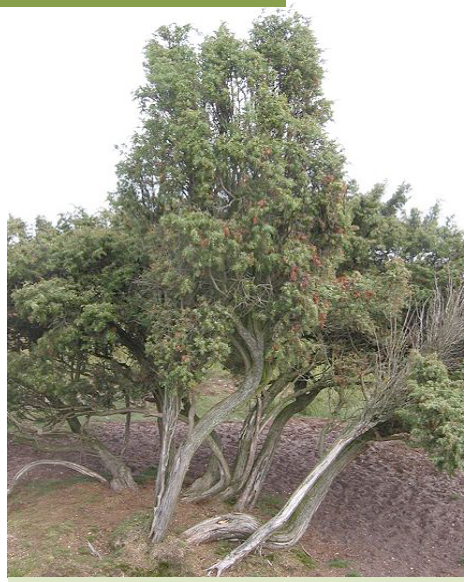
Juniperus communis



Family: Cupressaceae

Common names: Hauber, Juniper berry

Local names: Bethar, Pethri (Kashmir & Kumaon), Shukpa (Lahaul), Shukpa (Spiti), Hauber (Hindi)

Ayurvedic name: Hapusha

Plant profile:

Juniperus communis is a dense, more or less procumbent shrub rarely a small tree. The plant is dioecious in habit. The bark is reddish brown and peels off in papery shreds while the wood is finely veined, yellowish brown in colour and aromatic. The leaves are in whorls of three, linear-globular, sharply pointed, aromatic with a bluish white upper surface. The flowers are usually dioecious and axillary and the fruits are sub-globose and berry like with usually three seeds. The fruits stay green for more than a year and turn bluish black when ripe. *J. communis* is a gymnosperm, shrubby in nature and grows wild in the temperate Himalayas from Afghanistan to central Nepal at an altitudinal range between 1600-4500 m. It is well adapted to medium and high elevations in India. The plant is found as a common associate of *Pinus wallichiana* forests in Pattan and Lahaul valleys of Lahaul in Himachal Pradesh. The plant starts flowering in second year in the month of March-April and fruit ripens in August-September.

Medicinal uses:

- **Part used:** The berries and leaves

- **Active principles:** The berries yield essential oil with more oil in the ripe two-year-old berries. The oil content of the berries varies from 0.5-2.0% depending on the maturity of berries and source. The volatile oil extracted from berries is a colourless to light yellowish-green liquid with characteristic odour, turns deep yellow to reddish brown with turpentine odour and becomes thick on storage. The chemical constituents in oil are α-pinene, camphene, junene, 1-terpinen-4-ol, alcohols, cadinene, some crystalline compounds and traces of esters, resins and wax. Juniper needles are rich in ascorbic acid (0.88 mg/100 g). The fruits and roots yield brown and purple dyes respectively.

- **Disease cured and dosage:**
    - **Ethnomedicinal:** The inhabitants of Lahaul valley consider it an aromatic and for kidney disorders. The rectified oil is said to be a diuretic because of the presence of junene and is prescribed in diseases of kidney, urinary bladder and in conditions like hepatic dropsy, congestive cardiac failure. It is also a stomachic and carminative in indigestion and flatulence. A powder of its berries is rubbed over rheumatic and painful swellings. The fruit and oil are useful in chronic-bright's disease, chronic gonorrhea and leucorrhoea. The oil should not be given in acute nephritis. Juniper must not be taken internally when the kidneys are inflamed or during pregnancy.

    - **Ethnoveterinary:** The oil is also used in veterinary practice as an application to expose wounds and prevents irritation from flies.

- **Ayurveda:** Hapushad churna, hapushad taila. Prescribed dose: churna 3-5 g, oil 1-2 drops (as an appetizer), 4-6 drops (as a diuretic)

- **Ayurvedic properties and actions:**

- Guna (qualities): Laghu (light), ruksha (dry), tikshna (sharp)
- Rasa (taste): Katu (pungent), tikta (bitter)
- Vipaka (post digestive taste): Katu (pungent)
- Virya (potency): Ushna (hot)

- **Therapeutic description:**
  - Effect on humours: Alleviates vata, kapha
  - Systemic effects: Useful for pain and inflammation, skin diseases and wounds and acute deafness.
  - Nervous system: It is used to treat paralysis, hemi-paresis and all vataj diseases.
  - Respiratory system: Treats cough and dyspnoea.
  - Digestive system: Used to cure dyspepsia, abdominal colic, gulma, piles, IBS (irritable bowel syndrome) and worm infestation.
  - Urino-genital system: Treats leucorrhoea, dysmenorrhea, amenorrhea, pyourea and cystitis.

- **Drug preparation:** To convert the plant into a drug, the berries and leaves are dried under shade to prevent loss of the essence.
  - The medicine must be stored in a cool dry place.
  - It has a shelf life of 6 months-1 year.
  - It can be externally used as an oil to apply locally and ingested or inhaled for internal application.