

AN OVERVIEW OF *OSMANTHUS FRAGRANS*—AN IMPORTANT FRAGRANT TREE.

SNEHLATA BHANDARI*, SHIVANI BISHT AND N S BISHT

Department of Botany, Hemwati Nandan Bahuguna Garhwal University
(A Central University) Campus Pauri (Pauri Garhwal)-246001, Uttarakhand, India.

*snehlb@yahoo.co.in

Received:17-10-2010

Revised: 27-11-2010

Accepted: 3-12-2010

ABSTRACT

Fragrant olive or *Osmanthus*, an evergreen horticulture plant of rare occurrence in India is the national plant of China. The plant has tremendous potential for its multidimensional uses. It is being used as an anti-browning food additive, in skin-whitening cosmetics, or as a new drug for treating melanoma. The unripe fruits and flower petals are used in Chinese cuisine. The flowers contain essential oil which has become an integral part of the perfumery industry. This paper highlights the utilization of *Osmanthus fragrans* in various ways along with a short overview of the research work reported on this important species.

Keywords: OSMANTHUS FRAGRANS, OVERVIEW

REFERENCES

- Adhikari Seema Dhaila- & Adhikari B. S. Sacred Groves: People's Contribution to Conservation http://oldwww.wii.gov.in/envis/threatened_plants/Chapter-31.htm simada@rediffmail.com
- Daniells Stephen and Bird Katie. 2009, Chinese flower holds potential as skin lightening ingredient
- Gaur R. D. 1999, *Flora of the District Garhwal North West Himalaya (with ethnobotanical notes)*. Transmedia Srinagar (Garhwal) 246174 UP India.-485
- Gogiya, V.T., Kharebava L.G., Gogiya R.V. and Gvatua E.B.1986, Composition of the volatile compounds in flowers of *Osmanthus fragrans* (Thunb.) Lour. *Rastit. Resur.*, 22, 243-248.
- Huang Jingui. 2005, The difference between thick soup and gippo. *Journal of Huzhou teachers College*: 27 (6) 1-7
- Huang Shiwen , Yingming Pan, Dianhua Gan, Xilin Ouyang, Shaoqing Tang, Stephen I.N. Ekunwe and Hengshan Wang. Antioxidant activities and UV-protective properties of melanin from the berry of *Cinnamomum burmannii* and *Osmanthus fragrans* . *Medicinal Chemistry Research* DOI: 10.1007/s00044-010-9341-2
- Hussain, A. and Virmani O.P. 1992, *Dictionary of Indian medicinal plants*. <http://indianmedicine.eldoc.ub.rug.nl/root/H/41208/?pFullItemRecord=ON>.
- Ishiguro, T.; Koga N., and Nara K. 1957, Components of the Flowers of *Osmanthus fragrans* II. *Odoriferous Component Osmane and Acids*. *Yakugaku Zasshi*, 77, 566-67
- James Soon's visit, Ge Hong, Zhour Yuan and Wang Cai-yun 2005. Primary study on in vitro culture and micropropagation of sweet Osmanthus. *Gardening Journal*. 32(4)-0738-03.
- Jin-hong Guo Baosheng 02005. *Osmanthus fragrans* varieties in henan province and its breeding technology .Henan resources and breeding technology of sweet osmanthus. *Journal Of Henan Agricultural Sciences* no 8 85-87
- Kaiser, R. and Lamparsky D. 1977, Natural Occurrence of New Ionone Derivatives and their Structural Assignments by Synthetic Approaches, Paper No. 115, 7th International Essential Oil Congress, Kyoto, Japan.

- Kaiser, R. and Lamparsky D.1980, Volatile Con-stituents of Osmanthus Absolute. in *Essential Oils*. B. D. Mookhejee and C. J. Mussinan, eds., Allured Publishing, Wheaton, IL pp. 159-192
- Komaki, R 1980. The Constituents of the Essential Oil from Osmanthus Flower. Paper No. 117, 8th International Essential Oil Congress, Grasse
- Kumar, A. and D. Ganjewala, 2007, Antimicrobial properties of *Osmanthus fragrans* (Lour). *Res. J.Medicinal Plant*, 1:21-24.
- Lawrence, B.M.1992. Progress in Essential Oils: Osmanthus, Perfumer & Flavorist, 17(3), 72-76.
- Liang Mao-Chang,Liu You-Quan 2007, Immature Embryos Culture And Callus Proliferation Induction In *Osmanthus Fragrans*. *Nonwood Forest Research* 03 (online journal)
- Liu You-Quan,Liang Mao-Chang,Chen Yue-Hua 2008, Embryo culture of *Osmanthus Fragrans* Lour. *In Vitro. Nonwood Forest Research* 2008-02-002(online journal)
- Liu, L. Ch. and Q.H. Xiang. 2003, Research progress on genus *Osmanthus*. *J.Nanjing For. Univ. (Natural Sci. Edn.)*, 27:84-88.
- Nishikawa K., Matsuura E. and Ishimaru K.1998, Tissue culture and acteoside production of *Osmanthus fragrans*. *Jpn. J.Food Chem.*5(2);
- Ohloff, G.1994. Scent and Fragrances, The fascination of odors and their chemical perspectives; translated by W. Pickenhagen and B. Lawrence, Springer-Verlag, Pub., Berlin – Heidelberg. pp. 166-172.
- Sisido, K.; Kurozumi S, Utirnoto K. and Isida T.1966, Fragrant Flower Constituents of *Osmanthus fragrans*, *Perf. Essent. Oil Rec.*, 57, 557-560 (1966).
- Tan G. 2004. The development and application of fresh flowers in food as its ingredients. *Journal of culinary science of Yangzhou Univ.* (4):38-41.
- Usher G. 1974. A dictionary of plants used by man. *Constable* ISBN 0094579202.
- Wang Yuan 2008. *In vitro* culture of top buds of *Osmanthus frgrans*. *Northwest Plant Journal*. 28 (02)-0244-05
- Wang, H., Pan Y., Tang X.and Huang Z., 2006. Isolation and characterization of melanin from *Osmanthus fragrance* seeds. *LWT-Food Sci. Technol.*, 39: 496-502.
- Wang H., Gan Dianhua, Zhang X., and Pan Y., 2010. Antioxidant capacity of the extracts from pulp of *Osmanthus fragrans* and its components . *LWT-Food Sci. and Tech.* 43(2)-319-325.
- Wen. G.-Y., Yu F.-I., Wang H.-T.. Kang Z.-Q., Jiang K. and Bian Y. M.1983. Studies on Chemical Constituents of the Absolute from Flower of *Osmanthus fragrans* (Gui Hua). *Acta Bot. Sinica*, 25, 468-471
- Wu L., Chang L. H., Chen S .H., Fan N., Ho J .A. 2005. Antioxidant activity and melanogenesis inhibitory effect of the acetonc extract of *Osmanthus fragrans*: A potential natural and functional food flavour additive. *LWT-Food Science and Technology* Volume 42, Issue 9, 1513-1519
- Yan Xiaoqing and Zhang Tao 2006. Review of *Osmanthus fragrans* planting and utilization in China. *Journal Of Agriculture And Social Research (JASR)* Vol. 6, no.2,
- Yuan Wangjun, Dong Meifang and Shang Fude 2005. *In vitro* culture of embryo of *O.frangrans*. *Acta Horticulturae Sinica* 32(6):1136-1139
- Zhou, Y., Wang, C.Y. and Cheng, Z.W. 2008. Effects of exogenous ethylene and ethylene inhibitor on longevity and petal senescence of sweet Osmanthus. *Acta Hort.* (ISHS) 768:487-493 http://www.actahort.org/books/768/768_65.htm