

ETHNOBIOLOGY IN MIZORAM STATE : FOLKLORE MEDICO-ZOOLOGY

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ABSTRACT

Studies in ethnobotany and ethnozoology under the umbrella of Ethnobiology seem imbalanced in the sense that enormous publications have accumulated in case of the former but only little information has been disseminated in case of the latter. While 7500 wild plant species are known to be used by tribals in medicine, only 76 species of animals have been shown as medicinal resources (Anonymous, 1994). The present paper is the first-hand information of folklore medicine from animals in Mizoram. The animals enumerated comprise of 25 vertebrates and 31 invertebrates and are used for treatment of over 40 kinds of diseases or ailments, including jaundice, tuberculosis, hepatitis, cancer, asthma and veterinary disease. The author, however, does not recommend destruction of wild animals, be it for food or medicine.

Keywords : Folklore medicine, ethnozoology, wildlife, conservation, Mizoram.

Introduction

Mizoram is the last frontier of the Himalyan ranges in the North-East India and flanked by Bangladesh in the west, Myanmar in the east and south, and Assam in the north. It has a total geographical area of 21,081 Km² with a population of 6,89,756 persons (census 1991) and stood second in literacy rate (82.27%) (Anonymous, 1996), while the state is highest in tribal population (94.8%) in India (Vijayanannuni, 1996).

Historical Background

The Mizos were formerly known as 'Lushais'. They were animists before they became Christians in 1894. The Lushai Hills was full of jungles in the early days. 'Jhuming and hunting have been the only occupation which provided food to the people. Their jhuming and hunting

operation correlate with their customs and ceremonies. One of the most important feasts a Lushai can perform is called 'Khuangchawi' which involved a great deal of money that only the *Chiefs* or a few *well-to-do people* could perform (Parry, 1928). A man who performed such ceremony was called 'Thangchhuah'. Thangchhuah is a title given to a man who has distinguished himself by killing a certain number of different animals or by giving a certain number of public feasts (Lorrain, 1940).

There are two types of 'thangchhuah!'. One refers to the killing of certain prescribed wild animals, viz., bear (*savawm*), gaur (*Sele*), sambar (*Sazuk*), wild boar (*Sanghal*) Viper (*Rulngan*), serpent eagle (*Muvanlai*), elephant (*Sai*) and flying squirrel (*Vahluk*) Zawla, 1981; Hluna, 1992). This is called 'Ram lama Thangchhuah' (ram = jungle). The other

refers to the killing of domestic animals, viz., mithun (*Tumpang*), 2 piglets (*Vawk no-te*), bull gayal (*Sial*), boar (*Vawk pa*), other baby pigs (*Vawk-no-te-dang*) and a sow (*Vawk-pui*), and arrange a large quantity of local liquor (*Zu*) up to 80 posts and 15 small posts each day for 3-5 consecutive days for seven successive ceremonies (Parry, 1928).

This is called '*In lama Thangchhuah*' in = house).

Among other things, one significant purpose of becoming a '*Thangchhuah*' man is to escape the shot of '*Pawa*' a gaint man who used to shoot every person who had not killed man or animal, who sat at the entrance gate of '*Pialral*' (Paradise) after death. This being the case, it may require one man's entire life to complete the series, but, it is the coveted goal of every Mizo man to achieve the goal (Hluna, 1992).

Methodology :

The methodologies adopted for the present study are field survey, general observation and secondary information. Field survey was conducted in the '*intra-hotspots*' of National Parks and Wildlife Sanctuaries, viz; Dampa Tiger Reserve, Murlen National Park, Phawngpui National Park, Ngengpui Wildlife Sanctuary, Lungkulh virgin forest and Palak bio-diversity. General observations were also made in areas other than the hot-spots mentioned above. Secondary informations were collected from knowledgeable persons of old ages, legends folklore and folksongs, cultures and ceremonies, religious belief, writers, composers and other material sources available in Mizoram. A few important resources are *Zoram Upa Paw!* Thurawn Bu (1984), *Vailinga* (1991), *Nuchhungi* (1996) etc. Identification and

systematization of zoological nomenclature was done in the library of Zoological Survey of India, regional station, Shillong. The study was conducted during 1995-1997.

Some important wild animals in Mizoram are : *Elephas maxima* (Sai), *Panthera tigris* (Keipui), *P. pardus* (Keite), *Cervus unicolor* (Sazuk), *Muntiacus muntjak* (Sakhi) *Capricornis sumatrensis* (Saza), *Melursus urcinus* (Savawm), *Selenarctos thibetanus* (Savawm), *Hysterix indica* (Sakuh), *Hylobates hoolock* (Hauhuk), *Maccaca assamensis* (Zawng), *Python molurus* (Saphai), *Lophura leucomelana* (Vahrit), *Polyplectron bicalcaratum* (Vahrihaw), *Anthoceros malabaricus* (Vahai), *Picus canus* (Thloh), *Myiophonus caeruleus* (Thangfen) etc.

Discussion

Although folklore medicine of animal products had been in use since time immemorial, investigation on ethnozoology is practically nil in Mizoram. Frequent census operations of wild animals has been conducted by the State Environment & Forest Department and recently, survey of primates, serow and goral was conducted by Mishra et al., 1994 ; avefouna ley Shakar Raman et. al., 1995, and Robertson 1995 and 1996. But, ethno-zoological aspects has not been dealt with in so far as their resorts are concerned. The Zoological Survey of India, Eastern Regional Section, Shillong might have had conducted survey of zoological studies in Mizoram when All India Coordinated Research Project on Ethnobiology programme was carried out during 1982-83 (Anonymous, 1994). Lorrain (1940) mentioned a few instances of animal products which were used as medicine. The field survey reveals that certain animal products are still in use,

particularly in the interior places among different minority groups like Chakmas, Burs, Bawm, Mog, including the Mizos themselves. But, the use of animal's part(s) as medicine is usually kept secret in many places. The joint venture programme on wildlife conservation launched by the State Environment & Forest Department and the Young Mizo Association (Y.M.A., the largest single voluntary organisation in Mizoram) during 1992 and 1993 declared the year 1992/1993 as "Year of Wildlife Conservation." This venture was very effective. Many licence holders put down their guns, poisoning of fish and birds and trapping of animals sharply decreased, and illegal killing of animals reported. Public education was imparted through mass-media, planting of fruit bearing trees, distribution of pamphlets and stickers and enforcement of The Wildlife (Protection) Act, (1972) was effective leading to the receipt of best Award on wildlife conservation programmes from the Govt. of India in 1993. And now, the awareness of biodiversity conservation prevails in the state than ever before.

Enumeration

The zoological names are classified into Mammalia, Eves, Reptilia, Amphibia, Pisces, Arthropoda, Arachnida, Insecta, Myriapoda and Mollusca. The zoological names are arranged in descending order with authors where possible followed by the common names. Local names are given exactly as they are pronounced. The part (s) used, the preparation, purposes and Schedules are given in a tabular form (Table-1). Altogether 56 animals are presented as source of ethnomedicines.

Conclusion

Although amendable affords have been made in the recent past, strict vigilance in

accordance with Wildlife (Protection) Act, 1972 (amended up to 1991) need to be carried on in the state, because of the fact that *jhuming* and hunting has been an integral part of the Mizo lifestyle since *shifting* cultivation can not be stopped as yet, the only means of wildlife conservation is conservation of bio-diversity. The Wildlife (Protection) Act, 1972 (as amended upto 1991) prohibits the killing and hunting of all wild animals except with a permission from the competent authority; and no one should take to killing wild animals for the sake of medicines. It should be understood that the ethno-medico-zoological uses relate to the ancient times for academic record.

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TABLE- I.
Folklore Medico-Zoology In Mizoram State

Classification	Zoological	Common Name	Local Name	Part used	Method of preparation & administration.	Purpose/ diseases	Scheduled
1	2	3	4	5	6	7	8
Class : MAMMALIA Order: Primates Family : Lorisidae	<i>Nycticebus coucang</i> Boddaert	Slow loris	<i>Sa-huaini-do.</i>	Dry bones. ribs.	Dry bones or ribs kept in the pocket/body.	Self-defence against the magic power of witchcraft, the power of which remain inertive.	I.Part-I
Family : Hylobatidae	<i>Hylobates hoolock</i> Harlan	Hoolock gibbon	<i>Hau-huk</i>	Hairs	Applied on cuts	Haemostatics.	I. Part - I
				Meat	Cooked meat is given to a pregnant women; soup taken internally.	Facilitate easy labour. Bee-string	
				Fresh & warm blood	Drunk c.10 ml at a time.	Colic, hepatitis, hemicrania.	
					Blood mixed with local liquor taken internally.	Tuberculosis, colic & anaemia.	

1	2	3	4	5	6	7	8
					Blood mixed with turpentine applied externally.	Fracture of bone.	
				Cooked brain	The hairs of the skull are removed by fire and then cooked.	Cooked brain is applied to toothache and taken for headache.	
				Powdered brain.	Cooked brain preserved in container over fire is grounded to powder.	Applied to tooth-decay and bee-sting.	
				Cooked marrow.	Cooked marrow taken out of tibia-fibia, etc.	Massage or rubb on sciatica/paralysis.	
				Bored tusk /bone.	Tied with thread on waist or wrist.	Prevent the attack of diseases.	
Family : Cercopithecidae.	<i>Maccaca assamensis</i> Mc Clelland	The Assamese Macaque.	<i>Zawng.</i>	Meat.	Cooked meat given to a pregnant woman.	Easy labour.	
				Brain	Cooked brain given to children.	For strength.	
				Bile	Cooked bile swallowed.	Malarial fever	II. Part-I.

1	2	3	4	5	6	7	8
Order : Pholidota Family : Manidae	<i>Manis crassicaudata</i> Gray	Indian Pangolin.	<i>Sa-phu</i>	Bile	Cooked bile taken internally.	Splenomegaly.	
Order : Carnivora Family : Canidae	<i>Canis familiaris</i> Linn.	Dog.	<i>Ui</i>	Fresh blood	Fresh and warm blood is drunk. Applied externally on cuts, wounds and burns.	Tuberculosis, asthma, dysentery; As haemostatics, subdue burns.	Nil
	<i>Canis aureus</i> Linn.	Jackal.	<i>Si-hal.</i>	Dried meat	Eaten roasted Powdered ex-skeleton applied externally.	Sciatica and dry cough Wounds & ulcers.	IV.
				Hairs.	Applied on leech-bite	As effective haemostatics.	
Family : Ursidae	<i>Helarctos malayanus</i> Raffles	Malayan sun bear	<i>Sa-mang</i>	Bile	Same as <i>Melursus ursinus</i> .	Stomachache, fever, uteritis.	I.Part-I.
				Fatty-oil.	Warmed Fatty oil applied on chest and throat, externally.	Cough and Cold.	

1	2	3	4	5	6	7	8
Family : Ursidae	<i>Melursus ursinus</i> Shaw	Sloth bear	<i>Sa-vawm awr-rang</i>	Bile	Cooked bile taken internally (the size of rice grain)	Strengthen the function of uterus; cure stomachache, fever and liver ailment; induce infertility.	I.Part-I
				Bile	Bile combined with honey and <i>Piper nigrum</i> L. is taken internally.	Liver ailment.	
				Male organ	Superstitiously pretended as if they have actually brought the organ and said, "yes, we have brought the penis here" while peeping through a bamboo wall.	It is considered in the past as easy labour for birthpangs.	
Family : Musteli-dae	<i>Arctonyx collaris</i> Collaris Cuvier	Hog badger	<i>Phi-vawk</i>	Fatty-oil	Fatty-oil is taken internally with water @ 1/2 cup once daily. Applied externally.	Cancer Wounds & sores, rheumatism & spasm.	I.Part-I.

1	2	3	4	5	6	7	8
	<i>Luthra perspicillata perspicillata</i> Geoffroy	Otter	<i>Sa-hram</i>	Male organ	Male organ is boiled in water and given to a woman who could not conceive, but not impotent.	To facilitate pregnancy, and aphrodisiac.	II. Part-I.
Family : Herpestidaes	<i>Herpetes edwardsi</i> Geoffroy	Common mongoose	<i>Sa-ri-vai thun.</i>	Meat	Cooked meat is eaten by those who can not take four legged animals because of disliking. Meat is taken otherwise.	Once it is taken, he or she could take even four legged animals. Inflammatory diseases, measles urticaria or pork allergy.	Hairs I.List-I.
Family : Felidae	<i>Panthera tigris tigris</i> Linn.	Tiger	<i>Sa-kei/ Kei-pui</i>	Milk Fatty-oil	Congeaed tiger's milk applied externally on affected body. Fatty-oil applied externally.	Inflamatory diseases. Scabies and itches.	I.Part-I.

1	2	3	4	5	6	7	8
Order : Perissodactyla Family : Rhinocerotidae	<i>Rhinoceros Unicornis</i> Linn.	Genda	<i>Sa-mak</i>	Horn.	The cut-horn dipped in water for 30 mins. is drunk.	Liver ailment	I.Part-I.
Order : Artiodactyla Family : Suidae	<i>Sus scrofa cristatus</i> Wagner	wild pig	<i>Sa-nghal</i>	Meat	Cooked meat is taken.	Pile disorder.	III.
				Dried scortum	Dried scortum is boiled and the water is drunk.	Remove Tape- worms.	
Family : Cervidae	<i>Cervus unicolor</i> Kerr	Sambar	<i>Sa-zuk</i>	Meat & soup	Meat cooked with little rice is taken.	Body strength.	III.
	<i>Muntiacus muntjak</i> Zimmermann	Barking deer.	<i>Sa-khi</i>	Horn.	Young horn is scrapped and taken with water	Revitalization of body or stamina.	III.
					Scrapped horn mixed with pig's food given to pigs.	Remove sore worms.	

1	2	3	4	5	6	7	8
				Fibia or shinbone	Fibia is used for gently striking or rubbing the legs of ill-nourished children.	Walk more quickly or able to walk on.	
				Urine inside gallbladder.	Urine dropped into the ear.	Ottorrhaca.	
Family : Bovidae	<i>Capricornis sumatraensis</i> Bechstein	Serow	<i>Sa-za</i>	Meat, dried tongue Dried tongue	Cooked meat is eaten. Ground to powder and applied externally.	Body strength. I.Part-I. Chronic ulcer	
				Dried tongue	Rubbed on whetstone with little water and the paste applied/ rubbed on body.	Antispasmodic.	
Family : Bovidae	<i>Bos gaurus</i> Smith.	Indian bison.	<i>Bawang.</i>	Decayed tooth.	Decayed tooth is scrapped and ground to powder and applied on affected body.	To take out hairs of caterpillars, prickles and whitlow.	II. Part-I.

1	2	3	4	5	6	7	8
	<i>Capra hircus</i> Linn.	Goat	<i>Kel</i>	Fresh milk.	Drunk.	Snake-bite	
				Fresh blood.	Drunk.	Night blind-ness	
				Cyst.	Taken internally and applied externally at least 10 times daily.	Ulcerated cancer.	
Order : Rodentia Family : Hystricidae	<i>Hysterix indica</i> Kerr	Indian porcupine	<i>Sa-kuh</i>	Meat, intestine. & stomach.	Cooked meat, intestine and stomach given to a pregnant woman.	Easy labour	IV
					Water of cooked stomach/intestine taken internally 2-3 table spoonfuls twice daily.	Stomachache, colic, dysentery, fever, malarial fever, toothache.	
				Bile	Mixed with water dropped into the eye.	Opatitis.	
				Toes	Cooked toes taken eaten.	Strengthen the function of uterus and placental disorder.	
				Fulva	Cooked fulva taken internally.	Asthma.	

1	2	3	4	5	6	7	8
Order : Rodentia Family : Sciuridae	<i>Callosciurus pygerythrus</i> Geoffroy	Hoary bel- lied squirrel	<i>Hlei-pui mei-par.</i>	Meat & soup.	Meat is cooked and the soup thus ob- tained taken inter- nally.	Antispasmodic, swellings, & sprain.	Nil.
Order : Chiroptera	<i>Chiroptera</i> sp.	Bat	<i>Bak</i>	Meat	Roasted meat given to children above 4-5 years old.	Involuntary urination in nights.	Nil.

1	2	3	4	5	6	7	8
Class : AVES							
Order : Cuculiformes							
Family : Cuculidae							
	<i>Centropus sinensis sinensis</i> Stephens	Crow pheasant	<i>Lal-ruangase-hnawt.</i>	Meat	Meat is boiled with 1/2 Kg. of rice and eaten.	Asthma	
Order : Galliformes							
Family : Phasianidae							
	<i>Polyplectron bicalcaratum bakeri</i> Lowe	Peacock pheasant	<i>Va-ri-haw</i>	Feathers	Same as <i>pavo muticus</i> .	Powder is applied on chronic ulcer.	I.Part-III
	<i>Gallus gallus</i> Linn.	Red jungle fowl	<i>Ar.</i>	Potch.	Potch is taken internally.	Removal of structured bone in the throat.	
				Quill.	Quill roasted to ash applied on teeth/gum-bleeding.	Haemostatic.	
				Bile	Bile mixed with watered drop, into the orifice.	ottorrhoea.	
				Feather	Burnt feather applied on anus.	To remove Pinworms.	
	<i>Pavo muticus spicifar</i> Shaw & Nodder	Burmese fowl.	<i>Ar-awn</i>	Feather	Burnt feathers made into powder.	Applied on Chronic ulcer.	I.Part-III.

1	2	3	4	5	6	7	8
Order : Coraciiformes							
Family : Bucerotidae							
	<i>Rhyticeros undulatus ticehursti</i> Deignan	Wheathed hornbill	<i>Kawl-hawk</i>	Fatty- oil	Fatty-oil is made warm on palm and applied externally on chest, throat and joints.	Rheumatism, cough & cold.	I.Part-III.
					Warmed fatty-oil applied on the waist of a pregnant woman.	Easy labour.	
					warmed fatty-oil drop (1-2 drops) into the ear.	Ottorrhoea.	
	<i>Buceros bicornis</i> Linn.	Great hornbill	<i>Va-pual</i>	Fatty- oil	warmed fatty-oil applied on ulcer, chest and throat.	Common cough and cold and ulcer.	I.Part-III
	<i>Anthracosceros malabaricus</i> Gmelin	Pied hornbill	<i>Va-hai</i>	Fatty- oil	warmed fatty-oil applied externally on chest and throat.	Common cough and cold.	I.Part-III
Order : Piciformes	<i>Picus canus hassei</i> Stolpe	Blacknapped green wood pecker.	<i>Thloh</i>	Meat	Cooked meat taken internally.	Asthma	Nil.
Family : Picidae	<i>Picus flavinucha</i> could	Large yellow naped wood pecker.	<i>Thloh-lu-par</i>	Meat	Cooked or roasted meat taken.	Asthma	IV.

1	2	3	4	5	6	7	8
Order : Passeri- formes Family : Plocidae	<i>Passer domesticus indicus</i> Jarden & Selby	House sparrow	<i>Chawng-zawng</i>	Brain	Cooked brain is given to weak children.	Restoration of strength.	Nil
	<i>Corvus macro-rhynchos</i> Wagler.	Jungle crow	<i>Cho-ak</i>	Meat & bile.	Meat boiled in water and taken. Meat & bile taken internally.	Whooping cough. Jaundice.	
Family : Muscicapidae	<i>Myiophonus caeruleus</i> Scopoli	Blue whistling thrush	<i>Thang-fen</i>	Meat	The cooked or roasted meat is given to a person who detest to take the meat of four-legged animals, as in the case of <i>Herpetes edwardsi</i> .	Once it is taken, they are able to take and eat other animals. (meat).	Nil
				Urine	Urine inside gall-bladder is dropped (2-3 drops) in to the ear.	Ottorrhoea.	
				Feathers	Ash of burnt feathers taken in. Ash of burnt feathers in combination with <i>Palaemon carcinus</i> . congealed tigers milk, infusion of <i>Phyllanthus fraternus</i> and decoction of roots of <i>Mirabilis</i>	Diphtheria. Inflammatory glands.	
					jalapa is externally applied.		

1	2	3	4	5	6	7	8
Class : REPTILIA Order : Testudines	<i>Tehanochelys trijuga</i>	Indian pod terrapin	<i>Sum-si</i>	Meat	Cooked Meat taken.	Malaria fever.	
				Bile	The bile dipped into water for sometime is drunk.	Splenomegaly.	
Family : Testudinidae	<i>Geochelone elongata</i> Blyth	Star tortoise	<i>Sa-tel</i>	Fluidy substance produced on the neck.	Applied externally.	Piles	IV.
				Fluidy substance of the neck.	Applied externally.	Piles	
				Bile.	Bile is taken internally.	Sensation or hotness inside of the stomach.	IV.
Order : Squamata Family : Anguidae	<i>Varanus bengalensis</i> Daudin	Monitor	<i>Tang-kawng</i>	Tongue	Cooked tongue is given to children. Dried tongue is used for rubbing whitlow.	To stop stam-mering in children. Whitlow.	II-Part-II II.

1	2	3	4	5	6	7	8
				Fatty-oil	warm fatty-oil applied externally on affected body.	Cracked feet and boils, and as antispasmodic.	
				Meat	Cooked Meat is eaten.	Asthma.	
				Bile	Cooked bile is swallowed.	Malaria fever.	
Family : Agamidae	<i>Calotes calotes</i> Linn.	Green calotes	<i>Zo-lai-king</i>	Dried meat	Fire-dried meat is cooked and taken. Compulsive bite.	Pneumonia and asthma. Remove cyst or lypoma.	
					Mixed with pig's food.	Pig's mange & sickness.	
Family : Agamidae	<i>Calotes versicolor</i> Daudin	Common garn lizard	<i>Lai-king-awr-sen</i>	Dried meat	Dried meat is roasted or grinded up and eaten.	Hicough, asthma, cough & cold.	
					Fresh lizard given to pig.	Pig's sickness & mange.	

1	2	3	4	5	6	7	8
Family : Boidae	<i>Python molurus</i> Linn.	Python	<i>Sa-phai</i>	Bile	The cooked bile preserved over the fire is eaten.	Colic, stomachache, dysentery, cholera, hotness inside stomach & localised headache.	I.Part-III.
				Fatty-oil	Fatty-oil is retained in the mouth and gradually swallowed.	Diphtheria, convulsions & inflammatory glands.	
				Fatty-oil	Applied externally.	Scabies, rash, eczema & burns.	
				Spur.	If someone had a chance to scrape the thigh of a beautiful girl, she can not but just fall in love with him.	Considered to be used for love-making. same is the case with animals too. They will neither run away nor fierce either.	
	<i>Viper ruselli</i> (Shaw)	Viper snake	<i>Rul-ngan</i>	Fatty-oil.	Fatty-oil is made warmed by putting near the fire.	Applied on warts or verrucose.	II. Part-III.

1	2	3	4	5	6	7	8
Class : AMPHIBIA Order : Anura Family : Bufonidae	<i>Bufo melanostictus</i> Schneider	Toad	<i>Utawk/ Tawk-phar</i>	Flesh	Warty skin is removed and the flesh is boiled with rice-husk and the water is applied on body.	Eczema, rash.	Nil
				Bile	Applied on affected part of body.	Leech-bite & itching sores.	
Class : PISCES Order : Cypriniformes Family : Cyprinidae	<i>Cyprinus carpio</i> Linn.	Common carp.	<i>Sa-ngha</i>	Bile Fat.	Biles are swallowed. Fat is taken / eaten.	Fever, headache.	Nil
Order : Siluriformes Family : Amblycipitidae	<i>Bagarius bagarius</i> Hamilton-Buchanan	Gangetic goonch	<i>Thai-chhawninu</i>	Fatty-oil	Equal part of fatty-oil with those of <i>Rhyti ceros undulatus</i> <i>Hylobates hoo-lock</i> and <i>Panthera tigris</i> are mixed and massaged on body.	Gout, rheumatism & joints.	

1	2	3	4	5	6	7	8
Phylum : Arthropoda Class : Crustacea	<i>Palaemon carcinus</i>	Prawn	<i>Kai-kuang</i>	Whole part	The prawn is cooked or roas- ted and eaten. Infusion is applied on ver- rucose which was set to bleeding.	Inflammatory glands/di- seases. To get rid of the warts.	Nil
	<i>Paratelphusa</i> sp.	Fresh wa- ter crab.	<i>Chak-ai</i>	Boiled crab. Living crab. Fresh crabs.	Crabs are boi- led and the water is drunk. Living crabs are crushed & applied externally on body. Fresh crabs are boiled with the spadix of <i>Musa</i> sp. and the roots of <i>Dendrocnide</i> <i>sinuata</i> (Bl.) Chew, and the water is drunk.	Jaundice and billiousness. Chicken-pox and bee-sting. Effective for jaundice and enlargement of liver.	Nil
Class : ARACHNIDA	<i>Heteropoda venatoria</i>	House spider	<i>Mai-mawm</i>	Dead & dry Spider.	Dead and dry spi- der is grounded to powder and put into the orifice, wrapped it up with a soft cloth.	Ottorhoea. Rubbed the whitlow.	Nil

1	2	3	4	5	6	7	8
Class : INSECTA Order : Phasmida	<i>Caraucius morosus</i>	Stick insect	<i>Ar-a-mawng-hawlh.</i>	Whole part	Whole part of body ground into paste applied on body.	wounds, prickling spines.	
Order : BLATTARIAE	<i>Periplaneta americana</i> Linn.	Cockroach	<i>Chuk-chu</i>	Body	Cockroaches are killed, sun-dried and boiled and the water is drunk, or taken as tea.	Asthma, stomachic.	Nil
Order : Hemiptera	<i>Cimex lectularis</i> Linn.	Bed bug	<i>Khum-fa</i>	Whole part	Bugs (3 Nos.) are crushed and applied on affected part of body.	Inflammatory glands, boils & ulcers.	Nil
					Living bugs (5 nos.) are kept in a capsule is swallowed.	Malaria fever.	
Order : Neuroptera	<i>Myrmeleon formicarius</i>	Ant-lion	<i>Thiam thai-nu</i>	Posterior end of body.	It is crushed and applied on wart which was pricked to bleeding.	Removal of warts or Verrucose.	Nil

1	2	3	4	5	6	7	8
Order : Hymenoptera	<i>Apis mellifica</i> Linn.	Honey-bee	<i>Khawi-vah</i>	Bee wax	The wax is rubbed on insect bites	To relieve and heal the pain.	
Class : DIPLOPODA	<i>Tachypodoiulus niger</i>	Black millipede	<i>Ke-tam-i-nu</i>	Whole part.	Decoction	Tuberculosis	Nil
Phylum : MOLLUSCA	<i>Lymnaea</i> sp.	Water snail	<i>Chengkawl</i>	Flesh	Male and female limnea are boiled in water and the flesh inside the crush is picked out and eaten.	Measles, liver ailment & jaundice.	
					Limnea boiled with <i>Pteridium aquilinum</i> (L) Kuhn. (<i>Cha-kawk</i>) is taken internally.	Swellings & sprains.	
	<i>Xestina</i> sp.	Land snail	<i>Hnapkhawn</i>	Flesh	The snail is roasted or boiled in water and the flesh is taken internally.	Splenomegaly, jaundice, convulsions and fracture of bone.	

REFERENCES

1. Alfreds, J.R.B. -- *The Kaziranga Biosphere Project Document. Z.S.I., Eastern Regional Station. Fruit Garden, Risa Colony, pp. 1-178.*
2. Anonymous 1992 *The Wildlife (Protection) Act, 1972 (as amended upto 1991). Natraj Publishers, Dehra Dun, India, pp.1-137.*
3. Anonymous 1993 *Nungcha Humhalh, 1992 & 1993., Selected Essays, Songs, Drama & Poetry. Central Y.M.A. & Envi. & Forest Dept. Mizoram, Aizawl, pp.1-50.*
4. Anonymous 1994 *Ethnobiology in India. A Status Report. Ministry of Envi. & Forest Dept. Govt.of India, New Delhi, pp. 40-55.*
5. Anonymous 1994 *The Red Data Book on Indian Animals, Part I. Vertebrate (Mamalia, Aves, Reptiles & Amphibians) Z.S.I. Calcutta, pp. 1-543.*
6. Anonymous 1996 *Statistical Hand Book Mizoram. Directorate of Economics & Statistics, Govt. of Mizoram, Aizawl, pp.1-90.*
7. Daniel, J.C. 1983 *The Book of Indian Reptiles. BNHS, Bombay, pp. 1-141.*
8. Hluna, J.V. 1992 *Pre-Christian Religion of the Mizos. In : Studies on the Minority Nationalities of the North East India- The Mizos. Directorate of Higher & Technical Education, Govt. of Mizoram, Aizawl, pp. 35-36.*

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|--|---------|---|
| 9. Lorrain, J.H. | 1940 | <i>Dictionary of the Lushai Language.</i> The Asiatic Society (Reprint 1975), Calcutta, pp. 1-447. |
| 10. Nuchhungi, Patmashri | 1996 | Mizovin ran damdawi an hmante (per, communication), pp. 1-2. |
| 11. Mishra, C., Raman, T.R.S. and Johnsing, A.T.T. | 1994 | Survey of primates, serow and goral in Mizoram, A report. Wildlife Institute of India, Dehra Dun, pp.1-30. |
| 12. Parry, N.E. | 1928 | <i>A Monograph on Lushai Customs and Ceremonies.</i> Firma KLM Private Ltd., on behalf of Tribal Research Institute, Aizawl, Mizoram pp.94-108. |
| 13. Prater, S.H. | 1980 | <i>The Book of Indian Animals.</i> BNHS, Bombay, Op. 1-324. |
| 14. Robertson, A. | 1995-96 | Report on a field trip to Mizoram, List of birds species observed, pp.1-20. |
| 15. Salim Ali | 1964 | <i>The Book of Indian Birds.</i> BNHS, bombay, pp.1-156. |
| 16. Shankar Raman, T.S., Charudutt, M. and Johnsingh, A.J.T. | 1995 | Survey of primates in Mizoram, North-East India. : <i>Primate Conservation</i> 16: - 59-62. |
| 17. Vailinga, Rev.M. | 1991 | <i>Mizo Pi-pute Sulhnu leh Mizo Damdawi.</i> Christian Book Store-cum/Library, Target Bazar, Chandmary, Lunglei, pp. 10-27. |

- | | | |
|-------------------------|------|---|
| 18. Vijayanunni, Dr. M. | 1996 | <i>1991 Census Hand Book. Registrar & General Census Commissioner, India, p.1.</i> |
| 19. Young, J.Z. | 1950 | <i>The life of vertebrates. Oxford at the Clarendon Press, Oxford Univ.Press, Amen Howe, London, pp. 1-767.</i> |
| 20. Zawla, K. | 1981 | <i>Mizo Pipute leh an Thlahte Chanchin (3rd ed.) H.A. Press, Aizawl, pp.33-50.</i> |
| 21. Z.U.P. | 1984 | <i>Zoram Upa Pawl Thurawn Bu. (Advise to the Public). Zoram Upa Pawl Headquarters, Aizawl, Mizoram, pp.77-80.</i> |

सारांश

मिजोराम प्रदेश में जनजातीय जीव विज्ञान-लोकसाहित्यदिक चिकित्सापरक प्राणिविज्ञान

- एच. लालरामधिंगलोव

जनजातीय जीव विज्ञान के अन्तर्गत आने वाले जनजातीय वानस्पतिक विज्ञान तथा जनजातीय प्राणिविज्ञान के बीच एक संतुलन रखने का प्रयास किया गया हो ऐसा नहीं लगता । क्योंकि पहलेवाले पर बहुत अधिक संख्या में प्रकाशित पुस्तकें उपलब्ध हैं जबकि बादवाले के संबन्ध में बहुत थोड़ी सी ही जानकारी प्राप्त है । वन्य पौधों की ऐसी ७५०० जातियाँ ज्ञात हैं जिनका प्रयोग औषधरूप में जनजातियों द्वारा किया जाता है । जब कि इस विषय में प्राणीजगत् की केवल ७६ जातियों के संबन्ध में जानकारी प्राप्त है । मिजोराम में प्राणीजगत् की लोक औषधियों के विषय में प्रत्यक्षजानकारी इस लेख में दी गई है ।