# **Himalayan Aromatic Medicinal Plants: Mini Review**

Akshara Jain\*

Department of Pharmacognosy, Manipal College of Pharmaceutical Sciences Manipal, Karnataka, India

### **Review Article**

Received date: 09/11/2001 Accepted date: 23/11/2021 Published date: 30/11/2021

#### \*For Correspondence

Akshara Jain, Department of Pharmacognosy, Manipal College of Pharmaceutical Sciences Manipal, Karnataka, India

E-mail: jaina@mcps.edu

**Keywords:** Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Nepal, Sikkim, Bhutan, Natural ointments

#### ABSTRACT

Aromatic plants play played key parts in the existences of ancestral people groups living in the Himalaya by giving items to both food and medication. This survey presents a rundown of fragrant therapeutic plants from the Indian Himalaya, Nepal, and Bhutan, zeroing in on plant species for which unstable pieces have been portrayed. The audit sums up 116 fragrant plant species circulated more than 26 families.

# INTRODUCTION

The Himalya Center of Plant Diversity is a thin band of biodiversity lying on the southern edge of the Himalayas, the world's most noteworthy mountain range with rises surpassing 8000 m. The plant variety of this district is characterized by the monsoonal downpours, up to 10,000 mm precipitation, amassed in the mid-year, altitudinal zonation, comprising of tropical swamp rainforests, 100–1200 m asl, up to high glades, 4800–5500 m asl <sup>[1]</sup>. Hara and collaborators have assessed there to be around 6000 types of higher plants in Nepal, including 303 species endemic to Nepal and 1957 species confined to the Himalayan reach. The Indian Himalaya is home to in excess of 8000 types of vascular plants of which 1748 are known for their therapeutic properties.

Higher plants play played key parts in the existences of ancestral people groups living in the Himalaya by giving woods items to both food and medication. Various wild and developed plants have been used as corrective specialists since old occasions, and therapeutic plants have acquired significance as of late, as home grown meds, yet in addition as normal elements for the restorative business. In this survey, we sum up fragrant restorative plants from Bhutan, Nepal, and the Indian Himalaya of Uttarakhand, Himachal Pradesh, and Jammu and Kashmir<sup>[2]</sup>. We have zeroed in the audit on plant species for which unstable arrangements have been portrayed. In looking through the writing (Google Scholar), we have utilized the watchwords: medicinal oil, Himalaya, Bhutan, Nepal, Uttarakhand, Himachal Pradesh, and Kashmir. For medicinal balms from these districts that were accounted for in the writing, we have completed an extra hunt utilizing the plant name and the catchphrases, ethnobotany, ethnopharmacology.

There are around 400 types of Artemisia conveyed all through calm districts of the world, and the family is regularly portrayed by fragrant bushes and spices. Various individuals from the family are utilized as conventional meds by native societies, and many show organic exercises including antimalarial, cytotoxic, antihepatotoxic, antibacterial, antifungal and cell reinforcement exercises. Some especially outstanding individuals from the sort incorporate *A. absinthium L.*, the significant part of the infamous soul drink absinthe; *A. annua L.*, the effectual antimalarial drug qinghaosu; *A. dracunculus L.*, the seasoning spice tarragon; and *A. tridentata Nutt.*, the "huge sagebrush" of western North America <sup>[3]</sup>.

In the Humla region of northwestern Nepal, the entire new plant of *A. gmelinii* is ground into glue an applied remotely to fix cerebral pain, bubbles, and pimples. The rejuvenating balms from the aeronautical pieces of *A. gmelinii* from Himalayan India are

overwhelmed by artemisia ketone and 1,8-cineole. Neither of these mixtures, notwithstanding, are outstandingly antibacterial (*B. cereus*, *S. aureus*, *E. coli*, *P. aeruginosa*) or antifungal (*Candida albicans*, *A. niger*)

In the Garhwal Himalaya, Uttarakhand, the leaves of Artemisia japonica are utilized as an incense and insect poison and in ethnoveterinary medication the plant is utilized as a treatment for interior parasites (e.g., round worm). In northern Pakistan, the leaf extricate is utilized to treat intestinal sickness while a glue of the leaves is applied remotely to treat skin infections <sup>[4]</sup>. The natural ointment from the ethereal pieces of A. japonica gathered from Milam glacial mass (Uttarakhand), India, was overwhelmed by the monoterpenoids linalool (27.5%), (E)-  $\beta$ -ocimene (6.5%), 1,8-cineole (5.5%), and (Z)-  $\beta$ -ocimene (5.5%), alongside germacrene D (11.2%). Interestingly, an example of A. japonica from southern India (Munmar, Kerala) was rich in sesquiterpene hydrocarbons: Spathulenol (12%), germacrene D (7.5%),  $\beta$ -elemene (2.8%),  $\beta$ -caryophyllene (2.4%)

Artemisia nilagirica is broadly found in the sloping spaces of northern India, where it is utilized as an insect spray. A. nilagirica natural balm arrangements have shown altitudinal variety. Badoni and collaborators tracked down that A. nilagririca from lower heights in Uttarakhand (500 m asl) contained  $\alpha$ -thujone (36.9%) as the significant part, the oil from middle rise (1200 m asl) had mequinyl p-nitrobenzoate (22.1%), cadina-1,4-diene (17.7%), and  $\beta$ -eudesmol (12.4%) as the significant parts, and the example from higher rise (2000 m asl) had linalool (32.5%) and isopulegyl acetic acid derivation (20.7%) as the significant parts. Haider and colleagues <sup>[5]</sup>, working in Himachal Pradesh, noticed a comparable impact, yet with altogether different sythesis. A. nilagririca from lower heights (Mandi, 1044 m asl) contained caryophyllene oxide (28.6%) as the significant part, the oil from transitional rise (Manali, 2050 m asl) had borneol (35.8%) as the significant part, and the example from higher rise (Shimla, 2210 m asl) was overwhelmed by camphor (46.9%).

## CONCLUSION

The Himalayas, with wide-running rises, profound chilly and stream valleys, spaces of high precipitation and spaces of high desert, is a rich space of biodiversity with much endemism. Customary natural medication keeps on assuming a part in numerous ancestral regions, and various therapeutic plants and their rejuvenating ointments have shown striking organic exercises. Sadly, there stays a scarcity of data relating organic exercises of natural oils with the ethnobotanical employments of the plants. Much of the time this might be because of the movement dwelling in non-unpredictable parts. Furthermore, numerous phytochemical specialists have disregarded bioactivity screening identified with ethnopharmacological employments. Consequently, there is a lot of extra work that can be done to recognize phytochemicals related with organic exercises that help conventional employments of therapeutic plants. What's more, a few sweet-smelling plants have shown business guarantee as seasoning specialists, scents, beauty care products, and pesticides. Due, to a limited extent, to the incredible interest for natural oils, home grown drugs, and drugs, the therapeutic plants of the Himalayas are undermined by unreasonable gathering, and expanding ecological debasement, obtrusive plant species, and environmental change additionally compromise Himalayan local verdure. We support the conservation of customary information and employments of Himalayan restorative plants and we trust that extra advances are attempted to secure and keep up with the Himalayan biology.

### REFERENCES

- 1. Barthlott W, et al. Global centers of vascular plant diversity. Nova Acta Leopoldina. 2005;92:61–83.
- 2. Khan M, et al. Medicinal plants of Sewa River catchment area in the northwest Himalaya and its implication for conservation. Ethnobot Leafl. 2009;13:1113–1139.
- 3. Padalia RC, et al. Chemical analysis of volatie oils from west Himalayan Pindrow fir *Abies pindrow*. Nat Prod Commun. 2014;9:1181–1184.
- Kunwar RM, et al. Indigenous use and ethnopharmacology of medicinal plants in far-west Nepal. Ethnobot Res Appl. 2009;7:5– 28.
- 5. Kala CP. Ethnobotany and ethnoconservation of Aegle marmelos (L.) Correa. Indian J Tradit Knowl. 2006;5:537-540.