Ethnomedicinal plants used for the treatment of snakebites in Nepal

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Ethnobotany Research and Applications 32:30 (2025) - http://dx.doi.org/10.32859/era.32.30.1-18
Manuscript received: 03/09/2025 - Revised manuscript received: 02/11/2025 - Published: 04/11/2025

Research

Abstract

Background: Snakebite envenomation remains a critical public health issue in Nepal, where traditional healers rely on diverse medicinal plants for treatment.

Method: A systematic review of peer-reviewed and grey literature from 1950 to 2025 (June) regarding the indigenous use of plants in Nepal for snake bites was conducted using databases such as Google Scholar, PubMed, Scopus, and Science-Direct, as well as grey literature. A total of 115 articles out of 331 were analyzed and reviewed following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) model.

Results: This study documents 161 plant species from 67 families, with Fabaceae (12), Asteraceae (9), and Lamiaceae (8) being the most prominent, likely due to their rich bioactive compounds. Herbs (50.3%) dominated the growth forms, followed by trees (19.9%) and shrubs (19.3%), reflecting their accessibility in traditional medicine. Leaves (49 species) were the most frequently used plant part, while roots (42) and whole plants (30) were also significant, indicating targeted therapeutic applications. Remedies were primarily administered topically (58 species) or orally (34), with some plants used as direct antidotes (12 species). Geographically, Chitwan, Parbat, Kanchanpur, and Kaski districts reported the highest plant records.

Conclusion: This study catalogues Nepal's rich tradition of using 161 medicinal plants from 67 families for snakebite treatment yet reveals a striking lack of scientific validation for these remedies. To address this critical gap, rigorous phytochemical and pharmacological investigations are urgently needed to evaluate their therapeutic potential and develop safe, effective treatments that could benefit snakebite victims worldwide.

Keywords: Antidote plants; Antivenom plants; Ethnopharmacology; Snake envenomation

Background

Human-snake conflict has existed for centuries (Longkumer 2016) affecting particularly the rural people, agricultural workers, fishermen, and hunters and gatherers (Shah *et al.* 2003). Worldwide, snakebite envenomation impacts over five million people annually, leading to approximately 100,000 deaths and leaving around 400,000 individuals with permanent disabilities (Bawaskar *et al.* 2021). The incidence of snakebites and associated morbidity and mortality of humans in Asia is

45,900 per annum (Mohapatra *et al.* 2011) and the data peaks for South-east Asia (Westly 2013). In Nepal, 20,000-37,661 people are bitten by snakes resulting in 1,000 - 3,225 deaths annually (Alcoba *et al.* 2022; Pandey & Thapa 2023). In the eastern Tarai of Nepal, annual snakebite deaths per 100,000 populations were reported to be 162, which is the highest mortality rate in Asia (Sharma *et al.* 2004; WHO 2005). Highest mortality in Nepal is associated with limited antivenom and medical pluralities (Joshi 2010). In medical pluralism, both allopathic and traditional medicines synergy for medical treatment (Shrestha & Kunwar 2023). In Nepal, access to antivenom is limited, and traditional medicines contribute around 5% of the national medical system. As a result, a significant portion of the population is relying on traditional medicine (Newman *et al.* 1997). Conventional traditional herbal medicine against snakebite is common in the lowlands Tarai of the country since it is a great place for snakes to dwell and hibernate due to the abundance of rodents, reptiles, and amphibians (Chaudhary 2020). In traditional practices, ethnomedicinal plants are commonly employed to treat snakebites. In Nepal and India, treatment methods include the topical application of plant leaves, juices, or pastes; chewing of leaves and other plant parts; and oral consumption of plant extracts or decoctions and several plants, such as *Cyperus rotundus, Citrullus colocynthis* and *Nigella sativa*, are frequently cited for this purpose (Kumar *et al.* 2021). In this connection, this paper aims to document the ethnomedicinal knowledge and practices against snake bite treatment in Nepal to provide baseline information for bioevaluation and bioprospecting.

Particularly in regions where access to antivenom is limited, plant extracts are often prepared as poultices or decoctions and used topically or ingested to counteract the effects of venom. Snakebite management includes caring for symptoms and treating the cause with antivenom (Warrel 2010). In many low-income countries, access to antivenoms is limited because of high costs and widespread poverty among patients (Stock et al. 2007). Ophidian accidents represent a significant public health concern in tropical and subtropical regions globally (Mebs 2002), with an estimated incidence of approximately 550,000 bites annually.

A snake bite is a typical and usually fatal occupational and environmental ailment, particularly in rural tropical developing nations (Warrell 2010). A portion of these incidents results in the amputation of affected persons (8%) or fatalities (ranging from 0.3% to 2.3%) (Kasturiratne *et al.* 2008). This results in severe morbidity and death (Chippaux & Goyffon 1998; William *et al.* 2019), as well as long-term physiological impairments and/or psychological distress, and substantial economic consequences (William *et al.* 2011). In South Asia, snakes have long been objects of devotion, aversion, or loathing. Both Hindus and Buddhists hold cobras in high regard, and they frequently feature in stories and mythology (Alirol *et al.* 2010). The Terai region of Nepal is a vast agriculturally productive area, with a hot climate and high seasonal rainfall.

The most common method of treating snakebite envenomations is parenteral delivery of polyclonal antivenoms obtained from horses or sheep that neutralize poisons. Despite the significant advancements in this therapy, exploring alternative venom inhibitors, both synthetic and natural, remains crucial. These may improve or possibly replace the effects of antivenoms (Alagesaboopathi 2013). The only known effective therapy for this illness is antivenom (Jain *et al.* 2011). Unfortunately, populations in many tropical and sub-tropical nations still cannot afford this treatment (Gutierrez *et al.* 2011). The latter employ a wide variety of medicinal plants to cure several illnesses, including the well-known SBE, based on their empirical knowledge (Coe & Anderson 2005). Actually, the benefit of using plants to treat snakebites in rural regions is that they are readily available, affordable, and simple to use (Minu *et al.* 2012).

Materials and Methods

Study area

Nepal is politically structured into seven provinces, 77 districts, and 753 local bodies (Figure 1). Geographically, the country is longitudinally divided into three regions: Western Nepal (80° E to 83° E), Central Nepal (83° E to 86° 30′ E), and Eastern Nepal (86° 30′ E to 88° 12′ E). It also features five distinct vertical physiographic zones from south to north: (i) the Tarai (below 500 m), covering 14% of the country's area; (ii) the Siwalik range (500-1000 m), occupying 12%; (iii) the Mid-hills (1000-3000 m), making up 30%; (iv) the High Mountain region (3000-5000 m), accounting for 20%; and (v) the High Himalaya (above 5000 m), spanning 24% (LRMP, 1986). This diverse geography supports a rich biodiversity, with over 13,000 plant species, including approximately 7,000 flowering plants (Chaudhary *et al.* 2020).

Data collection and analysis

In this systematic review, peer-reviewed and grey literature from 1950 to 2025 (June) based on the indigenous use of plants in Nepal related to snake bite incidence, were reviewed analytically for discussion, conclusion, and recommendation. Different search engines; Google scholar, Research Gate, PubMed, Scopus, Science-Direct, and grey literature were searched using the keywords; "Ethnobotany", "Nepal", "Medicinal plants", "Indigenous knowledge", "Snakebite", "Traditional knowledge", "Ethnomedicine", "Herbal medicine", "Indigenous plants", "Wild plants", "Ethnopharmacological survey", "Ethnomedicinal study". A total of 115 articles of 331 were analyzed and reviewed after eliminating all duplicates and papers that were excluded by applying different inclusion criteria following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) model (Figure 2). A detailed table was formatted for all the plants used in case of snake bites recorded in Nepal.

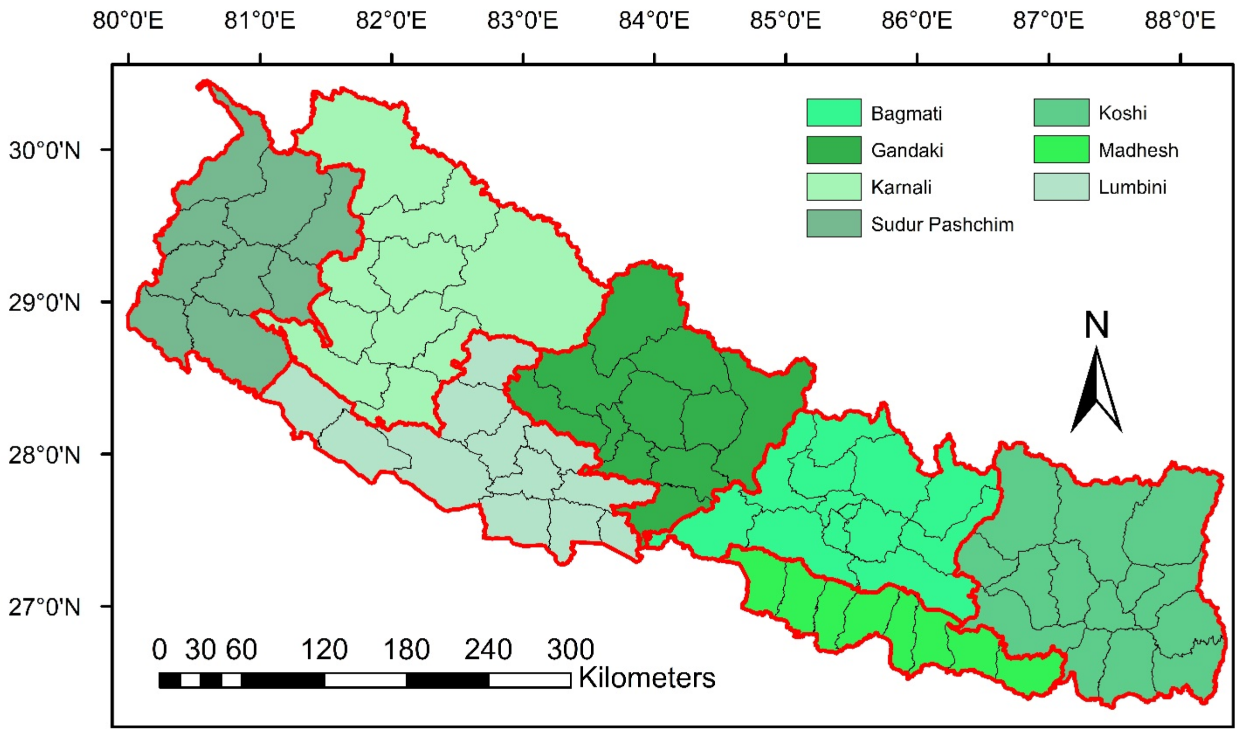

Figure 1. Map of study area

Results

Diversity of ethnomedicinal plants used for snakebite

This review documented 161 plant species from 67 families (Supplimentary file 1) traditionally used in Nepal for snakebite treatment, indicating high taxonomic diversity and deep ethnobotanical knowledge. The most dominant family was Fabaceae, with 12 species (Figure 3), likely due to its wide ecological distribution and rich content of bioactive compounds such as flavonoids and alkaloids known for their antivenom properties. Other prominent families included Asteraceae (9 species) and Lamiaceae (8 species), both commonly associated with traditional medicine worldwide. Euphorbiaceae, Ranunculaceae, Rubiaceae, and Solanaceae each had 6 species, further highlighting their significance in local healthcare practices. Families such as Araceae, Cucurbitaceae, and Rutaceae contributed 5 species each, while others like Amaranthaceae, Asclepidaceae, Malvaceae, Piperaceae, and Zingiberaceae contained 4 species each. Notably, 34 families were represented by only a single species, reflecting the broad but uneven use of plant families. This wide diversity underscores the extensive traditional knowledge systems across Nepal and suggests a strong reliance on locally available plant resources for managing snakebite incidents.

Growth forms of ethnomedicinal plants

Of the reported herbal plants, 50.31% of plant species were herbs, followed by trees (19.88%), and shrubs (19.25%) (Figure 4). The data revealed that climbers (10.56%) were the least recorded life form of plants. The life form analysis of the 161 plant species traditionally used for snakebite treatment in Nepal reveals a clear dominance of herbs, which account for 81 species, more than half of the total. This prevalence is likely due to their easy availability, accessibility, and faster growth rates, making them ideal for immediate use in local remedies. Trees and shrubs follow with 32 and 31 species, respectively, suggesting that more permanent, long-lived vegetation types also play a significant role in traditional healing systems. Climbers, though less common, are still represented by 17 species, indicating that all major plant growth forms contribute to traditional snakebite treatments. This variety in life forms reflects the adaptability and breadth of indigenous knowledge, with communities utilizing whatever plant forms are most accessible in their specific ecological settings. The prominence of herbs especially underscores their importance as readily harvestable and renewable resources in folk medicine.

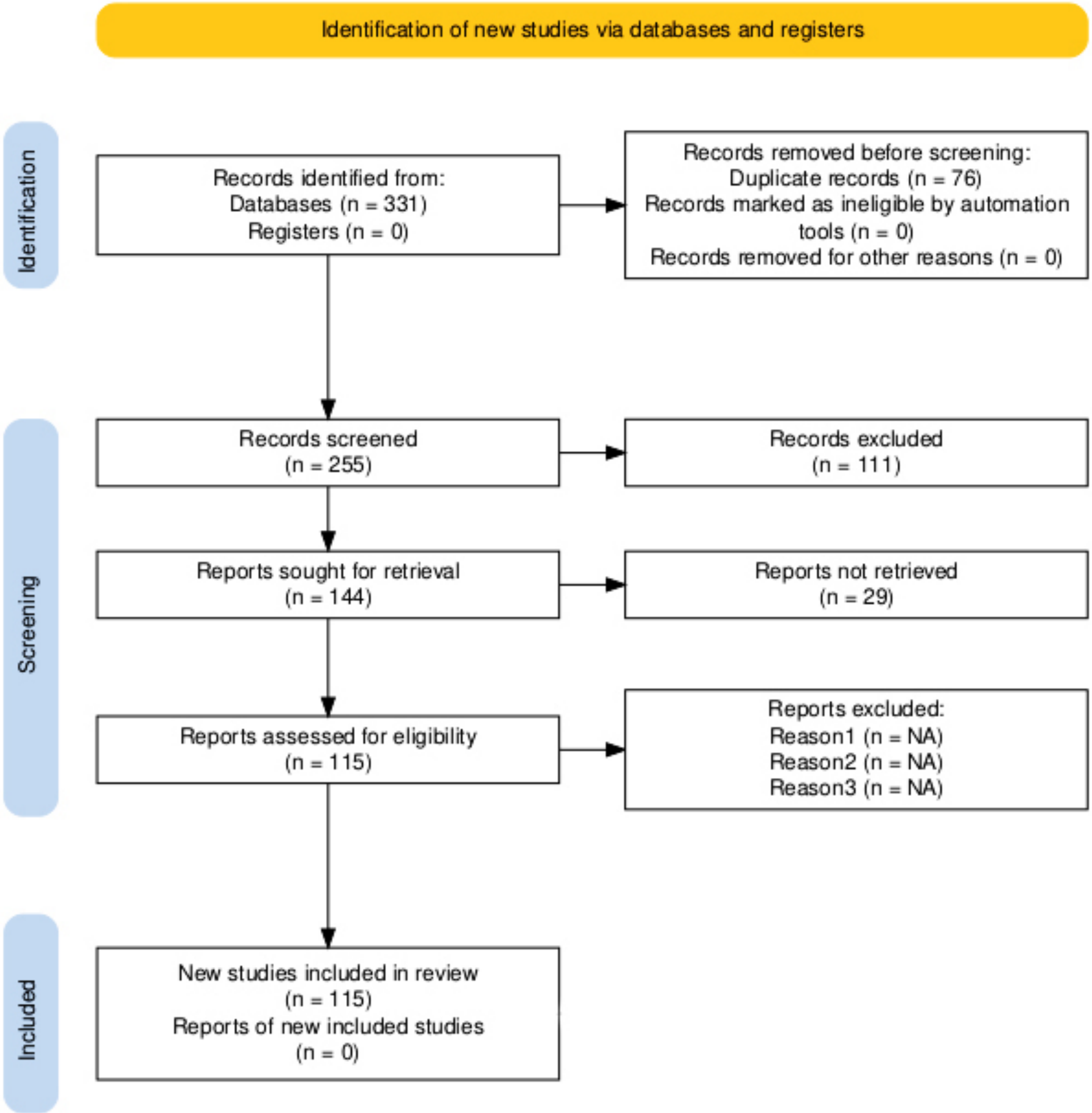

Figure 2. Flow chart of systematic literature review

Plant parts used

Among the plant parts used for preparing medicine, leaves (n = 49) were the most frequent and commonly utilized part, either alone or in combination with others (Figure 4). This is likely because leaves are abundant, easy to collect, and often contain potent bioactive compounds. Roots (42) and whole plants (30) also play a significant role, suggesting a belief in their strong medicinal properties, although harvesting roots can be destructive to plant populations. Fruits (23) and bark (18) are used frequently as well, pointing to their perceived therapeutic value. In contrast, parts like tubers, galls, and branches are rarely utilized (only once each), which may indicate limited ethnomedical knowledge or availability. Of the 161 medicinal plants, the parts used for 11 species (4.89%) were not recorded, reflecting the selective use of plant anatomy based on perceived healing efficacy, availability, and ease of preparation in treating snakebite.

Figure 3. Word cloud diagram of the families reported in the literature

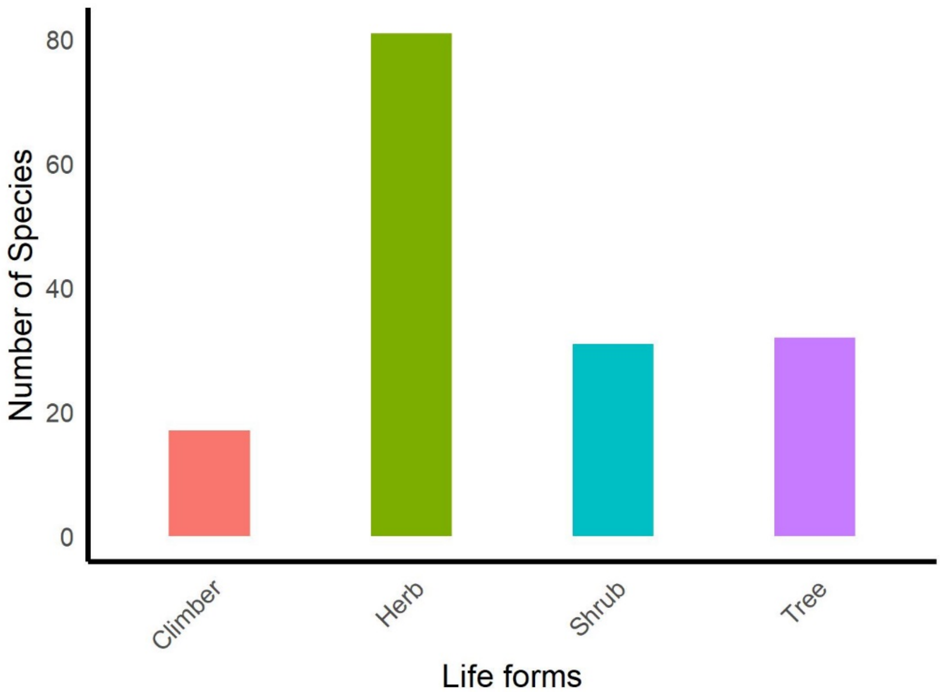

Figure 4. Life forms of the species

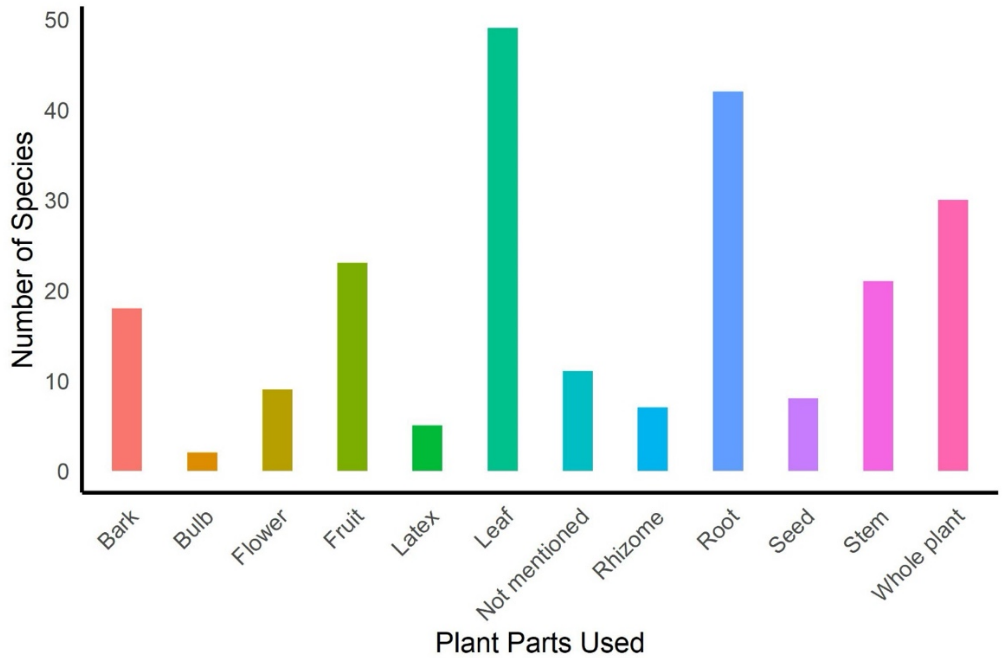

Figure 5. Different plant parts used for ethnomedicine against snakebite

Preparation and administration of remedies

The most common method is topical application (n=58), which makes practical sense for treating bites, as applying the remedy directly to the wound can help draw out venom or reduce swelling and pain (Figure 5). Oral administration follows with n=34, reflecting the belief that internal treatment can help counteract the venom's effects systemically. Interestingly, in 12 species, the plants were specifically used as an antidote, indicating a targeted approach to neutralizing venom. Only one case involved smelling, possibly involving aromatic herbs thought to influence the body through inhalation. Conversely, a significant portion (n=78) of the species was not explained regarding the mode of administration.

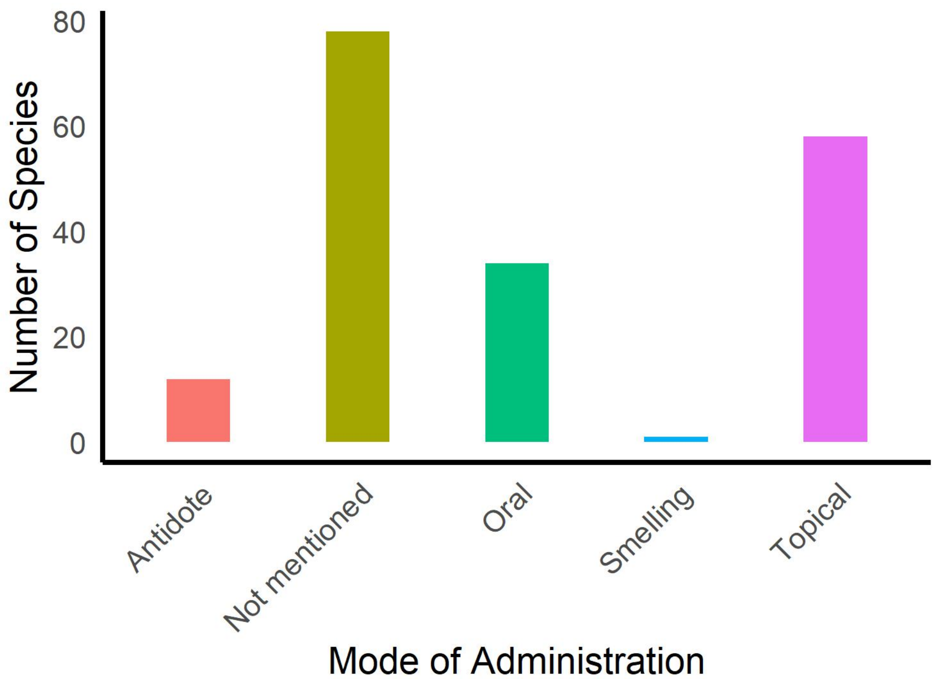

Figure 6. Different mode of administration used for ethnomedicine against snakebite

Spatial distribution of incidence and ethnobotanical studies

The study documented significant regional variations in the incidence and use of medicinal plants for snakebite treatment across Nepal (Figure 7-8). The Terai region had the most cases. Saptari and Mahottarai reported >25 cases, followed by Mahottari with 25, Rautahat and Dang with 23 each, and Kanchanpur with 21. In contrast, several hill and mountain districts had very few or no cases at all, even though they received more research attention. For example, Kaski had 17 studies but only 2 cases, Chitwan had 17 studies and 4 cases, and Parbat had 15 studies with no cases. On the other hand, high-burden districts like Saptari, Mahottari, and Rautahat had no published studies despite frequently occurring snakebites. Four districts, such as Chitwan, Parbat, Kanchanpur, and Kaski, exhibited the highest plant diversity, with each recording more than 15 different species used for treating snakebite (Figure 6). Similarly, Ilam, Sunsari, Kathmandu, and Makwanpur showed moderate diversity, with 10 to 15 plant species employed for snakebite remedies. A lower but still notable range of 5 to 10 medicinal plant species was reported from 17 districts, while 21 districts had minimal documentation, with only 1 to 5 species being used. Notably, 30 districts lacked any reported medicinal plants for snakebite treatment, indicating either limited ethnobotanical knowledge, insufficient research, or a scarcity of such plants in these regions.

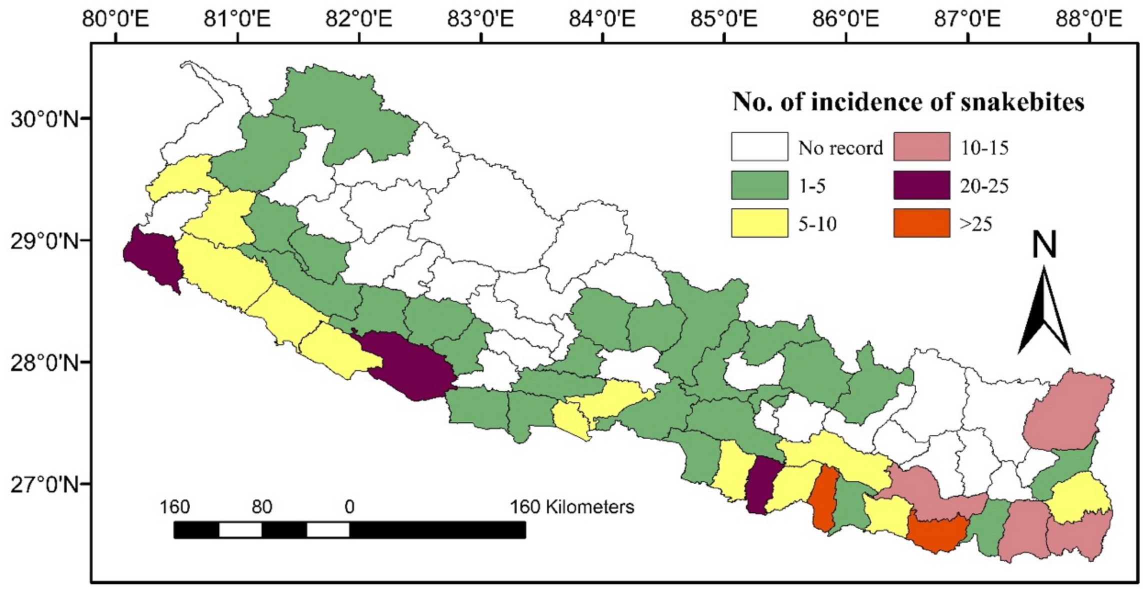

Figure 7. Map of Nepal showing the number of incidents of snake bites

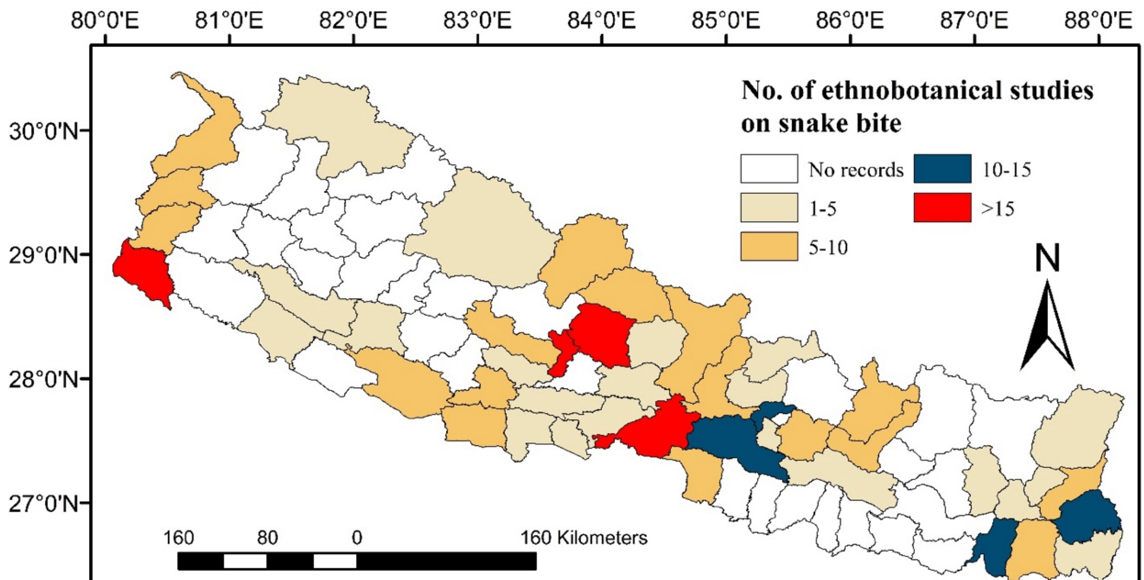

Figure 8. Map of Nepal showing ethnobotanical studies on snake bite

Discussion

The findings of this review underscore the significant diversity of ethnomedicinal plants utilized for the treatment of snakebites in Nepal, reflecting the nation's rich botanical heritage and deeply ingrained traditional knowledge systems. The taxonomic distribution, growth forms, utilized plant parts, and modes of administration collectively illustrate how Nepalese communities depend on locally accessible plants to manage snakebite envenomation, a critical public health issue in rural areas where access to modern antivenom is limited.

The highest number of snakebite cases and deaths occurs in South Asia, especially in India and Pakistan (Roberts 2022). Snakebite is the sixth largest factor causing human deaths in India (Westly 2013). Every year, snakebites cause around 4,500 deaths in Bihar. This makes it the state with the third-highest number of snakebite deaths in India, following Uttar Pradesh and Andhra Pradesh (Mohapatra *et al.* 2011). Similarly, these findings also align with the results of Dharmadasa *et al.* (2016) (Srilanka), Hasan *et al.* (2016) (Bangladesh), Giovannini & HOwes (2017) (Centr America, and Okot *et al.* (2020) (Uganda). The development of antivenom to cure envenomation from most snake species that cause SBE took many decades. It is crucial to employ the appropriate antivenom, nevertheless, as it is neither completely safe nor 100% effective (William *et al.* 2011; Habib & Warnell 2013; Keyler *et al.* 2013). The age and species of the snake, the season, the region, and the envenoming snake's food all affect the amount, content, and toxicity of venoms. According to Kang *et al.* (2011), snake venom is a complex mixture of toxic proteins that are injected to immobilize the victim.

The common use of herbs among indigenous communities mainly comes from the many herbaceous plants found in their environment (Ayyanar & Ignacimuthu 2005, Giday *et al.* 2010, Tabuti *et al.* 2003), easy availability, or being cheaper at the local market (Butt *et al.* 2015). Leaves were commonly employed due to their ease of collection in comparison to the other parts, such as roots, rhizomes, flowers, and fruits (Giday *et al.* 2009). Additionally, leaves play an active role in photosynthesis and metabolite formation (Ghorbani 2005), and harvesting leaves poses less damage to the presence of individual plant species (Giday & Ameni 2003). Studies conducted across the globe, such as India(Muthu *et al.* 2006, Uniyal *et al.* 2006, Raghupathy *et al.* 2008), Argentina (Hilgert 2001), Uganda (Tabuti *et al.* 2003), and Ethiopia (Giday & Ameni 2003), also highlighted the use of herbs as sources of medicine quite similar to this study. Many rural residents rely on traditional medicine for their main health care delivery due to the high cost of contemporary medications and their unavailability in distant locations (Durugbo *et al.* 2012). Additionally, due to their price, accessibility, and innate confidence in their efficacy over conventional medications, they support both traditional and unorthodox treatment.

Plants are a major source of licensed medications that are used to treat a variety of illnesses worldwide. According to estimates, about 25% of licensed medicines are derived directly from plant chemicals (Rates 2001). However, when synthetic derivatives of natural compounds are considered, the percentage rises significantly (Kusari *et al.* 2015). These approved plant chemicals have undergone stringent safety and effectiveness studies and consistently provide a substantial benefit to the patient, surpassing the placebo control. This sets them apart from typical medications (Trim *et al.*, 2020). Plant extracts have multiple biochemical and pharmacological characteristics and are a very rich source of pharmacologically active chemicals. When these substances interact with the poisons or enzymes from a snake bite, their actions are neutralized or inhibited (Makhija & Khamar 2010). Alkaloids, essential oils, flavonoids, tannins, saponins, and phenolic compounds are among the bioactive phytochemical elements of these plants that give them their therapeutic value. These constituents have specific physiological effects on the human body (Hostettmann 2003).

The predominance of the Fabaceae family (12 species) corresponds with its extensive ecological distribution and high concentration of bioactive compounds, such as flavonoids and alkaloids, which have exhibited antivenom properties in pharmacological studies (Gutierrez *et al.* 2017). The Fabaceae family is also dominant in India (Upasani *et al*. 2017), Uganda (Omara et al. 2020), Ethiopia (Yirgu & Chippaux 2019), and Tanzania (Mogha *et al*. 2022). The prominence of Asteraceae and Lamiaceae further reinforces their global acknowledgment in traditional medicine due to their anti-inflammatory and neuroprotective effects (Mohan *et al.* 2020). The presence of multiple species from Euphorbiaceae, Ranunculaceae, and Solanaceae families, recognized for their toxic yet medicinally valuable secondary metabolites, indicates that Nepalese healers have developed a sophisticated understanding of balancing toxicity with therapeutic efficacy. The representation of 34 families by only a single species suggests a broad but uneven ethnobotanical reliance, potentially attributable to localized availability or specialized indigenous knowledge that has not been thoroughly documented. The predominance of herbaceous species (50.31%) over trees, shrubs, and climbers suggests a preference for easily accessible, fast-growing plants that can be harvested quickly in emergencies. This finding is consistent with other ethnomedicinal studies in tropical regions where herbs are the primary source of first-aid treatments (Alves & Rosa 2007). Trees and shrubs, though less frequently used, still contribute significantly, likely due to their year-round availability and potent bioactive compounds stored in bark and roots.

Leaves being the most frequently used plant part (n=49) aligns with global ethnobotanical trends, as leaves are rich in secondary metabolites, easily collected, and renewable (Rokaya *et al.*, 2014). The substantial use of roots (n=42) and whole plants (n=30) indicates a belief in their high medicinal potency, though this raises concerns about sustainability, as root harvesting can threaten plant populations. The minimal use of tubers, galls, and branches suggests either limited traditional knowledge about these parts or their lower efficacy in treating snakebites. Similarly, the preference for topical application (n=58) over oral administration (n=34) is logical, given that snake venom primarily acts locally at the bite site, causing necrosis and swelling. Direct application may help neutralize venom enzymes or reduce inflammation. Oral ingestion, though less common, suggests systemic detoxification beliefs, possibly targeting hematotoxic or neurotoxic effects. The lack of documented administration methods for 78 species highlights a critical research gap, emphasizing the need for more detailed ethnobotanical documentation before traditional knowledge is lost.

In most cases, snakebite treatment uses extracts from individual plants. In some instances, mixtures of different plants and their parts are used to create antidotes. These antidotes are typically prepared through decoction, which is the main method (Omara *et al*. 2020). The uneven distribution of reported medicinal plants across Nepal's districts suggests regional variations in ethnobotanical expertise, biodiversity, and research coverage. Districts like Chitwan, Parbat, and Kaski, with high plant diversity, may have richer biodiversity or more active documentation efforts. In contrast, the absence of data from 30 districts could stem from insufficient research, cultural erosion of traditional knowledge, or lower snakebite prevalence. Targeted ethnobotanical studies in underrepresented regions are essential to preserve this knowledge and identify potential new antivenom candidates.

Conclusions

This review documents the extensive use of diverse medicinal plants (161 species across 67 families) for snakebite treatment in traditional Nepalese medicine, yet a limited number have been scientifically evaluated for their bioactive constituents and antivenom potential. Given the significant public health burden posed by snakebites in Nepal and other tropical regions, there is an urgent need for comprehensive phytochemical analysis of these ethnomedicinal plants to identify bioactive compounds and pharmacological validation of their venom-neutralizing properties. The integration of ethnobotanical knowledge with modern evidence-based scientific approaches could provide sustainable solutions to the global snakebite crisis while preserving Nepal's rich biocultural heritage.

Declarations

Ethics approval and consent to participate: Not applicable
Consent for publication: Not applicable
Availability of data and materials: The Necessary data are included in the manuscript and supplementary file.
Competing interests: The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.
Funding: No funding has been received for the study.
Author contribution: GB - conceptualization, methodology, investigation, analysis, writing original draft, review and editing; SB - conceptualization, methodology, investigation, analysis, writing original draft, review and editing; GN - Investigation, writing original draft; OK - Investigation, writing original draft; SK - Investigation, writing original draft; RK - Review and editing.

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Supplementary file 1 (Ethnomedicinal plants used for snakebite in Nepal)

Botanical name	Family	Local name	Habit	Part used	Mode of use	Mode of administration	Frequency of citation (F)	Reference and verification	District
Abrus precatorius L.	Fabaceae	Rati gedi	C	Root	Dried root is ground and administered	Topical	1	Ambu et al. 2020	Kavreplanchowk
Acacia pennata (L.) Willd.	Fabaceae	Arerikanda	T	Whole plant			1	Tamang et al. 2017	Chitwan, Dhading, Gorkha, Makwanpur
Achyranthes aspera L.	Amaranthaceae	Datiwan, Naksirka	H	Leaf, Root, Whole plant, Shoot, Flower, Seed	Decoction of leaf; paste of root	Oral, Topical	6	Lamichhane et al. 2014a; Gautam 2013; Khadka 2011; Bhattarai et al. 2009; Dhami 2008; Acharya 2023	Kanchanpur, Kapilvastu, Lalitpur, Nawalparasi, Pyuthan, Sunsari, Tanahun
Acmella calva (DC.) R.K. Jansen	Asteraceae	Marethi, Jansen, Latoghans	H	Whole plant	Paste	Topical	3	Kunwar et al. 2012; Khadka 2011; Lamichhane et al. 2014a	Baitadi, Dadeldhura, Darchula, Kapilvastu, Lalitpur Pyuthan
Aconitum lethale Griff.	Ranunculaceae	Bikhma/Bisma	H				3	Bhattarai 2009; Limbu & Rai 2013; Magar 2009	Dhankuta, Jhapa, Ilam, Morang, Panchthar, Sunsari, Taplejung, Terhathum, Tanahun
Aconitum naviculare (Bruhl) Stapf	Ranunculaceae		H				1	Bhattarai 2009	Manang, Mustang
Acorus calamus L.	Araceae	Bojho	H	Rhizome	Rhizome as antidote		3	Magar et al. 2022; Chaudhary et al. 2020; Joshi & Edington 1990	Kathmandu, Rasuwa, Sunsari
Adiantum capillus-veneris L.	Pteridaceae	Gophale, Pakhaale Unyu	H	Root, Leaf	Leaf paste; Root juice	Oral, Topical	5	Pariyar et al. 2021; Kunwar 2018; Acharya 2012; Kunwar & Bussmann 2009; Kunwar et al. 2010	Baitadi, Bardiya) Dadeldhura, Darchula, Gulmi
Adiantum pedatum L.	Pteridaceae	Unyu	H	Root	Rhizome paste is applied and tied	Topical	1	Aryal et al. 2016	

					with Siru with mantra				
Agrimonia pilosa Ledeb.	Rosaceae	Kathlange	H	Root	Root juice antidote	Oral	1	Kunwar et al. 2010	Baitadi, Dadeldhura, Darchula
Albizia lebbeck (L.) Benth.	Fabaceae	Kalo siris	T	Bark	Bark paste	Topical	2	Bhattarai & Tamang 2017; Tamang et al. 2017	Chitwan, Dhading, Gorkha, Makwanpur
Allium sativum L.	Amaryllidaceae	Lasun	H	Bulb	Paste of bulb	Topical	2	Adhikari et al. 2019; Rai & Shrestha 2009	Bhojpur, Kaski
Allium wallichii Kunth	Amaryllidaceae		H				2	Limbu & Rai 2013; Bhattarai 2009	Dhankuta, Ilam, Jhapa, Manang, Mustang, Morang, Panchthar, Sunsari, Taplejung, Terhathum, Sunsari
Alternanthera sessilis (L.) DC.	Amaranthaceae	Viringi-jhar/ Sarhauchi	H	Whole plant			1	Chaudhary & Rai 2017	Sunsari
Amaranthus lividus L.	Amaranthaceae	Lunde	H	Root, Stem, Leaf	Root paste with black pepper seed powder is diluted in Chaulani (rice waste water); stem and leaves extract	Topical, Oral	2	Bhatt et al. 2021; Singh et al. 2011	Kanchanpur, Rupandehi
Amaranthus spinosus L.	Amaranthaceae	Lude Kanda/ Banlunde/Kate math	H	Whole plant	Juice and decoction	Oral	2	Gautam & Timilsina 2022; Bhatt et al 2021	Kanchanpur, Kaski
Amomum subulatum Roxb.	Zingiberaceae	Alainchi	H	Fruit			1	Lamichhane et al. 2014a	Lalitpur
Anagallis arvensis L.	Primulaceae	Armale	H	Whole plant	Decoction	Oral	1	Singh & Hamal 2013	Rupandehi
Andrographis paniculata (Burm.f.) Wall. Ex Nees	Acanthaceae	Kalomegh	H	Whole plant	Juice	Oral	2	Singh 2020; Bhattarai & Tamang 2017	Makwanpur, Parsa
Anthocephalus chinensis (Lam.) A. Rich. ex Walp.	Rubiaceae	Kadam	T	Stem, Bark	stem and bark extract		2	Baral & Bhagat 2018; Kunwar et al. 2010	Baitadi, Dadeldhura, Darchula, Morang
Areca catechu L.	Arecaceae	Supadi	S	Fruit			1	Bhattarai 2008	Arghakhanchi
Arisaema costatum (Wall.) Mart. ex Schott	Araceae	Banko	H	Seed	Paste	Antidote	1	Ojha Khatri et al. 2021	Dolakha

Arisaema tortuosum (Wall.) Schott	Araceae	Banko, Sarpako Makai	H	Seed, Fruit, Tuber	Corm & seed paste		5	Silwal 2020; Paudel et al. 2021; Malla 2019; Malla et al. 2015; Bhatt et al. 2023	Arghakhanchi, Kathmandu, Parbat, Kanchanpur
Aristolochia indica L.	Aristolochiaceae	Isharmule	C	Leaf, Root	Juice of leaf and powdered root	Oral, Topical	1	Singh 2016	Parsa
Asclepias curassavica L.	Asclepidaceae	Khursani phool	H	Root			1	Gautam 2011	Panchthar
Aster diplostephioides (DC.) Benth. ex C.B. Clarke	Asteraceae	Mara, Motolugmick	H	Flower	Ground flower is taken (half a spoonful) with a cup of hot water two times a day after meal	Oral	1	Bhattarai 2009	Manang, Mustang
Azadirachta indica A. Juss	Meliaceae	Neem	T	Leaf	Leaf juice		1	Khanal et al. 2020	Gulmi
Bauhinia vahlii Wight & Arn.	Fabaceae	Bhorla	C	Seed, Young Shoot, Leaf	paste of root, seed, and young shoot	Topical	4	Baral & Bhagat 2018; Sapkota 2013; Gautam 2011; Rai 2003	Baglung, Morang, Panchthar, Terhathum
Bauhinia variegata L.	Fabaceae	Koiralo	T	Bark, Stem, Root, Leaf, Flower	powdered bark is combined with Citrus limon juice, bark and stem are as antidote	Oral, Topical	4	Ambu et al. 2020; Acharya & Acharya 2009; Bhattarai 2008, Acharya 2023	Arghakhanchi, Kavreplanchowk, Rupandehi, Tanahun
*Barleria cristata*L.	Acanthaceae	Bhede kuro	H	Leaf, Root			1	Acharya 2023	Tanahun
Boerhavia diffusa L.	Nyctaginaceae	Purnarnava	H	Leaf, Root	Leaf and root extract	Oral	1	Bhatt et al. 2021	Kanchanpur
Bombax ceiba L.	Malvaceae	Simal	T	Flower, Fruit, Bark, Root			1	Mahara et al. 2022	Kapilvastu
Bryophyllum pinnatum (Lam.) Oken	Crassulaceae	Pattharchatt	H	Leaf	Leaf juice, ash of the burnt leaves as paste	Oral, Topical	2	Pradhan et al. 2020; Malla 2019;	Parbat, Ramechhap
Calanthe plantaginea Lindl.	Orchidaceae	Bismaro	H	Stem		Antidote	1	Kunwar 2018	Kailash Sacred Landscape
Calotropis gigantean (L.) Dryand.	Asclepiadaceae	Aank/Madar	S	Latex, Bark, Root, Flower	Bark and root paste, latex, bark of Calotropis gigantea and Thaysanolena maxima is crushed and applied	Topical	8	Gautam & Timilsina 2022; Pariyar et al. 2021; Kunwar 2018; Chaudhary & Rai 2017; Poudel & Singh 2016b; Poudel 2015; Bhattarai 2013; Raut et al. 2025	Bardiya, Chitwan, Kaski, Kailash Sacred Landscape, Sunsari, Surkhet, Dang
Calotropis procera (Aiton) Dryand	Asclepiadaceae	Aakha / Madar	S	Leaf	Latex	Topical	2	Bhatt et al. 2021; Bhatt et al. 2023	Kanchanpur

Cannabis sativa L.	Cannabaceae	Bhang	H	Whole plant	Paste	Topical	1	Bhatt et al. 2021	Kanchanpur
Capsicum annuum L.	Solanaceae	Dalley Khursaani	H	Fruit	Paste	Topical	1	Dewan et al. 2023	Sankhuwasabha
Capsicum frutescens L.	Solaanaceae	Jirey Khursani	H	Fruit	Paste	Topical	1	Bhandari et al. 2013	Dang
Careya arborea Roxb.	Lecythidaceae	Kumbhi	T	Bark, Fruit	Paste	Topical	3	Acharya & Acharya 2009; Tamang et al. 2017; Bhattarai &Tamang 2017	Chitwan, Dhading, Gorkha, Makwanpur, Rupandehi
Caryota urens L.	Arecaceae	Machha Jode/ Rangbang	T	Leaf, Bark	Paste	Topical	1	Bhattarai 2020	Ilam
Cassia fistula L.	Fabaceae	Raj briksha	T	Seed, Fruit pulp, Leaf	Seed and fruit pulp paste, juice of seed, leaf paste, fruit powder	Oral, Topical	7	Gautam & Dhakal 2023; Bhattarai 2020; Malla 2019; Lamichhane et al. 2014a; Timilsina & Singh 2014; Sapkota 2008; Bhattarai 2008	Arghakhanchi, Baglung, Ilam, Lalitpur, Makwanpur, Nuwakot, Parbat
Castanopsis tribuloides (Sm.) A.DC.	Fagaceae	Musure Katus	T	Bark	Bark paste	Topical	4	Kunwar 2018; Joshi 2004; Joshi et al. 2011; Joshi & Joshi 2009	Kathmandu, Rasuwa
Centella asiatica (L.) Urb.	Apiaceae	Ghodtapre	H	Whole plant, Leaf	Paste	Topical, Oral	5	Rana et al. 2015; Hasan et al. 2013; Gautam 2013; Gurung 2007; Dewan et al. 2023	Kaski, Makwanpur, Sunsari, Sankhuwasabha
Cheilanthes dalhousiae Hook.	Pteridaceae	Rani sinka	H	Leaf			1	Rai & Singh 2015	Bhojpur
Chromolaena odorata (L.) R.M.King & H.Rob.	Asteraceae	Banmara	S	Whole plant	Prevention		1	Thorn et al. 2020	
Cissampelos pareira L.	Menispermaceae	Gajurgano/ Batulpate/Tanga	C	Root	Root decoction and paste	Oral, Topical	2	Joshi et al. 2020; Joshi 2014	Makwanpur
Citrus limon (L.) Osbeck	Rutaceae	Nibuwa	S	Fruit	Juice is combined with dried powdered leaves of Bauhinia variegata		1	Ambu et al. 2020	Kavreplanchok
Clerodendrum infortunatum L.	Lamiaceae	Bhat, Bhanti	S	Leaf, Root	Root and leaf paste	Oral, Topical	3	Bhatta et al. 2021; Bhattarai 2020; Pariyar et al. 2021	Bardiya, Ilam, Kanchanpur
Clitoria ternatea L.	Fabaceae	Aparajeeta	C				1	Dani & Tiwari 2018	Kathmandu
Colebrookea oppositifolia Sm.	Lamiaceae	Dhurseli	S	Leaf	Leaf juice or paste		5	Gautam & Timilsina 2022; Tamang et al. 2017; Bhattarai & Tamang 2017; Sigdel & Rokaya 2013; Khatri 2012	Chitwan, Dang, Dhading, Gorkha, Kaski, Makwanpur

Colocasia esculenta (L.) *Schott*	Araceae	Karkalo	H	Stem	Latex	Topical	1	Adhikari et al. 2019	Kaski
Costus speciosus (Koenig) Sm.	Zingiberaceae	Betlauri/Mumbhas	H	Rhizome, Stem, Root			3	Bhattarai & Tamang 2017; Lamichhane et al. 2014a; Tamang et al. 2017	Chitwan, Dhading, Gorkha, Lalitpur, Makwanpur
Crateva religiosa G.Forst.	Capparaceae	Sipligan	T	Fruit, Shoot, Bark	Juice of fruit, shoot and bark		1	Sapkota 2008	Baglung
Cynodon dactylon (L.) Pers.	Poaceae	Dubo	H	Whole plant	paste is applied with honey, decoction	Topical	2	Kunwar 2018; Bhatt et al. 2023	Kailash Sacred Landscape, Kanchanpur
Dactylorhiza hatagirea (D.Don) Soó	Orchidaceae	Panch Aunle	H	Root	Root powder and paste	Topical	2	Pradhan et al. 2020; Bhattarai 2009	Manang, Mustang, Ramechhap
Daphne bholua Buch.-Ham. ex D.Don	Solanaceae	Lokta	S	Bark	Paper made from bark is used as bandage	Topical	1	Ambu et al. 2020	Kavreplanchowk
Datura metel L.	Solanaceae	Bhokaray	S	Leaf, Seed	Leaf extract, seed paste	Oral, Topical	2	Bhatt et al. 2021; Kandel 2012	Kanchanpur, Nuwakot
Delphinium denudatum Wall.	Ranunculaceae	Nirmasi	H	Root, Rhizome	Root and Rhizome Paste		2	Aryal et al. 2016; Adhikari 2024	Dhading
Delphinium grandiflorum L.	Ranunculaceae	Alisyo/Atis	H	Root	Root juice		1	Prajapati 2012	Humla
Delphinium himalayae Munz	Ranunculaceae	Atis/ Majphal	H	Root	Root juice		2	Gewali 2009; Kunwar & Adhikari 2005	Dolpa
Diploknema butyracea (Roxb.) H.J.Lam	Sapotaceae	Chiuri	T		Repellent	Topical	1	Kunwar et al. 2010	Baitadi, Dadeldhura, Darchula
Dracaena trifasciata (Prain) Mabb.	Asparagaceae	Mangut	H	Leaf	Paste	Topical	1	Raut et al. 2025	Dang
Dracocephalum heterophyllum Benth.	Lamiaceae	Chichine Jhar	H	Leaf	Leaf paste		1	Pradhan et al. 2020	Ramechhap
Eclipta prostrata (L.) L.	Asteraceae	Bhringraj/ Kal jira	H	Whole plant	Paste		3	Gautam & Timilsina 2022; Bhatt et al. 2021; Dani & Tiwari 2018	Kanchanpur, Kaski, Kathmandu
Eichhornia crassipes (Mart.) Solms	Pontederiaceae	Talpatana	H	Leaf	Juice of leaf		1	Mahara et al. 2022	Kapilvastu
Elephantopus scaber L.	Asteraceae	Sahasra buti	H	Root	extract		1	Dhami 2008	Kanchanpur
Euphorbia chamaesyce L.	Euphorbiaceae	Dundhi	H	Whole plant	Paste		1	Manandhar 1985	Dang
Euphorbia hirta L.	Euphorbiaceae	Dudhe jhar/ Dudhi	H	Whole plant, Root	extract, root decoction		4	Singh, 2015a 2015b; Malla & Chhetri 2009; Dhami 2008	Kanchanpur, Kavreplanchowk, Parsa
Euphorbia parviflora L.	Euphorbiaceae	Dudhe jhar	H	Whole plant		Oral	1	Bhatt et al. 2021	Kanchanpur
Euphorbia tirucalli L.	Euphorbiaceae	Burkill, Thohar	T	Latex	1 tbls. Of latex is taken with milk to cause vomiting	Oral	1	Singh 2021	Parsa

Ficus auriculata Lour.	Moraceae	Timilo	T	Resin			1	Neupane 2023	Achham
Ficus religiosa L.	Moraceae	Pipal	T	Bark	Bark juice		2	Silwal 2020; Malla 2019	Kathmandu, Parbat
Fomitopsis pinicola (Sw.) P. Karst.	Fomitopsidaceae	Jali chyau	F	Whole plant			1	Rijal 2011	Chitwan
Galium asperifolium Wall.	Rubiaceae	Sano majitho	H	Whole plant	Paste		1	Bhattarai 2018	Ilam
Girardinia diversifolia (Link) Friis	Urticaceae	Malemau	S	Root	Root paste		1	Rijal 2011	Chitwan
Gossypium herbaceum L.	Malvaceae	Ban Kapas	S	Leaf	Leaf juice		1	Malla 2019	Parbat
Gymnema sylvestre (Retz.) R.Br. ex Sm.	Asclepidaceae	Gurmar	C	Whole plant		Antidote	2	Singh 2017, 2016	Parsa
Hedychium spicatum Buch.-Ham. Ex Sm.	Zingiberaceae	Kapoor kacharo/ Panee saro	H				1	Lamichhane et al. 2014b	Langtang NP
Hedyotis corymbosa Wall.	Rubiaceae	Majithe jhar, Piringo	H	Whole plant	extract	Oral	1	Bhatt et al. 2021	Kanchanpur
Helianthus annuus L.	Asteraceae	Suraj Mukh	H	Leaf	crushed leaves		1	Mahara et al. 2022	Kapilvastu
Herpetospermum pedunculosum (Ser.) C.B.Clarke	Cucurbitaceae	Bankarela	C	Root	Root juice or paste		1	Pradhan et al. 2020	Ramechhap
Hydrangea febrifuga (Lour.) Y.De Smet & Granados	Hydrangeaceae	Basuli	H	Leaf	Leaf juice	Oral, Topical	1	Aryal et al. 2016	
Hydrocotyle javanica Thunb.	Araliaceae	Khochade, Sano ghortapre, Zupha	H	Whole plant	Juice or paste		2	Dhital et al. 2021; Kunwar 2018	Dolakha, Kailash Sacred Landscape
Hypericum oblongifolium Hook.	Hpericaceae	Khareto	S	Leaf	Leaf juice	Antidote	3	Malla 2019; Malla et al. 2015; Manandhar 1991	Kavreplanchowk, Parbat
Imperata cylindrical (L.) Raeusch.	Poaceae	Siru	H	Whole plant	to tie body parts to hinder blood circulation; grounded and consumed, and applied 21 times before meal of evening	Topical	2	Gubhaju & Guha 2019; Aryal et al. 2016	Palpa
Inula cappa (Buch.-Ham. ex D.Don) DC.	Asteraceae	Gai tihare	S	Young Shoot	extract	Topical	1	Shrestha & Dhillion 2003	Dolakha
Jatropha curcas L.	Euphorbiaceae	Sajiwan, Vyaghra eranda	S	Shoot	Young shoot		1	Kunwar 2018	Kailash Sacred Landscape
Juncus prismatocarpus R.Br.	Juncaceae	Tauke jhar	H	Leaf	Leaf juice		1	Joshi 2021	Chitwan
Lantana camara L.	Verbenaceae	Banamara	S	Whole plant			1	Baral & Bhagat 2018	Morang
Lathyrus aphaca L.	Fabaceae	Matar ghans	H	Leaf	Leaf extract		1	Bhatt et al. 2021	Kanchanpur
Leea asiatica (L.) Ridsdale	Leeaceae	Dhakkal sai	H	Leaf			1	Tamang et al. 2017	Chitwan, Dhading, Gorkha, Makwanpur
Leea macrophylla Roxb. ex Hornem.	Leeaceae	Galeni	S	Root	Root juice		2	Kunwar et al. 2007; Gautam 2011	Dhading, Panchthar

Leucas aspera (Willd.) Link	Lamiaceae	Ban tulasi / Tilaula	H	Leaf	Leaf sap		2	Dani & Tiwari 2018; Bhatt et al. 2023	Kathmandu, Kanchanpur
Leucas cephalotes (Roth) Spreng.	Lamiaceae	Guma	H	Leaf	Leaf paste		1	Mahara et al. 2022	Kapilvastu
Lippia nodiflora (L.) Rich.	Verbenaceae	Kurkure Jhar	H				1	Dani & Tiwari 2018	Kathmandu
Litsea cubeba (Lour.) Pers.	Lauraceae	siltimur	T		Repellent	Topical	1	Rai & Shrestha 2009	Bhojpur
Luffa acutangula Roxb.	Cucurbitaceae	Ghiraula	C	Fruit	Fruits are kept near the back of the neck and if a person cries, it indicates that a snake has bittem him		1	Bhandari et al. 2013	Dang
Lycopodium clavatum L.	Lycopodiaceae	Naagbeli	H	Lahara	Powder		1	Aryal et al. 2016	
Marsilea quadrifolia L.	Marsileaceae	Chaupatay	H	Leaf	Leaf juice	Oral	1	Bhatt et al. 2021	Kanchanpur
Meconopsis regia G.Taylor	Papaveraceae	Kesar	H	Root	Root juice, 3-5 teaspoonfull four times a day for 2-3 days	Antidote	1	Malla 2019	Parbat
Mesua ferrea L.	Calophyllaceae	Nageshwori	T	Fruit, Stem	Repellent		1	Acharya & Rokaya 2005	Kathmandu
Millettia extensa (Benth.) Baker	Fabaceae	Gaujo	C	Whole plant			1	Gautam & Timilsina 2022	Kaski
Momordica charantia L.	Cucurbitaceae	Ban Karela	C	Whole plant			1	Khatri 2012;	Kaski
Moringa oleifera Lam.	Moringaceae	Sajina, Saijan	T	Bark	Bark paste	Topical	1	Raut et al. 2018	Jhapa
Mucuna pruriens (L.) DC.	Fabaceae	Kauso	C	Leaf, Fruit	Leaf extract, and fruit		2	Singh 2017; Bhattarai & Tamang 2017	Makwanpur, Parsa
Murraya koenigii (L.) Spreng.	Rutaceae	Mitha nim	S	Leaf, Bark	Decoction of leaf	Oral	3	Singh 2017, 2021; Bhatt et al. 2023	Parsa, Kanchanpur
Musa paradisiaca L.	Musaceae	Kera	T	Stem	Stem juice		1	Tamang & Singh 2014	Ilam
Mussaenda macrophylla Wall.	Rubiaceae	Dhobini	S	Bark			1	Subba & Basnet 2014	Dhankuta, Tanahun
Neolitsea pallens (D.Don) Momiy. & H.Hara	Lauraceae	Simalte	T		seed oil	Antidote	1	Malla 2019	Parbat
Neopicrorhiza scrophulariiflora (Pennell) D.Y.Hong	Plantaginaceae	Kutki	H	Rhizome	Rhizime is pounded on a stone salb, boild in a cup of water and 5 spoonfuls of this filtered decoction is mixed with a cup of milk 2-3 times a day	Oral	2	Bhattarai 2009 Kunwar & Adhikari 2005	Manang, Mustang, Dolpa
Nicotiana tabacum L.	Solanaceae	Surti / Khaini	H	Leaf	Paste	Topical	1	Dewan et al. 2023	Sankhuwasabha

Notochaete hamosa Benth.	Lamiaceae	Kuro	H	Leaf	Leaf juice about 5-7 teaspoonfuls twice a day for 10-15 days	Antidote	2	Malla 2019; Malla et al. 2015	Parbat
Nyctanthes arbortritis L.	Oleaceae	Parijat	T	Bark, Root, Leaf, Flower	juice of bark and leaf	Oral	3	Gautam & Timilsina 2022; Bhattarai & Khadka 2017; Sapkota 2013	Baglung, Ilam, Kaski
Ocimum sanctum L.	Lamiaceae	Tulsi	S	Leaf, Stem, Root	juice		2	Malla 2019; Khatri 2012	Kaski, Parbat
Oroxylum indicum (L.) Kurz	Bignoniaceae	Talelo	T		Repellent		1	Malla 2019	Parbat
Oxalis acetosella L.	Oxalidaceae	Chariamilo	H	Leaf	Paste		1	Karki et al. 2023a	Okhaldhunga
Oxalis corniculata L.	Oxalidaceae	Sakirbu, Chari Amilo	H	Whole plant, Leaf	paste with the paste of Centella asiatica; decoction of leaf, leaf powder	Oral, Topical	4	Bhandari et al. 2023; Karki et al. 2023b; Singh 2015a 2017	Dolakha, Parsa, Gulmi
Oxalis corymbosa DC.	Oxalidaceae		H	Whole plant			1	Poudel et al. 2021	Arghakhanchi
Paederia foetida L.	Rubiaceae	Bire lahara	C	Root			1	Rijal 2011	Chitwan
Pandanus nepalensis H.St.John	Pandanaceae	Tarika	S	Leaf	leaf juice	Antidote	1	Malla 2019	Parbat
Paris polyphylla Sm.	Liliaceae	Satuwa	H	Rhizome, Root, Bulb, Leaf	Paste of rhizome, root, Powder of root	Topical, Eating	11	Kutal et al. 2021; Khanal et al. 2020; Kunwar 2018; Aryal et al. 2018; Kunwar et al. 2009; Gurung 2007; Bhattarai 1991; Munankarmi et al. 2025; Karki et al. 2023a; Neupane et al. 2024, Neupane 2023	Baitadi, Darchula, Gulmi, Kailash Sacred Landscape, Kaski, Makwanpur, Kavreplanchowk, Okhaldhunga, Parbat, Syangja, Achham
Persicaria hydropiper (L.) Spach	Polygonaceae	Pirrey jhar	H	Leaf, Branch, Flower	Paste	Topical	1	Munankarmi et al. 2025	Kavreplanchowk
Pinus roxburghii Sarg.	Pinaceae	Rani salla	T	Resin	Resin	Topical	1	Chaudhary & Rai 2017	Sunsari
Pinus wallichiana A.B.Jacks.	Pinaceae	Gobre salla	T	Resin	Resin	Topical	3	Prajapati 2012; Gewali 2009; Kunwar & Adhikari 2005	Dolpa, Humla
Piper betle L.	Piperaceae	Pan	H	Leaf			1	Chaudhary & Rai 2017	Sunsari
Piper cubeba L.f.	Piperaceae	Marich	C	Fruit	Fruit powder decoction and paste		1	Bhattarai et al. 2009	Nawalparasi
Piper longum L.	Piperaceae	Pipla	T	Fruit, Root			1	Mahara et al. 2022	Kapilvastu
Piper nigrum L.	Piperaceae	Marich	C	Fruit		Topical	1	Raut et al. 2025	Dang
Pistacia chinensis Bunge	Anacardiaceae	Kakarsingee	T	Gall			1	Aryal et al. 2018	Darchula
Plantago centralis Pilg.	Plantaginaceae		H	Root	Root juice		1	Karki et al. 2023b	Dolakha
Pleurolobus gangeticus (L.) J.St.-Hil. ex H.Ohashi	Fabaceae		H	Root	Paste		1	Gachhadhar et al. 2023	Morang

Ranunculus sceleratus L.	Ranunculaceae	Jaldhaniya	H	Stem, Leaf			1	Bhatt et al. 2021	Kanchanpur
Rauvolfia serpentina (L.) Benth. ex Kurz	Apocynaceae	Sarpagandha	H	Root, Leaf, Flower, Whole plant	Root powder and paste, juice, hypnotic property toward snake, leaf, blossom worn around the neck, or a plant in the garden is believed to repel snakes	Oral, Topical	18	Chaudhary & Rajbhandari 2021; Bhattarai 2020; Joshi et al. 2020; Joshi et al. 2019; Rajbanshi & Thapa 2019; Bhattarai & Tamang 2017; Singh 2017; Chaudhary & Rai. 2017; Aryal et al. 2016; Poudel & Singh 2016a; Joshi 2014; Shah & Singh 2014; Shigdel & Rokaya 2011; Bhattarai et al. 2009; Ghimire & Bastakoti 2009; Muller-Booker 1993; Dangol & Gurung 1991; Bhattarai 1991	Chitwan, Dang, Ilam, Jhapa, Makwanpur, Nawalparasi, Parsa, Sindhuli, Sunsari
Rhus chinensis Mill.	Anacardiaceae		S	Root			1	Nemkul 2022	Nawalpur
Ricinus communis L.	Euphorbiaceae	Arandi, Alama	S	Leaf, Fruit	decoction	Antidote	1	Balami 2004	Kathmandu
Rubia manjith Roxb.	Rubiaceae	Majitho	C	Young Shoot, Whole plant	crushed young leaf, paste, decoction	Topical	5	Bhandari et al. 2021; Parajuli 2013a, 2013b; Dani & Tiwari 2018; Pandey 2013	Ilam, Kathmandu, Panchthar, Salyan
Rubus ellipticus Sm.	Rosaceae	Ainselu	S	Root, Shoot	Juice and paste		2	Pradhan et al. 2020; Sapkota 2008	Baglung, Ramechhap
Sapindus mukorossi Gaertn.	Sapindaceae	Rittha	T	Fruit			3	Dwa 2022; Kunwar et al. 2009 Burlakoti & Kunwar 2008	Darchula, Baitadi, Dadeldhura, Darchula, Kaski
Schima wallichii (DC.) Korth.	Theaceae	Chilaune	T	Bark, Seed	paste	Topical	2	Rijal 2011; Rai & Shrestha 2009	Bhojpur, Chitwan
Semecarpus anacardium L.fil.	Anacardiaceae	Bhalayo, Bheul	T	Fruit	repellent, by a solution of its fruit and cow manure; leaf and fruit ash antidote	Topical, Antidote	3	Thorn et al. 2020; Malla 2019; Kunwar et al. 2009	Central and western Terai, Baitadi, Darchula, Parbat
Senna occidentalis (L.) Link	Fabaceae	Sapgut	S	Whole plant	Paste	Topical	1	Raut et al. 2025	Dang
Sida cordifolia L.	Malvaceae	Balu	H				1	Dani & Tiwari 2018	Kathmandu
Solanum annuum C.V.Morton	Solanaceae	Khursani	H	Fruit	fried on oil	Topical	1	Adhikari et al. 2019	Kaski
Solanum esuriale Lindl.	Solanaceae	Kantakari	H	Root			1	Khatri 2012	Kaski
Sphaeranthus indicus L.	Asteraceae	Tauke jhar	H	Leaf	Leaf juice		1	Joshi 2021	Chitwan

Spilanthes paniculata Wall. ex DC.	Asteraceae	Bhuin timur, Mirmire, Khursani Jhar	H	Whole plant	Paste	Topical	4	Malla 2019; Singh et al. 2018; Dani & Tiwari 2018; Manandhar 1987	(Kathmandu, Lamjung, Palpa, Parbat
Terminalia alata Heyne ex Roth	Combretaceae	Darsi, Saj	T	Bark	Bark paste	Topical	2	Tamang et al. 2017; Bhattarai & Tamang 2017	Chitwan, Dhading, Gorkha, Makwanpur
Thysanolaena latifolia (Roxb. ex Hornem.) Honda	Poaceae	Amriso	S	Bark	Bark hair of Thaysanolaena maxima and Calotripis gigantean is mixed	Oral, Topical	2	Poudel & Singh 2016b; Poudel 2015	Surkhet
Trichosanthes cucumerina L.	Cucurbitaceae	Chichindo	C	Fruit	A young fruit tip	Topical	2	Aryal et al. 2016; Dhami 2008	Kanchanpur
Trichosanthes tricuspidata Lour.	Cucurbitaceae	Kwajeng Sintak	C	Root	Root paste		1	Karki et al. 2023b	Dolakha
Urena lobata L.	Malvaceae	Nalukuro, Bishkhapre, Soranto	S	Leaf	Leaf juice, decoction	Antidote, Oral	2	Malla 2019; Malla et al. 2015	Parbat
Urtica ardens Link	Urticaceae	Ghariya Sisno	H	Root	Root paste	Oral, Topical	1	Bhandari et al. 2021	Panchthar
Urtica dioica L.	Urticaceae	Sisnoo, Nelau	S	Root			1	Rijal 2011	Chitwan
Vitex negundo L.	Lamiaceae	Simali, Indrayani	S	Root	Smelling 1 spoon ground root in morning & evening, Juice	Oral, Smelling	2	Gubhaju & Gaha 2019; Aryal et al. 2016	Palpa
Wrightia arborea (Dennst.) Mabb.	Apocynaceae	Rani Khirro	T	Stem, Root	Juice		1	Gachhadhar et al. 2023	Morang
Zantedeschia aethiopica (L.) Spreng	Araceae	Darsan pipal	H	Stem	Latex of stem	Topical	2	Nagarkoti & Shrestha 2022; Tamang et al. 2017	Chitwan, Dhading, Gorkha, Lalitpur, Makwanpur
Zanthoxylum acanthopodium DC.	Rutaceae	Timur	T	Seed		Eating	1	Karki et al. 2023a	Okhaldhunga
Zanthoxylum armatum DC.	Rutaceae	Aakhe timur	S	Fruit	Fruit juice and paste	Oral, Topical	2	Adhikari et al. 2019; Munankarmi et al. 2025	Kaski, Kavreplanchowk
Zanthoxylum oxyphyllum Edgew.	Rutaceae	Siltimur	S	Flower, Fruit	Juice/extract/raw fruit	Antidote	3	Parajuli 2013a, 2013b; Bhattarai 2008	Arghakhanchi, Ilam
Zingiber officinale Roscoe	Zingiberaceae	Aduwa	H	Rhizome	Rhizome paste is applied and tied with Siru with mantra	Topical	1	Adhikari et al. 2019	Kaski
Ziziphus mauritiana Lam.	Rhamnaceae	Bayer	S	Leaf	Paste	Topical	1	Aryal et al. 2016	