacin (the anti-leukemic substances), Succinic acid, Alpha-spinasterol, caproic, caprylic, capric, lauric, myristic, palmitic, stearic, oleic, linoleic and linolenic fatty acids ⁷³⁶ . The fresh aerial parts of the plant contain Stigmasterol, erebroside, acylated stigmasteryl glucoside, Stigmasteryl glucoside, glucocerebroside, monogalactosyldiacylglycerol, and digalactosyldiacylglycerol ⁷³⁷ .	reported for analgesic and anti-inflammatory activity. The leaf extract of plant reported for cytotoxic properties against HeLa (Cervical cancer), HT29 (Colon cancer), and MCF-7 (breast cancer) Cell lines ⁷³⁸ . The plant also contains, cordacin, an anti-leukemic substance ⁷³⁶ .
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154.	<i>Plumbago indica</i> Linn.	<p>General weakness (<i>Esha Tinjangba</i>, <i>Esha MayengTaba</i>, <i>E-watpa</i>), Weakness of infant after birth, Blood purifier, Blood in stool/ Urine (<i>Dhatu Naba</i>), Backache (<i>KhwangNaba</i>), Psychiatric problem</p>	<p>Dhemaji district, Assam, India, roots worn as garland to expel embryo for anti-implantation properties⁷³¹. In Tripura, India, leaf juice internally used to treat jaundic and root paste externally applied to treat snakebite⁷³⁹. In Yelagiri hills, Tamil Nadu, India, root used for treatment of dyspepsia, inflammation, Colic, Cough⁷⁴⁰. In Chittagong hill tracts, Bangladesh, root juice of the plant externally used with coconut (<i>Cocos nucifera</i>) oil to treat swellings, rheumatism and paralysis. Also, decoction of root orally used 2 cups in a day for treating rheumatism²⁶³. In Barisal District, Bangladesh, leaf juice internally used for treating diarrhea⁶¹².</p>	<p>The <i>P. indica</i> plant contains Alkaloids, steroids, flavonoids, reducing sugars and amides⁷⁴¹. Plant root contains naphthoquinonoids, plumbagin (5-hydroxy-2-methyl-α-naphthoquinone) as major constituent, flavonoids, palmitic acid, myricyl palmitate, plumbagic acid lactone, ayanin (3,7,4', tri-O-methylquercetin) and azaleatin⁷⁴².</p>	<p>The acetone extract of <i>P. indica</i> stems exhibited estrogenic and antiestrogenic properties that indicated its antifertility activity⁷⁴³. The plumbagin (5-hydroxy-2-methyl-α-naphthoquinone) a major constituent <i>P. indicareported</i> for antitumor, antibacterial, antifungal and insecticidal properties⁷⁴².</p>
155.	<i>Bombax ceiba</i> Linn.	<p>Skin diseases/eczma (<i>khuthing</i>), skin rash (<i>phuri</i>), cold (<i>maihing</i>), allergic disease, white patch, Skin infection (<i>thamnakhoklai</i>), mouth ulcer, mouth inflammation (<i>Chil le Naba</i>), Male sexual disorder (<i>IshingPukchatp adaPhambiYaoda</i>, <i>Phambi</i>, <i>Kangba</i>, <i>PhambiChatpa</i>), Pus in Semen</p>	<p>In West Bengal, India, Oraon tribe use about 30g seed powder of <i>Bombax ceiba</i> and 10g hing (dried latex exuded or gum oleoresin from the rhizome or tap root of <i>Ferulaassa-foetida</i>) as abortifacient. In the Southern Rajasthan, India, half a cup of ethanol (alcohol) extract of bark and flower used internally for 3 days by both men and women to treat sexual diseases like hydrocele, leucorrhoea, gonorrhoea and to check menstrual disorders in women. In Orrisa, India, the kandhantribe orally uses one teaspoon juice of fresh stem bark of <i>B. ceiba</i>, along with one teaspoon freshroot juice of <i>Asparagus racemosus</i>, powder of sevenblack peppers (<i>Piper nigrum</i>) and one teaspoon of sugar to treat gonorrhoea, impotency, spermatorrhea, sterility, nocturnal</p>	<p><i>Bombax ceiba</i> contains 6-O-(β-D-galactopyranosyluronic acid)-D-galactose Lupeol, β-sitosterol, Naphthaquinone, Naphthol, Naphthol ether, Desmethyl naphthol, Hemigossylic acid lactone-7-methyl ether, Isohemigossypol, Isohemigossypol-1-methyl ether, Isohemigossypol-2-ethyl ether, Isohemigossypol-1,2-dimethyl ether, Isohemigossypolon-2-methyl ether, Isohemigossypol-2,7-dimethyl ether, 7-Hydroxycadalene, Hemigossylic acid lactone-2,7-dimethyl ether, Hemigossylic acid lactone-2-hydroxy-7-methyl ether, Hemigossylic acid lactone-7-hydroxy-2-methyl ether, Polysaccharide, β-Sitosterol-3-O-β-D-glucopyranoside, Hentriacontane, Hentriacontanol, Kaempferol, Quercetin,</p>	<p>Almost all parts of the plant i.e root, stem-bark, leaf, flower, fruit, seed, gum, thorns and silk-cotton are reported to possess medicinal potential in various ethnobotanical studies. However, its roots, stem-bark and flowers are employed maximally to treat various ailments. The plant is used mostly for treatment of gastrointestinal and skin diseases, gynaecological and urinogenital disorders, general debility, diabetes and impotence. Many of these folk claims have been validated scientifically in animal and human studies world wide⁷⁴⁹.</p>

emission and leucorrhoea. It is also prescribed to increase sperm in semen and act as aphrodisiac. In Sitamata wildlife sanctuary of Chittorgarh and Udaipur district, Rajasthan, India bark, flower and powdered root barks used to treat hydrocele, leucorrhoea, gonorrhoea, menstruation, urinary problems and as a tonic. In Arunachal Pradesh, India, the Lohit Community externally used fresh paste of bark with cow dung on back of leg muscle at night to treat hotness and inflammation. In Uttar Pradesh, India, the tribes of Sonbhadra district uses root powder as a tonic to treat impotency, a powder of stem prickles to treat asthma and seed paste externally applied to treat small-pox boils. In Eastern Rajasthan the tender twig used as toothbrush to cure mumps, powder flower mixed with honey for menorrhagia, the thorn paste prepared in unboiled milk and applied as ointment on the face to get rid of acne, the thorn is crushed and chewed with stem bark of *Cordia gharaf* to cure mouth sores. The root powdered internally used with *Chlorophyllum*, *Capparis sepiaria* and fruits of *Pedaliium murex* as tonic to calm body heat, root bark extract is use as tonic in case of sexual debility and also nervine tonic. Root powder used with sugar candy and milk to treat impotency⁷⁴⁴. In Guna district, Madhya Pradesh, India, tribes used root for surgical dressing in case of wounds and also to increase sexual vigor⁷⁴⁵. In Chhattisgarh, India, the Kamar tribes used crushed fresh root as toothpaste, twice a day for a week to treat toothache. Root paste also externally applied to treat wounds⁷⁴⁶. In Bishnupur district, Manipur, India, the Chothe tribe use bark, fruit and flower to treat female disease, skin diseases and snake bite⁷⁴⁷. In the hilly tract areas of East Godavari district, Andhra Pradesh, India, root powder orally used with a glass of cow milk to enhanced the fertility⁷⁴⁸.

Anthocyanin A, Anthocyanin B, 24 β-Ethylcholest-5-en-3β-yl-O-α-L-arabinosyl-(1→6)-β-D-glucopyranoside, 3,5-Dihydroxy-4'-methoxyflavon-7-yl-O-α-L-rhmnopyranosyl-(1→6)-β-D-glucopyranoside, 4',5,7-Trihydroxyflavon-3yl-O-β-D-glucopyranosyl---(1→4)-α-L-rhmnopyranoside, Palmitic acid, Octadecyl palmitate, n-Hexacosanol, Gallic acid, Tannic acid, Ethyl gallate, Flavan glycoside, 7-Hydroxy-5-isoproyl-2-methoxy-3methyl-1,4-naphthaquinone⁷⁴⁴.

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| 156. <i>Cynodondac Epistaxis (Nahitylon(Linn.) Taba)</i> , Blood Pers vomiting, blood | In Dharmabad taluka of Nanded district, Maharashtra, India, half cup of plant extract internally used | The <i>C. dactylon</i> contains flavonoids, glycosides (12.2%), tannins (6.3%), alkaloids (0.1%), | The plant has been rich in metabolites remarkably proteins, carbohydrates, |
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in sputum (<i>E-oba</i>), Infertility	<p>in morning for five days to treat abdominal heat/burning⁷⁵⁰. In Mandi district of Himachal Pradesh, India, entire over-ground parts of <i>C. dactylon</i> crushed with water and used to treat nasal breeding⁷⁵¹. In Kappathgudda region of Gadaga district of Karnataka, India, leaves of <i>C. dactylon</i>, ginger (<i>Zingiberofficinale</i>), <i>Foeniculum vulgare</i> crushed together, boiled in water and decoction used internally to treat diarrhea. Crushed root internally used with cow milk's curd to control continuous urination. Leaf extract of <i>C. dactylon</i>, stone sugar/ rock sugar and seed powder of <i>Syzygiumaromaticum</i> mixture internally used to treat Haematuria. Plant parts fried in ghee (cow milk fat) and externally used on affected areato treatabscess. In case of Snake bite plant extract used orally once in every 20 min, also externally usedon snake bite area. In case of Herpes plant is crushed in cold water and externally used on affected area until cure⁷⁵². The Mishing community of North East India, fresh plant of white <i>Cynodondactylon</i>, paddy straw pasted with water mixed with carbon ash deposited on the shade roof of fire place in an earthen container piece and that paste externally used over forehead for Pediatric vomiting³²⁶. In Mayurbhanj district, Orissa, India, leaves juice with sugar candy used for small kids to cure diarrhea and vomiting. Plant powder orally used with honey at the morning in empty stomach to cure bile problem⁷⁵³. The Chothe tribe of Bishnupur district, Manipur uses the whole plant to treat wounds and urinary problems⁶⁴⁸. InHasanur hills, erode district, Tamil Nadu, India, the Irula tribe used paste of whole plant to treat bone fracture⁷⁵⁴. In Kalavai village, Vellore district, Tamil Nadu, India, the Irula tribal uses whole plant to treat diabetes, coolness and urinary problems⁷⁵⁵.</p>	<p>resins (1.0%), free reducing sugar (10%) and total reducing sugar (12%). Plant also contains protein (11.6), fat (2.1%), carbohydrate (75.9%), fibers (25.9%), ash (10.4%), Ca (0.53%), P (0.22%), Fe (0.116%), K (1.63%) and beta carotene (0.028%). The identified phyto-constituents in hydro-alcoholic extract of whole plant includeshexadecanoic acid ethyl ester (17.49%, the major constituents), 3H-pyrazol-3-one, 2,4-dihydro-2,4,5-trimethyl, 4H-pyran-4-one, 2,3-dihydro-3,5-dihydroxy-6-methy, menthol, benzoic acid, 2- hydroxy-, methyl ester, benzofuran, 2,3-dihydro, 2-furancarboxaldehyde, 5-(hydroxymethyl, 2-methoxy-4-vinylphenol, decanoic acid, ethyl ester, dmannose, 3-Tert-butyl-4-hydroxyanisole, Ar-tumerone, tumerone, curlone, tricyclo[6.3.0.0(1,5)]undec-2-en-4-one, 2,3,5,9- tetramethyl, 3,7,11,15- Tetramethyl-2-hexadecen-1-ol, hexadecanoic acid ethyl ester, phytol, 9,12-octadecadienoic acid ethyl ester, linolenic acid ethyl ester and octadecanoic acid ethyl ester. The compounds identified in phenolic fraction of whole parts of <i>C. dactylon</i> includes Hydroquinone (69.49%, the major constituents), propanoic acid, 2-oxo, furfural, 2H-pyran-2-one, 5,6-dihydro, pantolactone, pentanoic acid, 4-oxo, levoglucosenone, hexanediamide, N,N'-dibenzoyloxy, 3-hydroxy-1-methylpyridinium hydroxide, 2-furancarbox-aldehyde, 5- methyl, propanedioic acid, phenyl, hydroquinone, phthalic anhydride, 1,3-benzenediol, 5-chloro, benzaldehyde, 3-(chloroacetoxy)-4-methoxy, ethanone, 1-(4-hydroxy-3- methoxyphenyl), 1,6-anhydro-α-D-glucopyranose (levoglucosan), vanillic acid, 1-(2-Hydroxy-4,5-dimethoxyphenyl)-ethanone, Syringic acid, pyrrolidin-2-one, N-(2,4- dimethylcyclopent-3-enoyl)-, cis, cinnamic acid, 4-hydroxy-3- methoxyand 9,9-Dimethoxy-bicyclo [3.3.1]nona-2,4-dione⁷⁵⁶.</p>	<p>minerals, flavonoids, carotenoids, alkaloids, glycosides and triterpenoides.whole plant of <i>C. dactylon</i>exhibited several biological activities in scientific research viz. antibacterial, antimicrobial, antiviral and wound healing properties. Because ofthe phyconstituents, safety and therapeutic effectiveness of <i>C. dactylon</i>, it may be a promising herbal drug in near future^{756,757}.</p>
157. <i>Ocimumame</i> Fever (<i>Nupigiricanum</i> Lin <i>E-Na</i>	In Barak valley, Assam, India, uses juice of the leaves along with the	The <i>O. americanum</i> containsvolatile oils as	The <i>O. Americanum</i> identified as

n.	<i>Pakhatpa</i>), Bad Breathing (Halitosis)	honey to treat fever ⁶⁷⁷ . In Kalavai village, Vellore district, Tamil Nadu, India, the Irulatribalsuses flower to treat upset stomach ⁷⁵⁵ .	major constituents that includes methyl cinnamate, methylheptenone, methylnonylketone, d-camphor, citral, ocimin, methylchavicol, linalool, nevadensin, salvigenin, beta-sitosterol, betulinic, ursolic, oleanolic acids, flavanoids, pectolinarigenin-7-methyletherand nevadensin. Polysaccharides composed of xylose, arbinose, rhamnose and galacturonic acids ⁷⁵⁸ .	vital source of essential oils and used in food, perfumery and cosmetic industries. The plant growing in parts of India as a source of flavour and fragrance for industry and as a source of natural camphor. It is used in the traditional system of medicine to treat conjunctivitis, malaria and headache ⁷⁵⁹ .
158.	<i>Ocimum basilicum</i> Linn. Fever (<i>Nupigi-E-Na Pakhatpa</i>), Bad Breathing (Halitosis)	In Wokha district, Nagaland, India, theLotha tribes internally used fresh leaves and inflorescence for treating stomachache and externally applied locally to treat ringworm and earache ⁷⁶⁰ . In upper subansiri district, Arunachal Pradesh, India, seed powder internally used to treat cough and cold ⁶¹⁸ . In the Southern part of Tamil nadu, India, whole plant decoction orally used for a week to treat snake bite ³⁷³ . InMahur range forest Nanded district, Maharashtra, India,externally applied leaf juice on body in early morning to cure body pain. A spoonful leavesjuice mixed with a spoonful honey and internally used twice a day for fifteen days to treat asthma. Approximately two spoonful of root extract mixed with one spoonful honey and orally used twice a day for eight days to treat asthma ⁷⁶¹ . InHasanur hills, Erode district, Tamil Nadu, India,the Irula tribe burned dried leaves in fire and inhaled smoke to treat Asthma ⁶⁰⁴ . In North-Central Western Ghats, India, leaf paste externallyused to treat bone fracture ⁷⁵⁴ . InKaladera region, Jaipur district, Rajasthan, India,leaf decoction used with honey to cure cold, cough and fever ⁷⁶² .	The essential oil extracted from Fresh flower of <i>O. basilicum</i> contains small amount of estragol, eucalyptol, ocimene, linalool acetate, eugenol, 1-epicyclosesquiphellandrene, methanol, menthone, cyclohexanol, cyclohexanone, myrcenol and nerol. Plant also contains glycoside, gums, mucilage, proteins, amino acids, tannins, phenolic compounds, triterpenoids, steroids, sterols, saponins, flavones and flavonoids. In the essential oil of the plant Linalool contains as a major constituent (56.7-60.6%), also, present oxygenated monoterpenes (60.7-68.9%) followed by sesquiterpenes hydrocarbons (16.0-24.3%) and oxygenated sesquiterpenes (12.0-14.4%). The major oxygenated monoterpenes present in the plant viz. linalool, camphor, cis-geraniol and 1,8-cineole. The major sesquiterpene hydrocarbons viz. a-bergamotene, b-caryophyllene, germacrene D, c-cadine and bicyclogermacrene are whereas, epi-a-cadinol and viridiflorol present in the plant ^{763,764} .	The pleasant odour and high volatility of aroma chemicals like camphor, cineole, citronellol, geraneol, linalool, methyl chavicol etc. utilized in consumer industries for the manufacture of perfumes, cosmetic, medicine and food adjuncts ⁷⁶⁴ .
159.	<i>Eclipta prostrata</i> (Linn) L. Fever (<i>Nupigi-E-Na Pakhatpa</i>), Typhoid (<i>MariNaba, ThirilNaba</i>), Mouth ulcer, Mouth inflammation (<i>Chil le Naba</i>), Blood in stool/urine (<i>Dhatu Naba</i>).	In North East India, the Mishing community internally used fresh plant juice with milk to treat Jaundice ³²⁶ . In Barak valley, Assam, India, Manipuri community used juice of the leaves with the honey to treat fever ⁶⁷⁷ . In the Southern part of Tamil nadu, India, leaf paste applied externally for 21 days to treat snake bite ³⁷³ . In Uttar Pradesh, India, leaf extract used in hair to treat dandruff and to make silky and shiny hair. In	<i>E. prostrata</i> or <i>E. alba</i> plant contains Flavonoids such as Luteolin-7-O-β-D-glucoside, luteolin, apigenin, orobol(isoluteolin). Alkaloids viz. [(20S) (25S)-22,26-imino-cholesta-5,22(N)-dien-3-ol] (verazine), [20- <i>epi</i> -3-dehydroxy-3-oxo-5,6-dihydro-4,5-dehydroverazine], [(20R)-20-pyridyl-cholesta-5-ene-3-ol,23-diol] (ecliptalbine), [(20R)-4-hydroxyverazine], [4-hydroxyverazine], [(20R)-25-	Numerous of vital phytoconstituents isolated and identified from the <i>E. prostrata</i> or <i>E. alba</i> plant namely wedelolactone, eclalbasaponins, -amyrin, ursolic acid, oleanolic acid, luteolin, and apigenin. The published scientific reports shown that due to present of these compounds the plant can

<p>Boudh district, Odisha, India, whole plant paste made into small pills with black pepper (<i>Piper nigrum</i>) and internally used to treat fever and jaundice. In Tripura, India, Chakma tribe used 5-10 ml (two teaspoons) of leave juice daily to treat hepatic problem. In Mount Abu, Rajasthan, India, levas and flower used for treatment of Asthma, cough, jaundice and urinary problem. In Hanumangarh, Rajasthan, India, used oil extract as hai tonic, leaf juice with honey to treat jaundice and leaves extract with water to treat diarrhea. In Kanpur district, Uttar Pradesh, India, externally applied 2-5 gm of plant paste to treat wound and cuts. In Ayurvedic medicine, plant used for treatment of liver cirrhosis and infectious hepatitis⁷⁶⁵. In Jalalpur jattan, Gujrat amd Punjab, Pakistan, leaf paste extrenally used to treat allergy, athelete's foot and ringworm. In Thakurgaon district, Bangladesh, leaves of white-flowered plant boiled in a water filled earthen vessel with leaves of <i>Cynodont dactylon</i> and <i>Scopariadulcis</i> and filtered decoction internally used in morning and evening on empty stomach to treat diabetes. In Mansoor, Malegaon, India, Plant used as tonic, deobstruent, emetic and to treat liver and spleen enlargement. In Thar desert, Gujrat, India, whole plant used as deobstruent, febrifuge, to treat hepatic problem, catarrhal, hepatitis, spleen enlargement and skin diseases. Leaf extract used to promote hair growth, leaf extract in oil externally applied in scalp before bedtime to treat insomnia. In Bundelkhand, Uttar Pradesh, India, plant decoction used for treatment of scorpion sting. In Samba district, Jammu and Kashmir, India, Whole plnat used for treatment of asthma, bronchitis, fever, gastric and hepatic disorder, jaundice, ulcers, wounds, sores and leukoderma. In Rampal Bagerhat district, Bangladesh whole plant used for treatment of indigestion. In Buldhana district, Maharashtra, India, whole plant and leaves used for treating wounds, In Kolli hills, Tamil nadu, India, whole plant juce</p>	<p>hydroxyverazine], [25□-hydroxyverazine]. Terpenoids and their glycosides such as Eclalbasaponins VII–X (taraxastane triterpene glycosides), eclalbasaponins I–VI (oleanane triterpene glycosides), eclalbasaponins I–VI (triterpene glycosides), ecliptasaponins C and D (triterpenoid glucosides), □-amyrin, oleanolic acid, ursolic acid (triterpenoids). Sterol viz. Stigmasterol, daucosterol, stigmasterol-3-<i>O</i>-glucoside. Sesquiterpene lactones such as 5-hydroxymethyl-(2,2':5',2'')-terthienyltiglate, 5-hydroxymethyl-(2,2':5',2'')-terthienylgelate, 5-hydroxymethyl-(2,2':5',2'')-terthienyl acetate. Terthienyl aldehyde (Ecliptal), Fatty alcohols (Hentriacontanol, heptacosanol), Saponins (Eclalbatin (triterpene saponin), dasyscaphin C), Phenolic acids (Protocatechuic acid, 4-hydroxy benzoic acid), Polyacetylinic Compounds such as □-Terthienylmethanol, polyacetylenes, polyacetylene substituted thiophenes. Volatile oils contain Heptadecane, 6,10,14-trimethyl-2-pentadecanone, <i>n</i>-hexadecanoic acid, pentadecane, eudesma-4(14),11-diene, phytol, octadec-9-enoic acid, 1,2-benzenediacarboxylic acid diisooctyl ester, (Z,Z)-9,12-octadecadienoic acid, (Z)-7,11-dimethyl-3-methylene-1,6,10-dodecatriene, (Z,Z,Z)-1,5,9,9-tetramethyl-1,4,7cycloundecatriene. Also contains 3,4-Dihydroxy-benzoic acid ethyl ester, 7-<i>O</i>-Methylorobol-4'-<i>O</i>-β-D-glucoside, Luteolin sulphate, Apigenin sulphate, Luteolin, Wedeloactone, 3'-hydroxybiochanin A, Eclalbasaponin III, Ecliptasaponin C, Eclalbasaponin VI, Eclalbasaponin IV, Eclalbasaponin A, Eclalbasaponin V, Echinocystic acid 28-<i>O</i>-β-D-glucopyranoside, Echinocystic acid, 3-Oxo-16α-hydroxyolean-12-en-28-oic acid, c-Sitosterol, Glycine, N[(3a,5a,12a)-3,12-dihydroxy24-oxocholan-24-yl]-, oleic acid, eicosylester, ethanol, 2-(9,12-octadecadienloxy), 10-octadeconic acid, methyl ester,</p>	<p>play vital role for making next generation therapeutics for treatment of cancer, arthritis, liver diseases, hair loss and snake bites⁷⁶⁶. Moreover, the plant popularly known as "King of hairs" used in indigenous system of medicine as a hepatoprotective medicine. This plant has been traditionally used as liver tonic in Ayurveda and is commonly used as deobstruent to promote bile flow and to protect the liver. It is used in hair oil preparations as it promotes hair growth and maintains hair black. The herb is also known for its medicinal value as an analgesic, antiseptic, antiviral, antioxidant, antihemorrhagic and anti-hyperglycemic⁷⁶⁹.</p>
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used internally for treating snake bite. In Javadhu hills, Tamil nadu, India, plant used to treat hepatitis. In Vannapuram village, Idukki, Kerala, India, whole plant used for rejuvenating hair, to treat kidney and liver diseases. In Assam, India, shoot juice used with few drops of mustard oil or root extract once daily for 3-4 days to treat diarrhea. In Cote d'Ivoire, Africa, whole plant used by Anyi-Ndenye pregnant women to ensure fetal development and facilitate childbirth. In Dibrugarh, Assam, India, whole plant used as tonic and to treat spleen enlargement. In Azamgarh district, Uttar Pradesh, India, whole plant juice used with sugar to treat severe whitish dysentery. In Nizamabad village, Andhra Pradesh (Present Telangana state), India, dry plant powder used by elderly people as energy tonic. plant passed externally used in head to blacken grey hair. In Nagapattinam district, Tamil Nadu, India, leaf extract used to treat swelling. In Birbhum district, West Bengal, India, fresh leaves used with sesame oil for treatment of baldness, elephantiasis and headache. Whole plant juice externally used locally to treat skin diseases. In Khetawas, Jhajjar district, Haryana, India, plant used to treat of snake bite. In Satpuda Mountain of Nandurbar, Dhule and Jalgaon district of Maharashtra, India, 4-5 dry leaves powder used with a cup of water once in a day for two days to treat menorrhagia. In Idukki district, Kerala, India, Uraly tribes externally used crushed leaves to treat cuts and wounds. In Shivalik hills, Haridwar, Uttarakhand, India, Gujjar tribes used the plant to treat jaundice, premature graying and falling of hair. In Parambikulam wildlife sanctuary, Kerala, India, leaf paste externally used on hair to promote hair growth. In Ambala district, Haryana, India, leaf decoction externally used on head to treat headache. Leaf extract used to treat asthma, cold and cleaning of lice in hair. In Arghakhanchi district, Nepal, Plant juice externally used to treat cuts and wounds. In Moradabad district, western Uttar

pentadecanic acid, 14methyl, methylester, diethyl phthalate.
^{766,767,768}

		Pradesh, India, leaf extract extrenally used on head to treat dandruff and to blackendgray hair ⁷⁶⁶ .			
160.	<i>BixaOrellana</i> Linn.	Healing of wounds and burns, prevents scaring and blister	In Salugu Panchayati of PaderuMandalam, Visakhapatnam District, Andhra Pradesh, India, root used for treating fever ⁷⁷⁰ . In Bishnupur district, Manipur, India, leaf, bark and seeds used as antipyretic, astringent and to treat snake bite ⁷⁴⁷ . In Barak valley, Assam, India, manipury community used bark decoction for treatment of fever ⁶⁷⁷ . In the hilly tract areas of East Godavari district of Andhra Pradesh, India, root decoction orally used twice in a day to treat fever ⁷⁴⁸ . In Argentina, seed used as antipyretic, cardiotonic and antidiarrheal. In Brazil, seed used for treatment of body pain, fever, constipation, burns and malaria. In Colombia, leaves used for treating Snakebite and seed used as aphrodisiac. In cuba seed used as aphrodisiac. In Guatemala, root and leaves used to treat gonorrhoea.leaves used to treat dysentery, hepatitis, blood diseases androots used to treat diabetes. In Honduras, leaves used to treat pain, dysentery and indigestion. In Jamaica seed used for treating diabetes. In Nicaragua, leaves and seed used to treat respiratory and pulmonary disorders, diarrhea, burns, and seed used to treat labor pains, cough, cold, diuretic and as diuretic. In Paraguay, seeds used to treat diabetes. In peru, fruits used as apiac, diuretic, antidisenteria and astringent. Leaves used to treat fever and skin problem. Roots used to treat alcoholic hepatitis and worms. Seeds used to treat fever, dysentery, stomach problem, as aphrodisiac and astringent. In Trinidad and Tobago, leaves used as diuretic, roots used to treat diabetes ⁷⁷¹ .	The <i>B.orellana</i> plant oil contains Carotenoid such as Apo- ψ - carotene, 9'Z-6'-ol, beta carotene, Bixaceae, Bixin, isobixin, norbixin, Geranylgeraniol, Z- carotene, cryptoxanthin, Dimethyl-(9Z)-6,6' - diapocarotene-6,6' -dioate, Dimethyl-(9Z,9' Z)-6,6' - diapocarotene-6,6' -dioate, Phytoene, Phytofluene, Lutein, Methyl-(9Z)-10'-oxo-6,10' - diapocarotene-6-oate, Methyl- (9Z)-6'-oxo-6,5'-diapocarotene-6- oate, Methyl-(9Z)-8'-oxo-6,8'- diapocarotene-6-oate, Methyl-(9' Z)-apo-6'-lycopenoate, Methyl- (7Z,9Z,9' Z)-apo-6'-lycopenoate, Methyl-(9Z)-apo-8'-lycopenoate, Methyl-(all-E)-apo-8' - lycopenoate, Neurosporen, Norbixin, Trans-bixin, and Zeaxanthin ⁷⁷¹ .	Several parts of the <i>B. orellana</i> (annatto) have been widely used in traditional system of medicine for prevention and treatment of wide number of health disordes. The plethora of traditional uses has encouraged researchers to identify and isolate from all parts of this plant. Carotenoids, apocarotenoids, terpenes, terpenoids, sterols and aliphatic compounds are the main compounds found in all parts of this plant and are reported to exhibit a wide range of pharmacological activities. In recent times annatto has received tremendous scientific interest mainly due to isolation of yellow- orange natural dye from its seed which exhibits high biodegradability, low toxicity and compatibility with the Environment ⁷⁷² .
161.	<i>Erycibepani</i> <i>culata</i> Roxb	Piles (<i>Nungshang</i>), Kidney problem, Gynaecological problem.	In Nawarangpur district of Odisha, India, the bark decoction (5 ml) used twice a day for 2 days to treat fever with headache ⁷⁷³ . In Chhattisgarh, India, extract of young leaves used in eyes before bed time till one month for night blindness ⁷⁷⁴ . In Mayurbhanj district, Orissa bark chewed twice	The <i>E. paniculateroots</i> containcoumarins, saponin, flavonoids and polyphenolic acids ⁷⁷⁸ .	Ethanol (50%) extract of aerial parts have shown diuretic and hypotensive properties. The methanol extract if of <i>E. paniculate</i> leafs exhibited significant antimicrobial potential against both Gram-positive and Gram-

		a day for two days to treat fever. The bark juice internally used for treating cholera. Bark powder used for treating fever and diarrhea ^{226,775} . In Chhattisgarh, India, Kamar tribes used leaf juice externally on hair before hair wash once a week to treat dandruff, killing lice and for hair growth ⁷⁴⁶ . In Korwa hill, Chhattisgarh, India, plant used for easy child delivery and to treat night blindness ⁷⁷⁶ . In Bonai, Sundargarh and Panposh Forest division of Sundargarh district, Orissa, India, internally used ripe fruits in between meals as a mild laxative ⁷⁷⁷ .	negative bacteria Saponins present in the roots reported as haemolytic and Rosmarinic acid present in the roots known for anti-inflammatory potentials ⁷⁷⁸ .	
162.	<i>Schimawalli chii</i> (DC.) Korth. Poisonous bite, dog bite, snake-bite (<i>Ngakranachikpa</i>), Uterine disorder and hysteria.	In western Mizoram, India, fruit decoction used for treatment of snake bite and insect bite ²⁷⁹ . In upper subansiri district of Arunachal Pradesh, India, seeds used to treat stomach trouble ⁶¹⁸ . In Mizoram, India, decoction of fruit used to treat snake bite and insect bite, bark as rubefacient, antihelminthic, antigonorrhoeic, and leaf as carminative ⁷⁷⁹ . In Mizoram, decoction and Infusion of leaves used as Astringent, antiseptic, to treat diarrhoea, gastritis and insect bite. ⁴⁹⁷ In Bishnupur district, Manipur, India, the Chothe tribe used bark for treatment of intestinal worm ⁷⁴⁷ . In Naxalbari area of West Bengal, India, stem bark powder used with water for treatment of liver problems and stem bark powder externally used to treat fresh cut skins ⁷⁸⁰ . Zunheboto district, Nagaland, India, Sumi tribe used leaves, roots and bark for treatment of intestinal worms (as anthelmintic), pain (as rubefacient). The young leaves for treating fever (antipyretic) and flatulence ^{781,388} .	<i>S. wallichii</i> plant contains Tannin, octacosanol, phytol, alpha-spinasterol and a saponin schiwallin ³⁸⁸ . Bark of the plant contains 2,3-benzofurandione, Phenylpropanolamine, Glycidol, Rotenone ⁷⁸² .	<i>S. wallichii</i> leaves reported for potential anticancer activity ⁷⁸² .

Table –S6: Family Importance Value (FIV) determines the species of particular family and their use in treatment of particular disease.

Family	Total No	FIV	Family	Total No	FIV
Acanthaceae	2	6.67	Liliaceae	1	3.33
Agaricaceae	1	3.33	Malvaceae	1	3.33
Alangiaceae	1	3.33	Meliaceae	2	6.67
Amaryllidaceae	1	3.33	Menispermaceae	2	6.67
Apiaceae	1	3.33	Mimosaceae	2	6.67
Apocynaceae	2	6.67	Musaceae	2	6.67
Araceae	1	3.33	Myrtaceae	1	3.33
Arecaceae	1	3.33	Nyctaginaceae	1	3.33
Asclepiadaceae	2	6.67	Orchidaceae	1	3.33
Asteraceae	6	20.00	Oxalidaceae	1	3.33
Bixaceae	1	3.33	Papaveraceae	1	3.33
Bromeliaceae	1	3.33	Plumbaginaceae	1	3.33
Caesalpiniaceae	1	3.33	Poaceae	4	13.33
Cannabaceae	1	3.33	Ranunculaceae	1	3.33
Caryophyllaceae	1	3.33	Rhamnaceae	2	6.67
Combretaceae	1	3.33	Rubiaceae	5	16.67
Convolvulaceae	2	6.67	Santalaceae	1	3.33
Crassulaceae	1	3.33	Simaroubaceae	1	3.33
Cucurbitaceae	1	3.33	Smilacaceae	1	3.33
Dilleniaceae	1	3.33	Solanaceae	4	13.33
Elaeagnaceae	1	3.33	Theaceae	1	3.33
Euphorbiaceae	1	3.33	Thymelaeaceae	1	3.33
Fabaceae	1	3.33	Vitaceae	2	6.67
Iridaceae	1	3.33	Zingiberaceae	1	3.33
Lamiaceae	6	20.00	Total	81	270.00
Lauraceae	2	6.67	Average		3.33

Table – S7— Informant consensus Factor (ICF) by categorizing formulations used in various disease conditions in other words variability in mode of utilization against disease.

Sl No	Category (disease and disorder)	Plant Species	User reports	ICF
1	Fever (High temperature, malarial fever)	14	16	0.13
2	Jaundice & other Liver disorders (Liver enlargement/fatty liver, Hepatitis)	10	17	0.44
3	Gastro-intestinal disorder (Gastric/gas, Acidity, diarrhoea, dysentery, loose motion, stomach ache, constipation and gastric Ulcer)	21	23	0.09
4	Inflammatory disorders (Joint pain, rheumatic arthritis, Swelling after accidental injury, intestinal swelling, Gout, Rhinitis and mouth inflammation)	22	25	0.13
5	Respiratory Problem (Cough, lung disorder, chest pain, blocked nose, sinusitis, Asthma, bad breathing/Halitosis)	20	29	0.32
6	Dermatological disorder (Eczma, boils, burns, rigworm, skin infection, Skin rash, white patch, Itching, Hair problem, Wart and allergy)	28	31	0.10
7	Pain / Injury (tooth ache, body pain, bone fracture, Headache, Ear pain, Ligament injury, Backache, Muscle pain and muscle injury)	14	20	0.32
8	Urological problem (stone problem, gall bladder, Urinary tract problem and kidney problem)	7	8	0.14
9	Cardiovascular (heart problem, Chest Pain, blood pressure, blood purification, blood coagulant, and Vein problems)	8	8	0.00
10	Nervous disorder (Psychiatric problem, Parkinson, epilepsy, Alzheimers disease, Hysteria, Migraine, Hypnosis and Sedation)	6	6	0.00
11	Sexual Diseases (Menstrual problem, White discharge, Gynecological problem, birth difficulty, Male sexual disorders, Pus in semen, infertility, weakness woman after birth of child)	14	17	0.19
12	Metabolic disorders (Diabetes)	7	7	0.00
13	General health (paralysis, anaemia, nausea, vomiting, blood vomiting, general weakness, blood in sputum, Epistaxis, Blood in stool/ Urine, cold allergy and food poisoning)	20	28	0.30
14	Infectious disorders (tonsillitis, Cough & Cold, typhoid, wart, Leprosy, mouth ulcer, boil, Osteomyelitis, Tuberculosis and urinary tract infection)	27	37	0.28
15	Antidote (bee bite, wrong medication, Snake-Bite, Dog Bite, Iatrogenic, detoxification)	10	12	0.18
16	Piles	13	14	0.08
17	Cancer	19	23	0.18
18	Wound healing (Cuts wound, Burn wound, Bullet wound, Crack heel)	8	9	0.13
			Total	2.99
			Average	0.17

References

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