

# SEABUCKTHORN – A VALUABLE RESOURCE OF THE COLD DESERT (LADAKH)

Amjad Ali and Venu Kaul\*

Department of Botany, University of Jammu, Jammu - 180006

\*veenukaul@yahoomail.co.in

**Abstract:** Seabuckthorn grows extensively throughout Ladakh region of J&K state (India). Its distribution extends from Nubra (District Leh) on one side upto Drass (District Kargil) on the other and encompasses Zaskar valley. It is a dioecious thorny shrub and if left undisturbed, attains the size of a small tree. The plant has gained tremendous importance by virtue of its pharmaceutical, cosmaceutical and nutraceutical value. Despite having such a potential, the plant is still under utilized in this region.

**Keywords:** Cosmaceutical, Dioecious, Ladakh, Nutraceutical, Pharmaceutical, Seabuckthorn, Underutilized

## REFERENCES

- Akkermans A.D.L., Roelofsen, N., Blom, J., Huss, D. and Harkin, R.** (1983). Utilization of carbon and nitrogen compound by Frankia in synthetic media and root nodules of *Alnus glutinosa*, *Hippophae rhamnoides* and *Datisca cannabina*. *Can J Bot* **61**: 2793- 2800.
- Awasthi, R.P. and Sankhyan, H.P.** Research and development status of Seabuckthorn in cold deserts of western Himalaya – India (Abstract only). In: [www.Google/ Hippophae.com](http://www.Google/Hippophae.com).
- Chaurasia, O.P., Basant, B., Verma, A., Ahmad, Z. and Raut, B.** (2003-04). Potential fodder plant of Ladakh, DIHAR (DRDO) Leh, Ladakh.
- Chen, Y., Jiang, Z., Qin, W. Ni, M., Li, X. and He, Y.** (1990). Chemical composition and characteristic of Seabuckthorn fruit and its oil. *Chem. Ind. Forest Prod. (Chinese)* **10** (3) 163- 175.
- Code Denise.** Seabuckthorn – Ancient Food of East and Future Food of West. In: [www.seabuckthorn.com](http://www.seabuckthorn.com).
- Delabays, N. and Slacanin, I.** (1995). Domestication and selection of new plant species of interest to the cosmetic industry. *Revue Suisse de viticulture, -d' Arboriculture-et- Horticulture* **27**:143-147.
- Dhyani, D., Maikhuri, R.K., Rao, K.S., Kumar, L., Purohit, V.K., Sundriyal, M. and Saxena, K.G.** (2007). Basic nutritional attributes of *Hippophae rhamnoides* (Seabuckthorn) populations from Uttarakhand Himalaya, India. *Current Science* **92** (8):1148-1152.
- Duhoon, S.S., Koopar, M.N. and Chandra, U.** (1996). Seabuckthorn (*Hippophae* spp.) – A less known wonder plant of Ethno-micro-botanical importance in cold desert of India. *J. Econ. Taxon. Bot. Add. Ser.* **12**: 43- 45.
- Dwivedi, S.K., Singh, R. and Raut, B.** (2004). Present status and future thrust on seabuckthorn research in Ladakh. In: *Souvenir and Book of Abstracts of National Seminar on Cultivation, Harvesting and Scientific Exploitation of Seabuckthorn*, p. 38-44., August 26-27, 2004, FRL (DRDO), Leh, India, 136p.
- Dwivedi, S.K., Singh, R. and Ahmad, Z.** (2006). The Seabuckthorn, FRL, Leh Ladakh.
- Erkkola, R. and Yang, B.** (2003). Seabuckthorn oils: Towards healthy mucous membranes. *Women's Health-Agrofood industry hitech*, 53-57.
- Gao, X., Ohlander, M., Jeppsson, N., Bjork, L. and Trajkovski, V.** (2000). Changes in antioxidant effects and their relationship to phytonutrients in fruits of Seabuckthorn (*Hippophae rhamnoides* L) during maturation. *J. Agric. Food Chem.* **48**: 1485-1490.
- Hooker, J. D.** (1878). *Flora of British India*. vol. V pp. 201 (Reprint 1999).
- Jeppsson, N., Bartish, IV and Persson, H.A.** (1999). DNA analysis as a tool in seabuckthorn breeding, pp. 338-341. In J. Janick (ed.), *Perspectives on new crops and new uses*. ASHS Press, Alexandria, VA.
- Li, T.S.C.** (1999). Physiological components and health effects of ginseng, Echinacea, and seabuckthorn. pp. 329-356. In G. Mazza (ed.), *Functional Foods- Biochemical and Processing aspects*. Technomic Publ. Co. Inc., Lancaster, PA.
- Lian, Y., Lu, S., Xue, S. and Chen, X.** (2000). *Seabuckthorn biology and chemistry*. (In Chinese, with some chapters translated) Gansu Science and Technology Publishing, Lanzhou, China.
- Naithani, H.B.** (2004). *Hippophae* Linn. (Seabuckthorn) in India: A review. *Indian Forester* **130** (9): 1045-1056
- Rongsen, Lu.** (1992). Seabuckthorn: A multipurpose plant species for fragile mountains. ICIMOD Occasional Paper No. 20, Kathmandu, Nepal. pp. 1-50.
- Rongsen, Lu.** Genetic resources of *Hippophae* and its utilization In: [google/ISAexpert forum.com](http://google/ISAexpertforum.com).
- Rousi, A.** (1971). The genus *Hippophae* L. A taxonomic study. *Annales Botanicae Fennici* **8**: 177-227.
- Singh, Brahma** (2004). Seabuckthorn for food and Medicine. National Seminar on Seabuckthorn, FRL (DRDO) Leh.

Singh, V. and Dogra, K.K. (1996). **Characteristics, distribution, biomass, degeneration and nutritional values of seabuckthorn. Indian Forester 122 (6): 486-491.**

[www.seabuckthorn.com](http://www.seabuckthorn.com)

[www.wikipedia/hippophae.com](http://www.wikipedia/hippophae.com)

**Xu, M.** (1994). The medicinal research and

exploitation of sea buckthorn. *Hippophae* 7: 32-34.

**Xu, M., Sun, S. and Cui, J.** (2001). The medicinal research on Seabuckthorn. Proc. Int. Workshop Seabuckthorn. New Delhi, India. Feb 18-21, 2001.

**Yuzhen, Z. and Fuheng, W.** (1997). *Hippophae* 10 (1) 39-41.