

A quantitative ethnobotanical study of medicinal plants of Khawrihnim village (Indo-Burma biodiversity hotspot) with Mimosaceae, Euphorbiaceae and Verbenaceae as dominant families

Hmingremhlua Sailo^a, Zothanmawia^a, Bendangchuchang Longchar^{a,b}, Vanlalhruii Ralte^a, H Lalruatsanga^{a,b} & P C Vanlalhluna^{a,*}

^aDepartment of Botany, Pachhunga University College, Aizawl 796 004, Mizoram, India

^bDepartment of Life Sciences, Pachhunga University College, Aizawl 796 004, Mizoram, India

*E-mail: pcvanlalhluna@yahoo.com

Received 08 January 2026; revised 16 April 2026; accepted 08 July 2026

Supplementary Data

Supplementary Table S1 List of medicinal tree species documented in Khawrihnim forest of Mizoram												
Species Name	FC	Ui	NU	Np	UR	RFC	RI	UV	FL (%)	CVe	CI	Conservation status
<i>Albizia chinensis</i>	85	2	3	60	170	0.773	0.762	1.545	70.6	0.092	1.545	LC
<i>Albizia procera</i>	70	2	2	50	140	0.636	0.568	1.273	71.4	0.068	1.273	LC
<i>Alstonia scholaris</i>	60	3	4	45	180	0.545	0.773	1.636	75	0.106	1.636	LC
<i>Aporosa octandra</i>	50	2	3	35	100	0.455	0.603	0.909	70	0.038	0.909	LC
<i>Bombax ceiba</i>	40	2	2	30	80	0.364	0.432	0.727	75	0.024	0.727	LC
<i>Callicarpa arborea</i>	45	2	3	32	90	0.409	0.58	0.818	71.1	0.037	0.818	LC
<i>Cinnamomum verum</i>	35	2	3	28	70	0.318	0.534	0.636	80	0.019	0.636	VU
<i>Clerodendrum colebrookianum</i>	30	1	2	20	30	0.273	0.386	0.273	66.7	0.003	0.273	NE
<i>Chukrassia tabularis</i>	25	1	2	18	25	0.227	0.364	0.227	72	0.002	0.227	LC
<i>Emblia officinalis</i>	55	2	3	40	110	0.5	0.625	1	72.7	0.042	1	LC
<i>Erythrina stricta</i>	40	2	2	30	80	0.364	0.432	0.727	75	0.024	0.727	LC
<i>Ficus semicordata</i>	35	2	3	25	70	0.318	0.534	0.636	71.4	0.019	0.636	LC
<i>Gmelina arborea</i>	30	1	2	20	30	0.273	0.386	0.273	66.7	0.003	0.273	LC
<i>Haldia cordifolia</i>	25	1	2	18	25	0.227	0.364	0.227	72	0.002	0.227	NE
<i>Parkia roxburghii</i>	45	2	3	32	90	0.409	0.58	0.818	71.1	0.037	0.818	LC
<i>Psidium guajava</i>	50	2	3	35	100	0.455	0.603	0.909	70	0.038	0.909	LC
<i>Picrasma javanica</i>	35	2	3	25	70	0.318	0.534	0.636	71.4	0.019	0.636	NE
<i>Sapindus mukorossi</i>	30	1	2	20	30	0.273	0.386	0.273	66.7	0.003	0.273	LC
<i>Stereospermum neuranthum</i>	25	1	2	18	25	0.227	0.364	0.227	72	0.002	0.227	NE
<i>Terminalia bellirica</i>	55	2	3	40	110	0.5	0.625	1	72.7	0.042	1	LC

FC – Frequency of Citation, Ui – Number of Use-reports for a Species, NU – Number of Uses, Np – Number of Participants (Informants), UR – Use Report, RFC – Relative Frequency of Citation, RI – Relative Importance Index, UV – Use Value, FL (%) – Fidelity Level (%), CVe – Coefficient of Variation (Ethnobotanical), CI – Cultural Importance Index

Not Evaluated (NE) – Species has not yet been assessed for the IUCN Red List., Least Concern (LC) – Species is widespread and abundant, and not currently at risk. Vulnerable (VU) – Species faces a high risk of extinction in the wild. Invasive / Not Threatened – Species is non-native, spreads rapidly, and is ecologically harmful, but not globally threatened.

Supplementary Table S2 — List of medicinal shrub species documented in Khawrihnm forest of Mizoram

Species Name	FC	Ui	NU	Np	UR	RFC	RI	UV	FL (%)	CVe	CI	Conservation status
<i>Catharanthus roseus</i>	60	2	3	45	120	0.545	0.625	1.091	75	0.027	1.091	NE
<i>Chromolaena odorata</i>	45	2	2	30	90	0.409	0.568	0.818	66.7	0.016	0.818	LC and Invasive
<i>Clerodendrum viscosum</i>	35	2	2	25	70	0.318	0.534	0.636	71.4	0.01	0.636	NE
<i>Crotalaria juncea</i>	40	2	2	28	80	0.364	0.432	0.727	70	0.012	0.727	NE
<i>Datura metel</i>	30	1	2	18	30	0.273	0.386	0.273	60	0.003	0.273	NE
<i>Elaeagnus cordata</i>	25	1	2	15	25	0.227	0.364	0.227	60	0.002	0.227	NE
<i>Hedyotes scandens</i>	35	2	3	25	70	0.318	0.534	0.636	71.4	0.01	0.636	NE
<i>Hibiscus rosachinensi</i>	30	1	2	20	30	0.273	0.386	0.273	66.7	0.003	0.273	NE
<i>Justicia adhatoda</i>	40	2	3	28	80	0.364	0.58	0.727	70	0.012	0.727	LC
<i>Lepionurus sylvestris</i>	25	1	2	15	25	0.227	0.364	0.227	60	0.002	0.227	NE
<i>Melastoma malabathricum</i>	35	2	2	25	70	0.318	0.432	0.636	71.4	0.01	0.636	NE
<i>Osbeckia nepalensis</i>	25	1	2	18	25	0.227	0.364	0.227	72	0.002	0.227	NE
<i>Securinega virosa</i>	30	1	2	20	30	0.273	0.386	0.273	66.7	0.003	0.273	LC
<i>Solanum indicum</i>	35	2	2	25	70	0.318	0.432	0.636	71.4	0.01	0.636	NE
<i>Solanum torvum</i>	30	1	2	18	30	0.273	0.386	0.273	60	0.003	0.273	LC

FC – Frequency of Citation, Ui – Number of Use-reports for a Species, NU – Number of Uses, Np – Number of Participants (Informants), UR – Use Report, RFC – Relative Frequency of Citation, RI – Relative Importance Index, UV – Use Value, FL (%) – Fidelity Level (%), CVe – Coefficient of Variation (Ethnobotanical), CI – Cultural Importance Index

Not Evaluated (NE) – Species has not yet been assessed for the IUCN Red List., Least Concern (LC) – Species is widespread and abundant, and not currently at risk. Vulnerable (VU) – Species faces a high risk of extinction in the wild. Invasive / Not Threatened – Species is non-native, spreads rapidly, and is ecologically harmful, but not globally threatened.

Supplementary Table S3 — List of medicinal herbs species documented in Khawrihnm forest of Mizoram

Species Name	FC	Ui	NU	Np	UR	RFC	RI	UV	FL (%)	CVe	CI	Conservation status
<i>Achyranthes aspera</i>	60	2	3	45	120	0.545	0.625	1.091	75	0.027	1.091	NE
<i>Acalypha indica</i>	55	2	3	40	110	0.5	0.625	1	72.7	0.024	1	NE
<i>Ageratum conyzoides</i>	50	2	2	35	100	0.455	0.568	0.909	70	0.021	0.909	Invasive
<i>Amorphophallus poeniifolius</i>	40	2	2	28	80	0.364	0.432	0.727	70	0.012	0.727	NE
<i>Benincasa hispida</i>	35	1	2	20	35	0.318	0.386	0.318	57.1	0.003	0.318	NE
<i>Centella asiatica</i>	50	2	3	35	100	0.455	0.625	0.909	70	0.021	0.909	LC
<i>Costus speciosus</i>	40	2	2	28	80	0.364	0.432	0.727	70	0.012	0.727	NE
<i>Curcuma longa</i>	35	2	2	25	70	0.318	0.432	0.636	71.4	0.01	0.636	NE
<i>Entada pursaetha</i>	30	1	2	18	30	0.273	0.364	0.273	60	0.002	0.273	NE
<i>Eryngium foetidum</i>	25	1	2	15	25	0.227	0.364	0.227	60	0.002	0.227	NE
<i>Gnetum scandens</i>	35	2	3	25	70	0.318	0.625	0.636	71.4	0.01	0.636	NE
<i>Homalomena aromatic</i>	25	1	2	18	25	0.227	0.364	0.227	72	0.002	0.227	NE
<i>Mikania micrantha</i>	30	1	2	20	30	0.273	0.364	0.273	66.7	0.003	0.273	Invasive
<i>Musa spp.</i>	25	1	2	18	25	0.227	0.364	0.227	72	0.002	0.227	NE
<i>Smilax ovalifolia</i>	30	2	2	20	60	0.273	0.432	0.545	66.7	0.007	0.545	NE
<i>Tinospora cordifolia</i>	35	2	3	25	70	0.318	0.625	0.636	71.4	0.01	0.636	NE
<i>Zingiber officinale</i>	25	1	2	18	25	0.227	0.364	0.227	72	0.002	0.227	NE

FC – Frequency of Citation, Ui – Number of Use-reports for a Species, NU – Number of Uses, Np – Number of Participants (Informants), UR – Use Report, RFC – Relative Frequency of Citation, RI – Relative Importance Index, UV – Use Value, FL (%) – Fidelity Level (%), CVe – Coefficient of Variation (Ethnobotanical), CI – Cultural Importance Index

Not Evaluated (NE) – Species has not yet been assessed for the IUCN Red List., Least Concern (LC) – Species is widespread and abundant, and not currently at risk. Vulnerable (VU) – Species faces a high risk of extinction in the wild. Invasive / Not Threatened – Species is non-native, spreads rapidly, and is ecologically harmful, but not globally threatened.